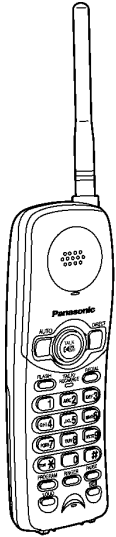
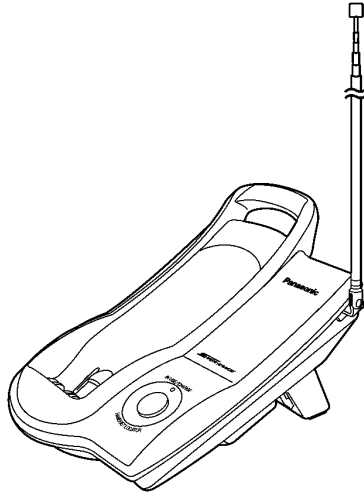


Service Manual

Telephone Equipment



(Handset)



(Base Unit)

KX-TC2106UAB
KX-TC2106UAS
KX-TC2106UAT
KX-TC2106UAW

Cordless Phone

Black Version

Silver Version

Metallic Black Version

White Version

(for Ukraine)

SPECIFICATIONS

General

Modulation:	FM, 5kHz Deviation	Pause:	3.5 seconds per pause
Frequency Stability:	± 2.5 kHz	Memory Capacity:	10 telephone numbers, up to 48 digits per station
Dial Type:	Pulse/Tone (DTMF)		
Redial:	Last dialed number each time the Redial button is pressed		

	Base Unit	Handset
Power Source:	AC adaptor (PQLV16CEX, 230 V, 50 Hz)	Built-in rechargeable Ni-Cd battery (3.6 V, 300mAh) PQXA36ASVC
(Receiver Section)		
Receiving Frequency:	10 channels within 39.775 to 40.000 MHz	10 channels within 30.075 to 30.300 MHz
Adjacent Channel Rejection:	40 dB	40 dB
Sensitivity:	4dB μ V for 20 dB S/N	0 dB μ V for 20 dB S/N
(Transmitter Section)		
Transmitting Frequency:	10 channels within 30.075 to 30.300 MHz	10 channels within 39.775 to 40.000 MHz
Jacks:	DC IN, Telephone line	
Antenna:	Telescopic	Rubber Flexible
Speaker:		1 $\frac{3}{16}$ " (3 cm) dynamic
Microphone:		Condenser microphone
Ringer Equivalence No. (REN)	0.5	—
Power Consumption:	Stand by: Approx. 5w Maximum: Approx. 7w	
Dimensions (H X W X D):	90mm x 125mm x 210mm	260mm x 55mm x 45mm
Weight:	270 g	170 g

Design and specifications are subject to change without notice.

IMPORTANT INFORMATION ABOUT LEAD FREE, (PbF), SOLDERING

If lead free solder was used in the manufacture of this product the printed circuit boards will be marked PbF. Standard leaded, (Pb), solder can be used as usual on boards without the PbF mark.

When this mark does appear please read and follow the special instructions described in this manual on the use of PbF and how it might be permissible to use Pb solder during service and repair work.

Panasonic

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WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

When you note the serial number, write down all 11 digits. The serial number may be found on the bottom of the unit.

Note:

Because CONTENTS 4 is the extract from the Operating Instructions of this model, it is subject to change without notice. You can download and refer to the original Operating Instructions on TSN Server for further information.

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1 ABOUT LEAD FREE SOLDER (PbF: Pb free)

Note:

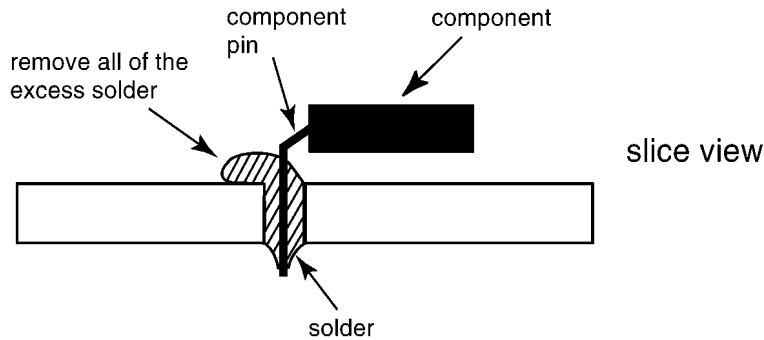
In the information below, Pb, the symbol for lead in the periodic table of elements, will refer to standard solder or solder that contains lead.

We will use PbF solder when discussing the lead free solder used in our manufacturing process which is made from Tin (Sn), Silver (Ag), and Copper (Cu).

This model, and others like it, manufactured using lead free solder will have PbF stamped on the PCB. For service and repair work we suggest using the same type of solder although, with some precautions, standard Pb solder can also be used.

Caution

- PbF solder has a melting point that is 50°F ~ 70° F (30°C ~ 40°C) higher than Pb solder. Please use a soldering iron with temperature control and adjust it to 700°F ± 20° F (370°C ± 10°C). In case of using high temperature soldering iron, please be careful not to heat too long.
- PbF solder will tend to splash if it is heated much higher than its melting point, approximately 1100°F (600°C).
- If you must use Pb solder on a PCB manufactured using PbF solder, remove as much of the original PbF solder as possible and be sure that any remaining is melted prior to applying the Pb solder.
- When applying PbF solder to double layered boards, please check the component side for excess which may flow onto the opposite side (See the figure below).



1.1. Suggested PbF Solder

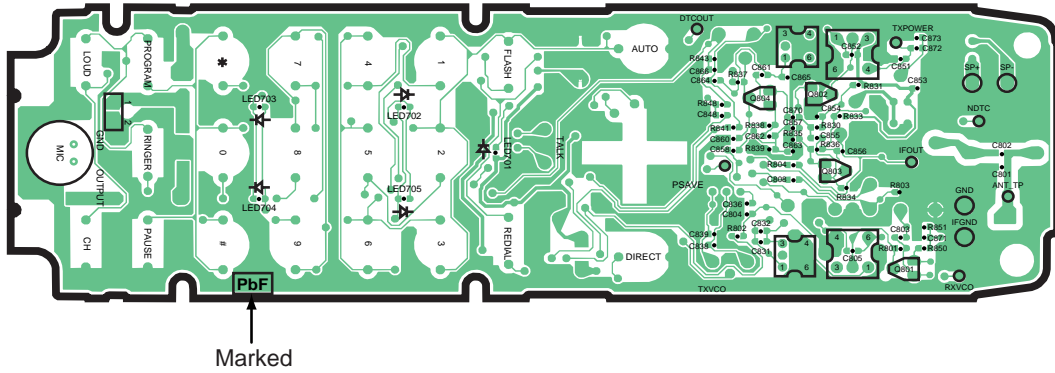
There are several types of PbF solder available commercially. While this product is manufactured using Tin, Silver, and Copper (Sn+Ag+Cu), you can also use Tin and Copper (Sn+Cu), or Tin, Zinc, and Bismuth (Sn+Zn+Bi). Please check the manufacturer's specific instructions for the melting points of their products and any precautions for using their product with other materials.

The following lead free (PbF) solder wire sizes are recommended for service of this product: 0.3mm, 0.6mm and 1.0mm.

0.3mm X 100g	0.6mm X 100g	1.0mm X 100g

1.2. How to recognize that Pb Free Solder is Used

(Example: Handset P.C.B.)



Note:

The location of the "PbF" mark is subject to change without notice.

2 FOR SERVICE TECHNICIANS

ICs and LSIs are vulnerable to static electricity.

When repairing, the following precautions will help prevent recurring malfunctions.

1. Cover plastic parts boxes with aluminum foil.
2. Ground the soldering irons.
3. Use a conductive mat on worktable.
4. Do not grasp IC or LSI pins with bare fingers.

3 CAUTION

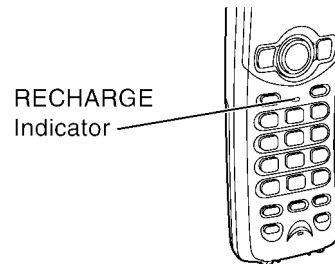
1. Danger of explosion if battery is incorrectly replaced.
2. Replace only with the same or equivalent type recommended by the manufacturer.
3. Dispose of used batteries according to the manufacturer's Instructions.

4 OPERATING INSTRUCTIONS

4.1. Battery

4.1.1. Recharge

When the RECHARGE indicator flashes or the unit beeps intermittently, place the handset on the base unit for about 9 hours to recharge the battery.



4.1.2. Battery information

After your Panasonic battery is fully charged:

Operation	Operating time
While in use (TALK)	Up to about 5 hours
While not in use (Standby)	Up to about 120 hours

- The battery operating time may be shortened depending on usage conditions and ambient temperature.
- **Clean the handset and the base unit charge contacts with a soft, dry cloth. Clean if the unit is subject to grease, dust or humidity.** Otherwise the battery may not charge properly.
- If the battery is fully charged, you do not have to place the handset on the base unit until the RECHARGE indicator flashes. This will maximize the battery life.
- The battery cannot be overcharged.

4.1.3. Battery Replacement

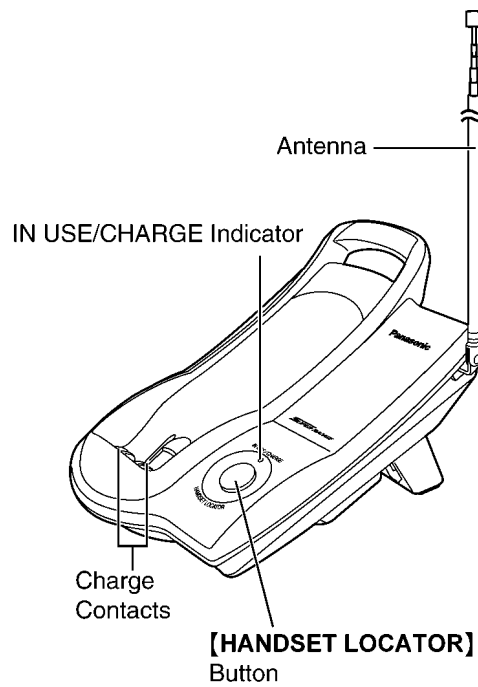
If you cleaned the charge contacts and fully charged the battery, but after a few telephone calls, the RECHARGE indicator flashes, the battery needs to be replaced. Replace the battery with a new Panasonic P-P301 (KX-A36A) battery. See step 3 of "**Connection**". When replacing the battery, programmed information may be erased. Reprogram if necessary.

Press the notch on the cover firmly and slide it as indicated by the arrow. Replace the old battery with new one. Close the cover and charge for about 9 hours.

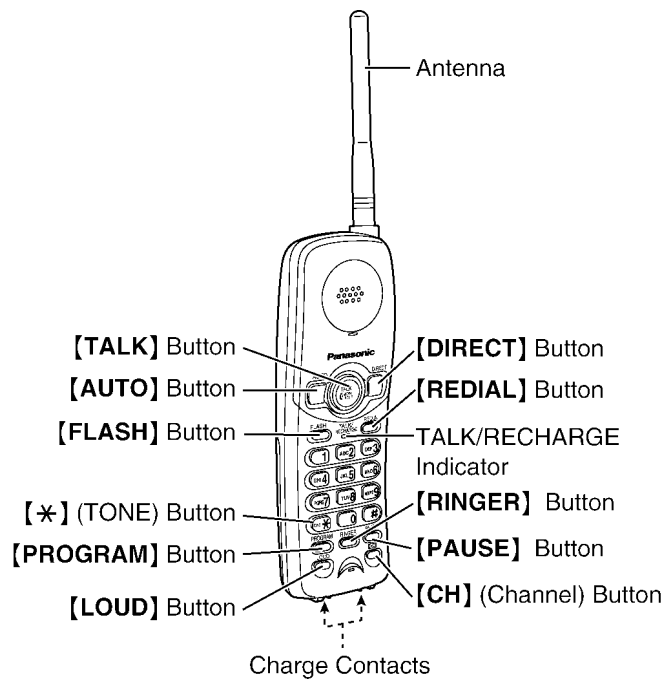


4.2. Location of Controls

4.2.1. Base Unit

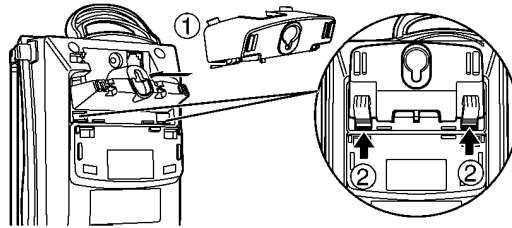


4.2.2. Handset

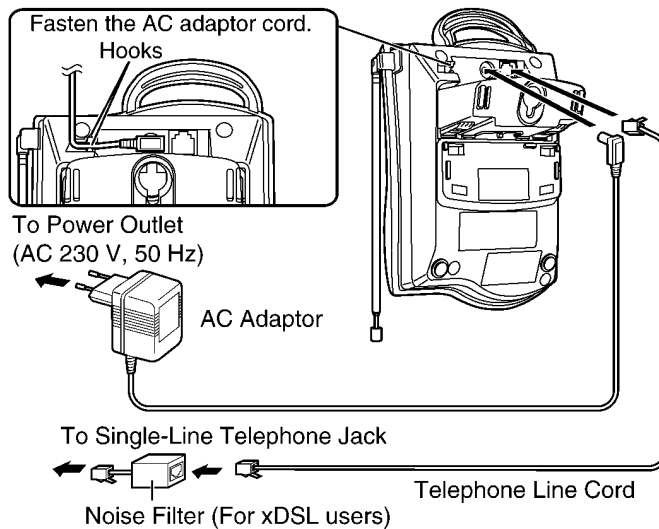


4.3. Connection

- 1 Install the Wall/Desk stand before use.
Insert the hooks in the direction (1) then push the tabs as shown (2).
 - The word "UP DESK" should face upward.



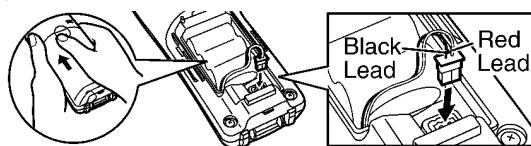
- 2 Connect as shown.



If you subscribe to an xDSL service

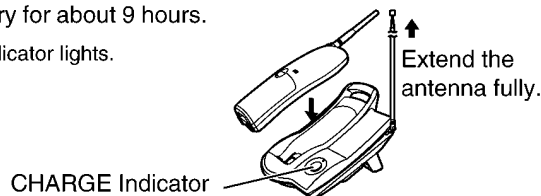
- Please attach a noise filter (contact your xDSL provider) to the telephone line between the base unit and the telephone line jack in the event that noise is heard during conversations.
- USE ONLY WITH Panasonic AC ADAPTOR PQLV16CEX.
- The AC adaptor must remain connected at all times. (It is normal for the adaptor to feel warm during use.)
- The unit will not work during a power failure. We recommend connecting a standard telephone to the same telephone line.

- 3 Install the battery in the handset, then close the handset cover and locking it into place.



- 4 Charge the battery for about 9 hours.

- The CHARGE indicator lights.



To select the dialing mode PULSE (preset) or TONE
The TALK indicator light must be off before programming.

[#] twice (PULSE)

Press [PROGRAM] ➡ [AUTO] ➡ OR ➡ [PROGRAM].

[*] twice (TONE)

- A beep sounds.
- To cancel during programming, press [PROGRAM], then restart from the beginning.
- If 3 beeps sound during programming, a wrong key was pressed. Start again from the beginning.

4.4. Troubleshooting

Problem	Cause and Remedy
The unit does not work.	<ul style="list-style-type: none"> • Check the settings. • Charge the battery fully. • Clean the charge contacts and charge again. • Install the battery properly. • Place the handset on the base unit and unplug the AC adaptor to reset. Plug in, and try again. • Re-insert the handset battery and place the handset on the base unit. Try again.
An alarm tone sounds when you press [TALK].	<ul style="list-style-type: none"> • You are too far from the base unit. Move closer and try again. • Place the handset on the base unit and try again. • Plug in the AC adaptor. • Extend the base unit antenna fully.
Static, sound cuts in/out, fades. Interference from other electrical units.	<ul style="list-style-type: none"> • Place the handset and the base unit away from other electrical appliances. • Move closer to the base unit. • Extend the base unit antenna fully. • Press [CH] to select a clearer channel.
The unit does not ring.	<ul style="list-style-type: none"> • The ringer volume is set to OFF. Press [RINGER] when the TALK indicator light is off.
While storing a phone number, the unit starts to ring.	<ul style="list-style-type: none"> • To answer the call, press [TALK]. The program will be canceled. Store the number again.
You cannot store a phone number in memory.	<ul style="list-style-type: none"> • You cannot store a number while the unit is in the talk mode. • Do not pause for over 60 seconds while storing.
You cannot redial by pressing [REDIAL].	<ul style="list-style-type: none"> • If the last number dialed was more than 48 digits long, the number will not be redialed.
[HANDSET LOCATOR] does not function.	<ul style="list-style-type: none"> • The handset is too far from the base unit or is engaged in an outside call.
The RECHARGE indicator flashes or the unit beeps intermittently.	<ul style="list-style-type: none"> • The battery is low. Charge the battery fully.
You charged the battery fully, but the RECHARGE indicator flashes.	<ul style="list-style-type: none"> • Clean the charge contacts and charge again. • Install a new battery.
The CHARGE indicator light does not go out while charging.	<ul style="list-style-type: none"> • This is normal.

5 DISASSEMBLY INSTRUCTIONS

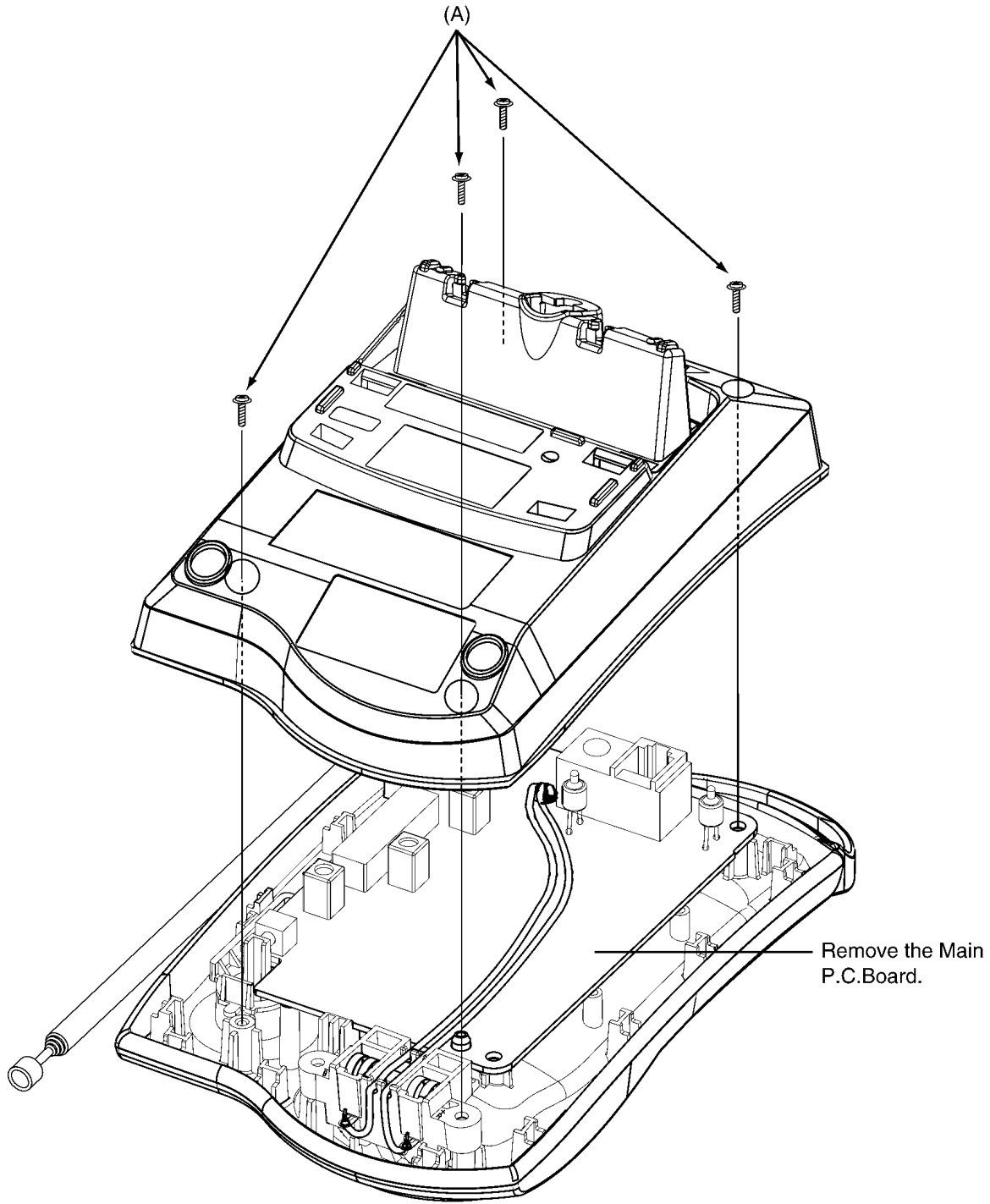


Fig. 1

Shown in Fig.-	To Remove	Remove
1	Cabinet Cover	Screws (2.6 x 12)..... (A) x 4
	Main P.C. Board	Main P.C. Board

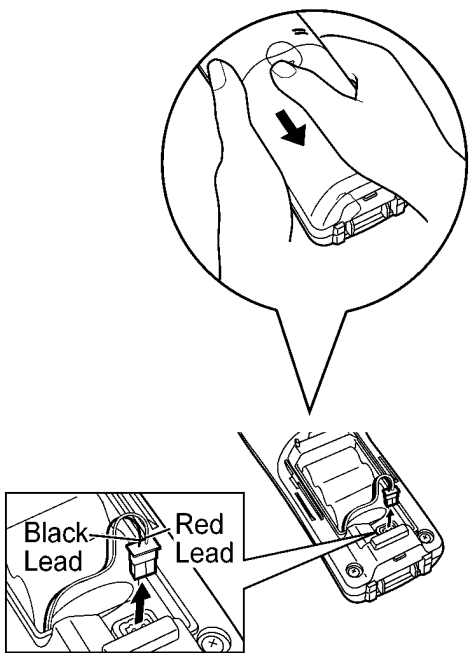


Fig. 2



Fig. 3

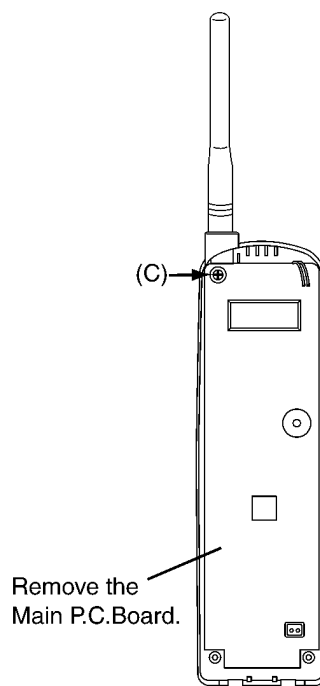
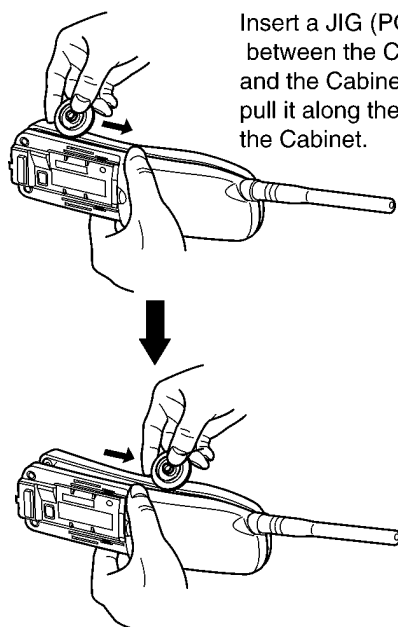
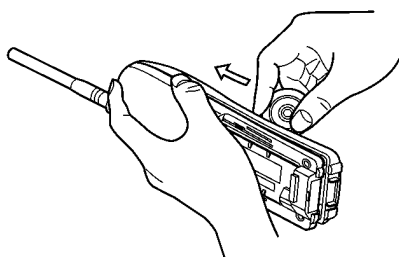


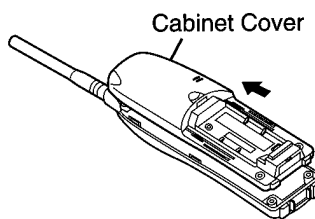
Fig. 5



Insert a JIG (PQDJ10006Y) between the Cabinet Body and the Cabinet Cover, then pull it along the gap to open the Cabinet.



Likewise, open the other side of the Cabinet.



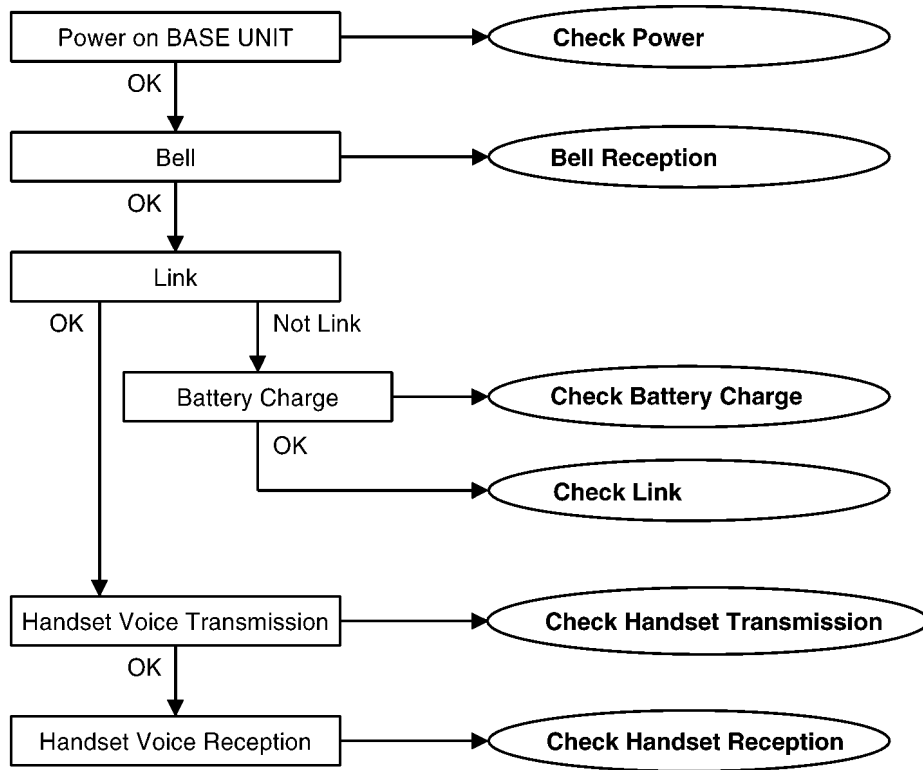
Remove the Cabinet Cover by pushing it upward.

Fig.4

Shown in Fig.-	To Remove	Remove
2	Cabinet Cover	Battery compartment cover.
3		Screws (2.6 × 12).....(B) × 2
4		Follow the procedure.
5	Main P. C. Board	Screw (2.6 × 12).....(C) × 1 Main P. C. Board

6 TROUBLESHOOTING GUIDE

MAIN



Cross Reference:

Check Power (P.13)

Bell Reception (P.14)

Check Battery Charge (P.15)

Check Link (P.16)

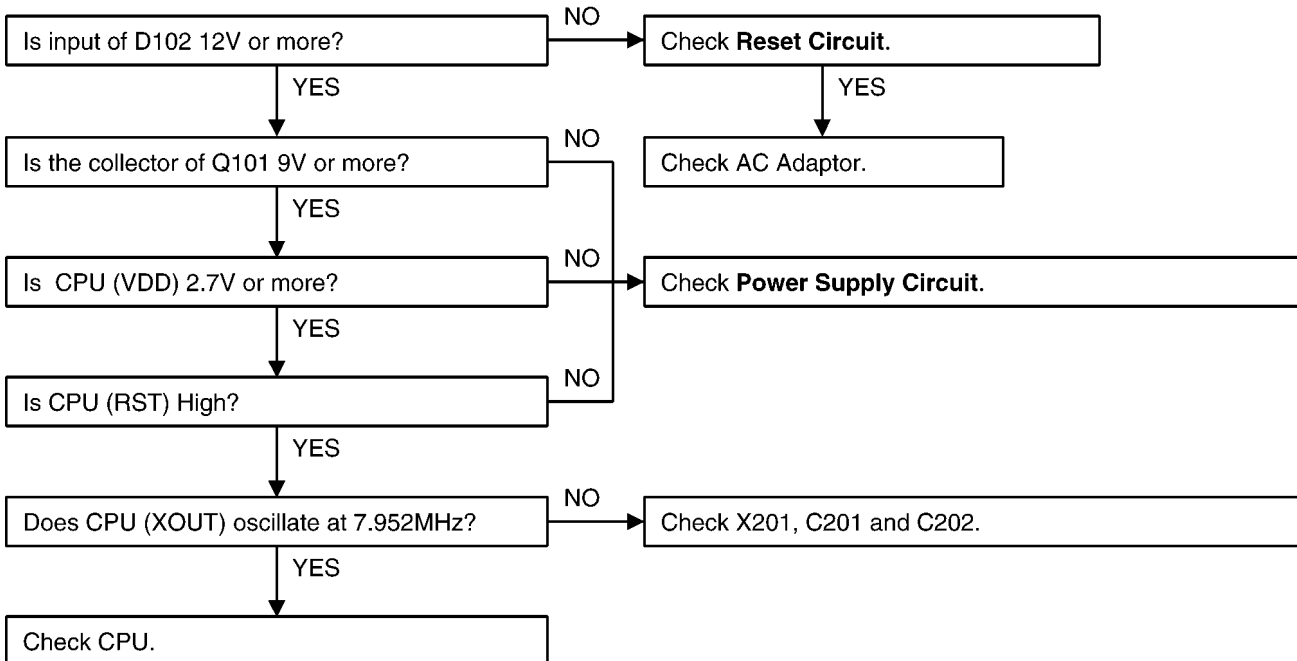
Check Handset Transmission (P.17)

Check Handset Reception (P.18)

6.1. Check Power

Base Unit

Is the AC Adaptor inserted into 230V outlet?
(AC Adaptor PQLV16CEX)



Cross Reference:

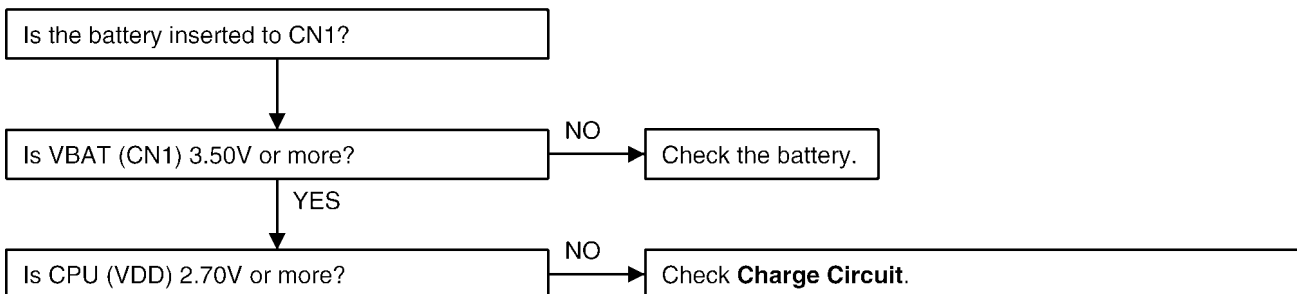
Reset Circuit (P.34)

Power Supply Circuit (P.33)

Note:

*CPU: IC201

HANDSET



Cross Reference:

Charge Circuit (P.35)

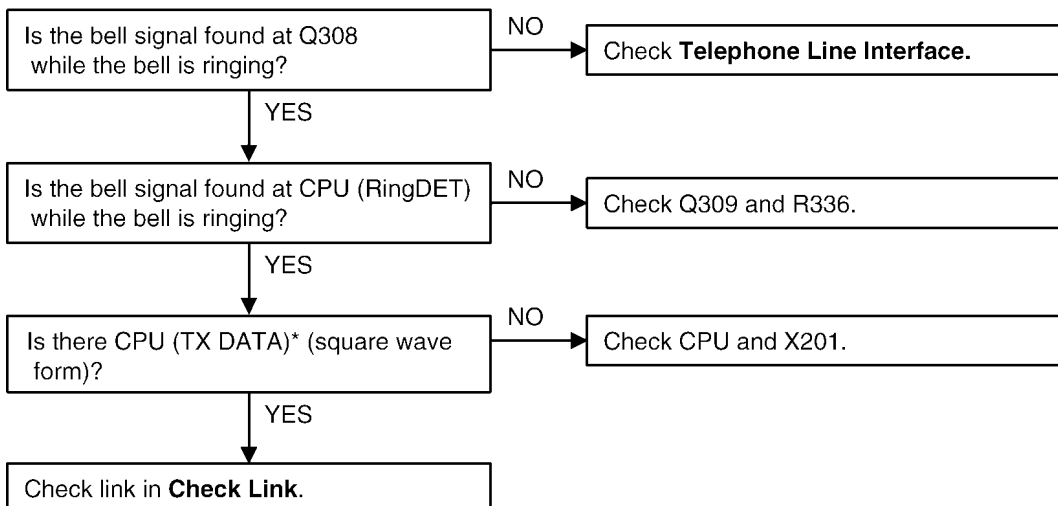
Note:

*CPU: IC701

*: Each measurement points are shown in **CIRCUIT BOARD (BASE UNIT)** (P.59) or **CIRCUIT BOARD (HANDSET)** (P.61)

6.2. Bell Reception

Base Unit



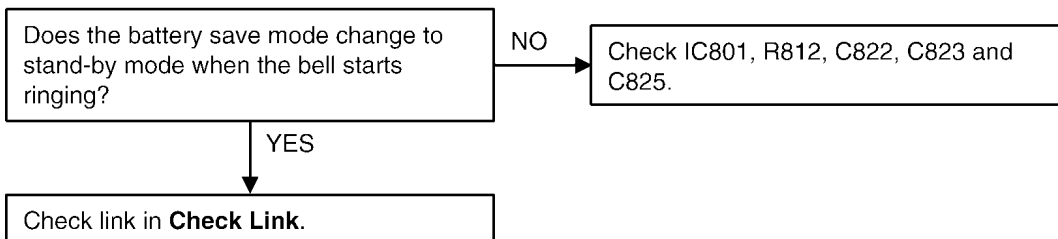
Cross Reference:

- Check Link (P.16)
- Telephone Line Interface (P.35)

Note:

*CPU: IC201

HANDSET



Cross Reference:

- Check Link (P.16)

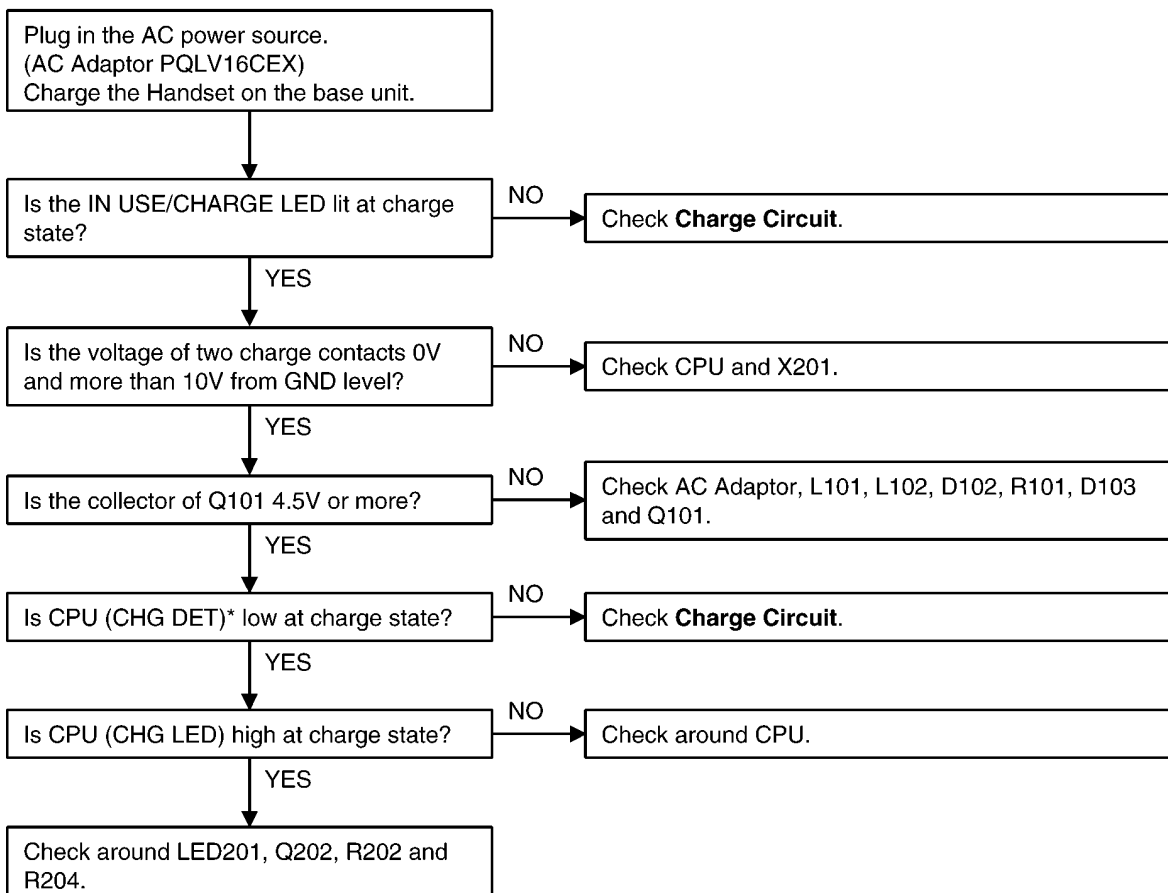
Note:

*CPU: IC701

*: Each measurement points are shown in **CIRCUIT BOARD (BASE UNIT)** (P.59) or **CIRCUIT BOARD (HANDSET)** (P.61)

6.3. Check Battery Charge

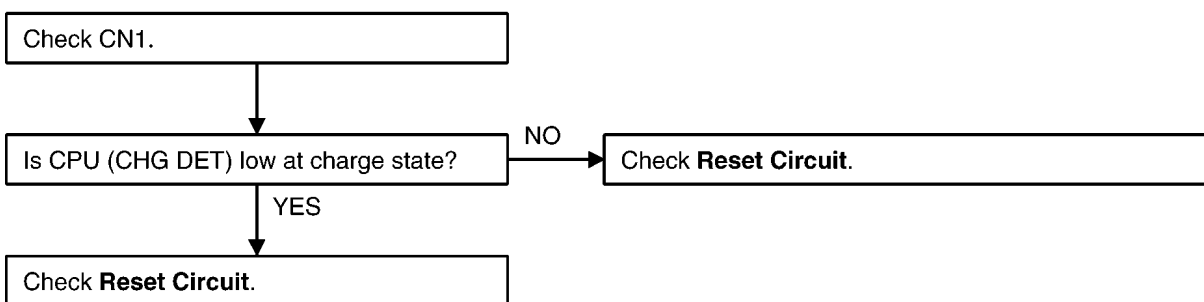
Base Unit



Cross Reference:
Charge Circuit (P.35)

Note:
 *CPU: IC201

HANDSET



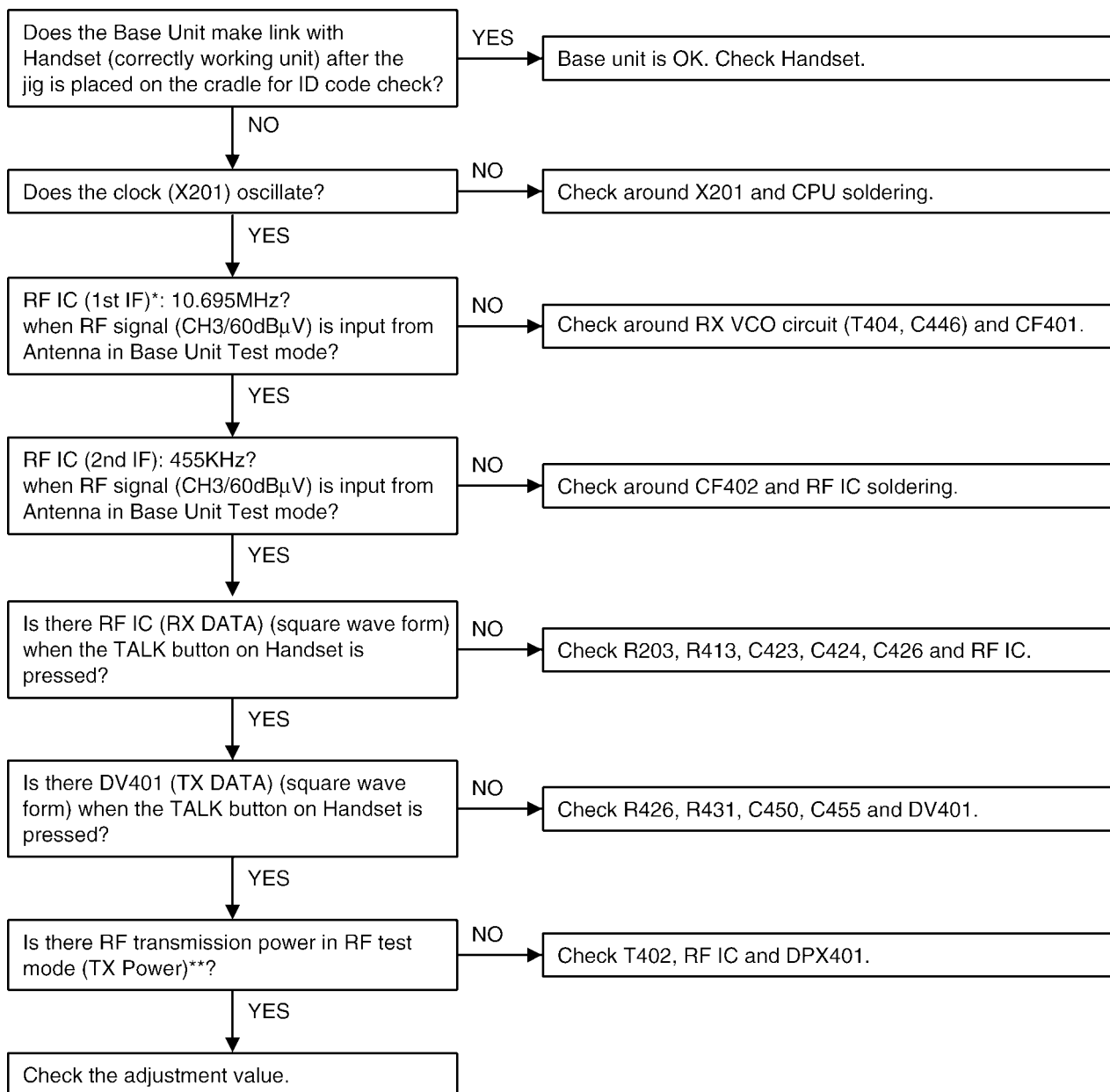
Cross Reference:
Reset Circuit (P.39)

Note:
 *CPU: IC701

*: Each measurement points are shown in **CIRCUIT BOARD (BASE UNIT)** (P.59) or **CIRCUIT BOARD (HANDSET)** (P.61)

6.4. Check Link

BASE UNIT



** : Refer to **Adjustment** (P.20)

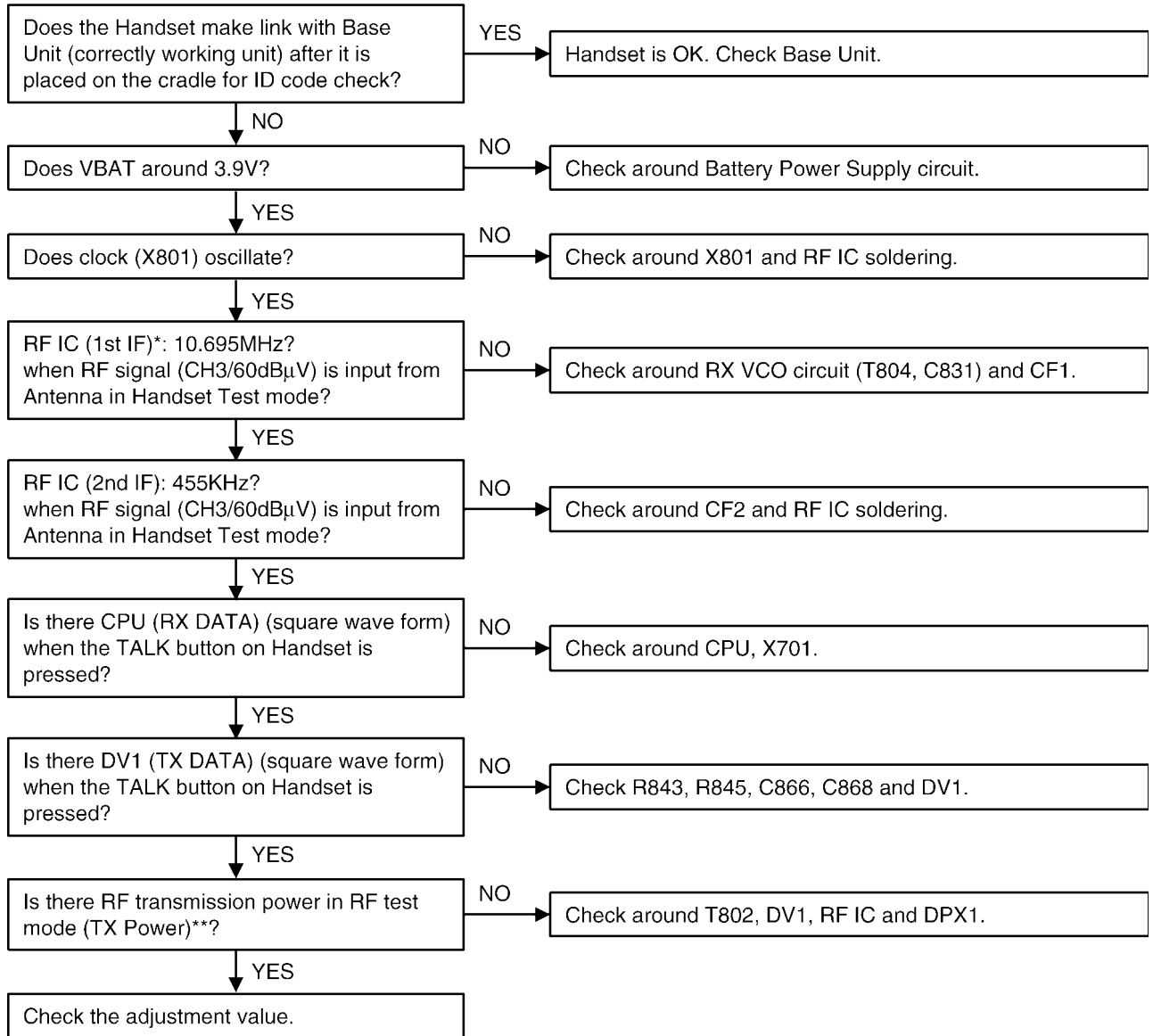
Note:

*CPU: IC201

*RF IC: IC401

*: Each measurement points are shown in **CIRCUIT BOARD (BASE UNIT)** (P.59) or **CIRCUIT BOARD (HANDSET)** (P.61)

HANDSET



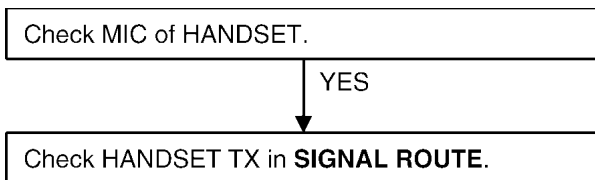
** Refer to **Adjustment** (P.23).

Note:

- *CPU: IC701
- *RF IC: IC801

*: Each measurement points are shown in **CIRCUIT BOARD (BASE UNIT)** (P.59) or **CIRCUIT BOARD (HANDSET)** (P.61)

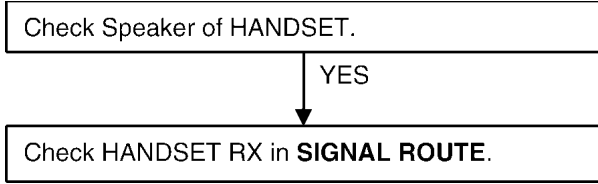
6.5. Check Handset Transmission



Cross Reference:

SIGNAL ROUTE (P.41)

6.6. Check Handset Reception



Cross Reference:

SIGNAL ROUTE (P.41)

7 ADJUSTMENTS (BASE UNIT)

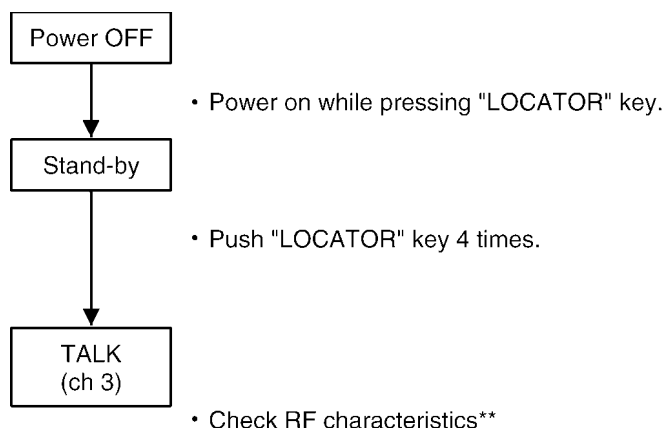
If your unit has below symptoms, adjust or confirm each item using remedy column from the table.

Symptom	Remedy*
The base unit does not respond to a call from handset.	Make adjustments in item (A)
The base unit does not transmit or the transmit frequency is off.	Make adjustments in item (B)
The transmit frequency is off.	Make confirmation in item (C)
The transmit power output is low, and the operating distance between the base unit and the handset is less than normal.	Make adjustments in item (D)
The reception sensitivity of base unit is low with noise.	Make confirmation in item (E)
The transmit level is high or low.	Make confirmation in item (F)
The reception level is high or low.	Make confirmation in item (G)
The unit does not link.	Make confirmation in item (H)

*: Refer to **Adjustment** (P.20).

7.1. Test Mode Flow Chart (Base Unit)

The operation-flow of Test mode and main check items are shown below.

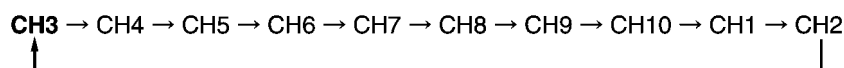


Note:

** : Refer to the above table.

7.2. How to change the channel

When CH-UP (Pin29 of CPU and GND) is short, the channel will be changed as follows;



Note:

Refer to **Adjustment Standard (Base Unit)** (P.21) for connection.

7.3. Adjustment

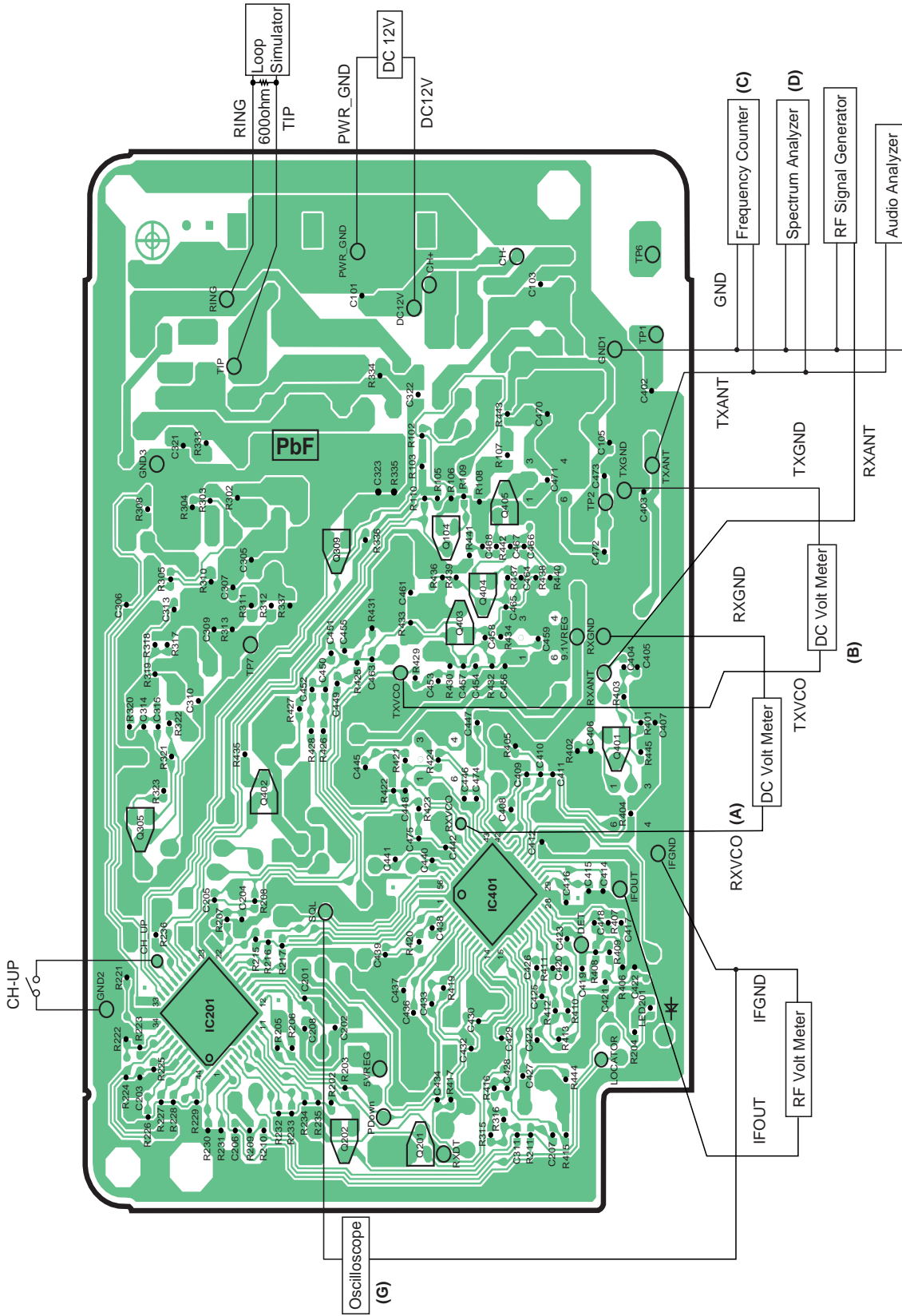
	Adjustment Items	Test Mode	Adjustment Point	*Procedure	Check or Replace Parts
(A)	RX VCO Adjustment	3ch Talk	T404	• Adjust T404 so that the reading of the Digital Voltmeter is 1.5 ± 0.3 V.	IC401, T404, C446
(B)	TX VCO Adjustment	3ch Talk	T402	• Adjust T402 so that the reading of the Digital Voltmeter is 1.5 ± 0.3 V.	IC401, DV401, T402
(C)	TX Frequency Confirmation	3ch Talk	-	• Confirm so that the reading of the frequency counter is $30.175\text{MHz} \pm 700\text{Hz}$.	IC401, X401, DV401, C440, C441
(D)	TX Power Adjustment	3ch Talk	T403	• Adjust T403 so that the reading of the RF VTVM is more than 8dBm.	IC401, Q403, Q405, T403, DPX401
(E)	RX Sensitivity Confirmation (2nd IF output)	3ch Talk	T401	1. Apply -60dBm output from S.S.G. (modulation frequency 1KHz, dev. 0KHz). 2. Confirm that the reading of AF VTVM is the maximum value (more than 20mV).	DPX401, T401, CF401, CF402
(F)	Line Output Level Confirmation	3ch Talk	-	1. Apply -60dBm output from S.S.G. (modulation frequency 1KHz, dev. 3KHz). 2. Confirm that the reading of AF VTVM is more than 600mV (600Ω load).	IC401, Q304
(G)	Line Input Modulation Confirmation	3ch Talk	-	1. Input via loop simulator 1.0KHz, 55mV (measured at T-R) signal. 2. Apply -60dBm output from S.S.G. (modulation frequency 1KHz, dev. 0KHz). 3. Confirm so that the reading of FM Deviation Meter is $2.4 \pm 0.4\text{KHz}$.	IC401, DV401
(H)	Noise Squelch Confirmation	3ch Talk	-	1. Measure the S.S.G. output level when the noise squelch changes from Low to High. 2. Confirm that the S.S.G. output level is -105dBm ~ -110dBm.	IC401, DPX401

* : The connections of adjustment equipment are as shown in **Adjustment Standard (Base Unit)** (P.21).

S.S.G. Frequency: 39.875 MHz

7.4. Adjustment Standard (Base Unit)

When connecting the Simulator and Equipments for checking, please refer to the illustration below.



Note: (A) - (G) is referred to ADJUSTMENTS (BASE UNIT) (P.19)

8 ADJUSTMENTS (HANDSET)

If your unit has below symptoms, adjust or confirm each item using remedy column from the table.

Symptom	Remedy*
The movement of Battery Low Indicator is wrong.	Make confirmation in item (A)
The base unit does not respond to a call from the handset.	Make adjustments in item (B)
The base unit does not transmit or the transmit frequency is off.	Make adjustments in item (C)
The transmit frequency is off.	Make confirmation in item (D)
The transmit power output is low, and the operating distance between the base unit and the handset is less than normal.	Make adjustments in item (E)
The reception sensitivity of the handset is low with noise.	Make confirmation in item (F)
Does not link between the base unit and the handset.	Make confirmation in item (G)
The reception level is high or low.	Make confirmation in item (H)
The transmit level is high or low.	Make confirmation in item (I)

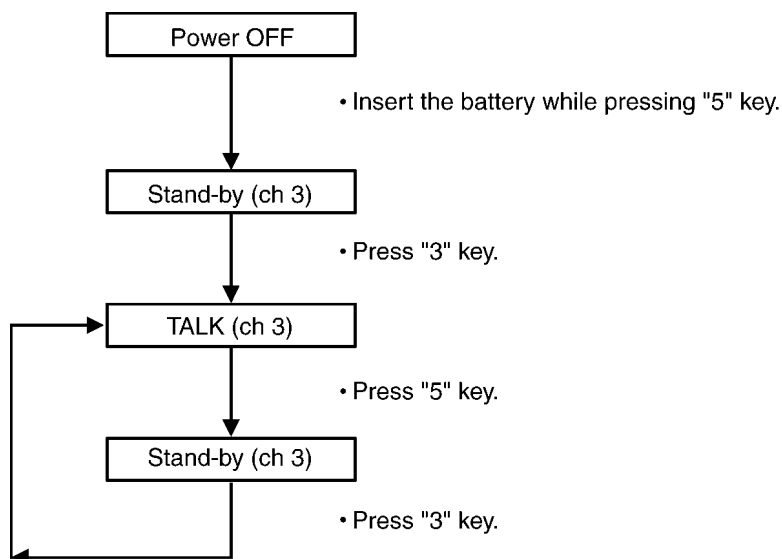
*: Refer to **Adjustment** (P.23).

Unit condition:

1. Remove the antenna lead wire from P.C. Board of the handset.
2. Power Supply: DC 3.9V (DC power supply)
3. Volume: HIGH (When P.C. Board of handset is in test mode, volume condition is medium. Press "LOCATOR" key once.)
4. Speaker Load: 150Ω

CH	TX Frequency	RX Frequency
CH3	39.875MHz	30.175MHz

8.1. Test Mode Flow Chart (Handset)



Note:

Refer to **CIRCUIT BOARD (HANDSET)** (P.61)

SIGNAL ROUTE (P.41)

8.2. How to change the channel

- Press **[*]** button.

CH3 → CH4 → CH5 → CH6 → CH7 → CH8 → CH9 → CH10 → CH1 → CH2

- Press **[#]** button.

CH3 → CH2 → CH1 → CH10 → CH9 → CH8 → CH7 → CH6 → CH5 → CH4

8.3. Adjustment

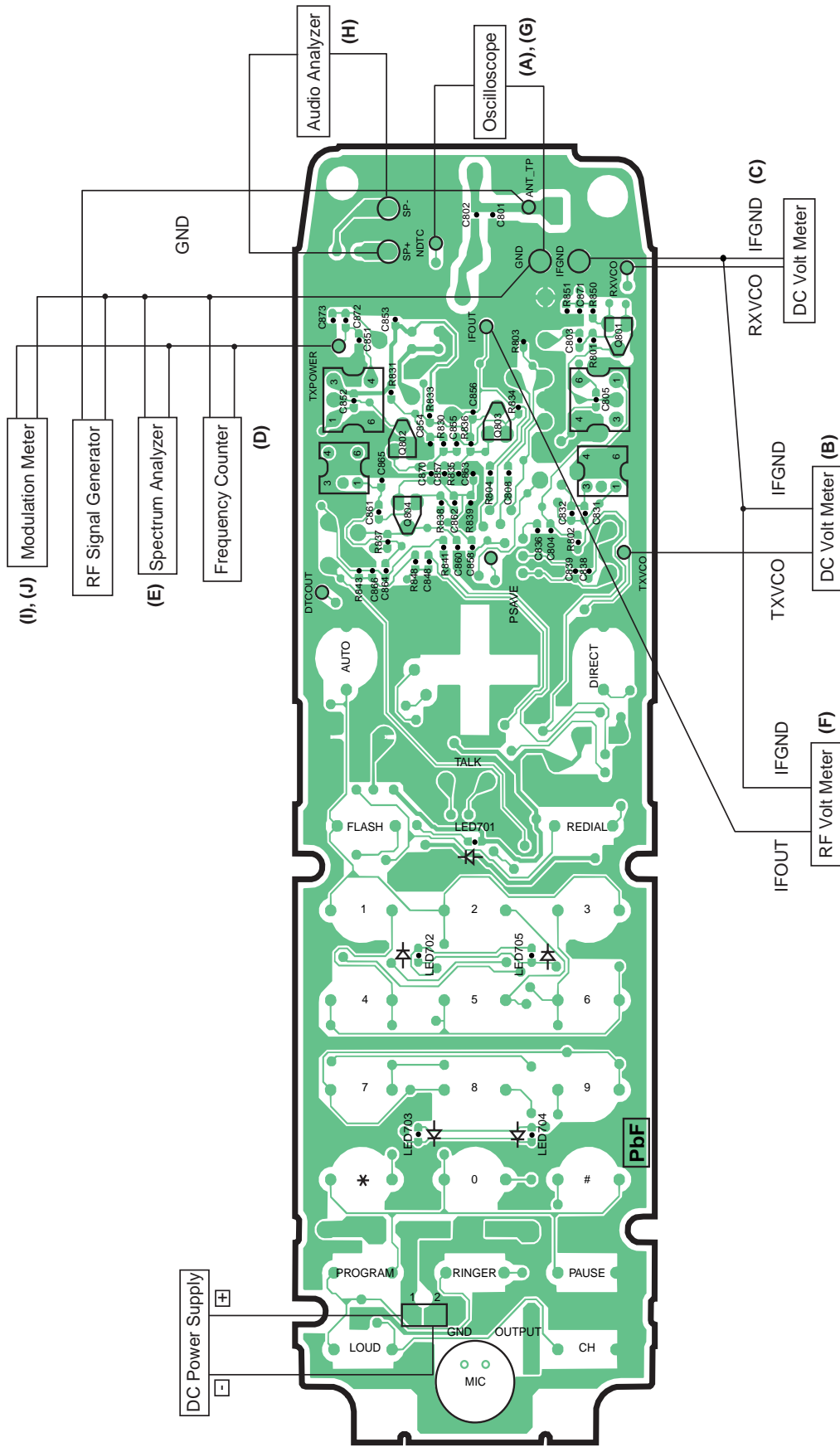
	Adjustment Items	Test Mode	Adjustment Point	*Procedure	Check or Replace Parts
(A)	Battery Low Confirmation	3ch Talk	-	1. Adjust the power supply voltage to DC 3.60V and confirm so that the reading of oscilloscope is High. 2. Adjust that power supply voltage to DC 3.40V and confirm so that the reading of oscilloscope is Low.	IC801
(B)	TX VCO Adjustment	3ch Talk	T803	• Adjust T803 so that the reading of the Digital Voltmeter is 1.5 ± 0.3 V.	IC801, X801, T803, DV1
(C)	RX VCO Adjustment	3ch Talk	T804	• Adjust T804 so that the reading of the Digital Voltmeter is 1.0 ± 0.3 V.	IC801, X801, T804, C831
(D)	TX Frequency Confirmation	3ch Talk	-	• Confirm so that the reading of the frequency counter is $39.875\text{MHz} \pm 700\text{Hz}$.	IC801, DPX1, T802
(E)	TX Power Adjustment	3ch Talk	T802	• Adjust T802 so that the reading of the RF VTVM is more than 5dBm.	IC801, Q802, Q804, T802, DPX1
(F)	RX Sensitivity Confirmation (2nd IF output)	3ch Talk	T801	1. Apply -60dBm output from S.S.G. (modulation frequency 1KHz, dev. 0KHz). 2. Confirm 2nd IF output so that the reading of AF VTVM is the maximum value (more than 20mV).	DPX1, T801, CF801, CF802
(G)	Noise Squelch Confirmation	3ch Talk	-	1. Measure the S.S.G. output level when the noise squelch changes from Low to High. (modulation frequency 1KHz, dev.3KHz) 2. Confirm that the S.S.G. output level is -113dBm ~ -118dBm.	IC801, DPX1
(H)	Speaker Output Level Confirmation	3ch Talk	-	1. Apply -60dBm output from S.S.G. (modulation frequency 1KHz, dev. 3KHz). 2. Confirm that the reading of AF VTVM is more than 30mV. (Distortion:less than 7%) (volume High)	IC801
(I)	Mic Modulation Factor Confirmation	3ch Talk	-	1. Apply a MIC signal (1KHz, 4mV at 600Ω load). 2. Confirmation so that the reading FM Deviation Meter is $2.4 \pm 0.5\text{KHz}$.	IC801, DV1
(J)	Data Modulation Confirmation	3ch Talk	-	• Confirm for $5.0\text{KHz} \pm 1.5\text{KHz}$ FM Deviation Meter reading.	Q802, Q804, T802, DV1, DPX1

*: The connections of adjustment equipment are as shown in **Adjustment Standard (Handset)** (P.24).

S.S.G. Frequency: 30.175 MHz

8.4. Adjustment Standard (Handset)

When connecting the Simulator and Equipments for checking, please refer to the illustration below.



Note: (A) - (J) is referred to ADJUSTMENTS (HANDSET) (P.22)

9 RF SPECIFICATION

9.1. Base Unit

Item	Value	Refer to -.*	Remarks
TX Frequency	30.175 MHz \pm 700 Hz	ADJUSTMENTS (BASE UNIT) (C)	at CH3
TX Power	more than 8dBm	ADJUSTMENTS (BASE UNIT) (D)	at CH3
Line Modulation factor	2.4 KHz \pm 0.4 KHz	ADJUSTMENTS (BASE UNIT) (G)	
Data Modulation factor	5.0 KHz \pm 1.5 KHz	—	
Line Output level	more than 600 mV	—	

*: Refer to **Adjustment** (P.20).

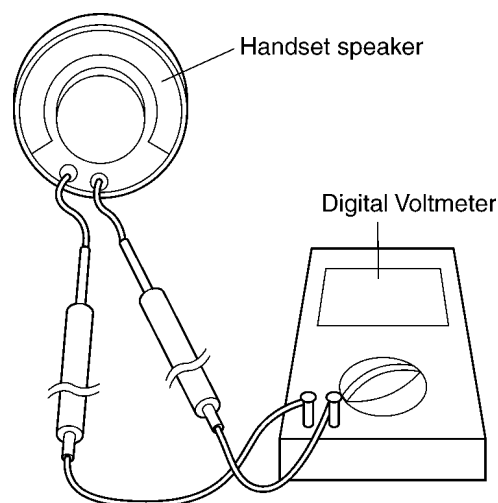
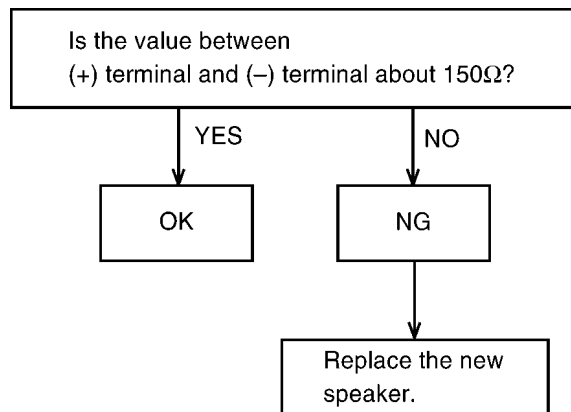
9.2. Handset

Item	Value	Refer to -.**	Remarks
TX Frequency	39.875 MHz \pm 700 Hz	ADJUSTMENTS (HANDSET) (D)	at CH3
TX Power	more than 5dBm	ADJUSTMENTS (HANDSET) (E)	at CH3 (Antenna soldering point 50 Ω Load)
Data Modulation factor	5.0 KHz \pm 1.5 KHz	ADJUSTMENTS (HANDSET) (J)	at CH3
MIC Modulation factor	2.4 KHz \pm 0.5 KHz	ADJUSTMENTS (HANDSET) (I)	at CH3 (MIC terminal 4mV Input)
SP Output level	more than 30 mV	—	

** : Refer to **Adjustment** (P.23).

10 HOW TO CHECK THE HANDSET SPEAKER

1. Prepare the digital voltmeter, and set the selector knob to ohm meter.
2. Put the probes at the speaker terminals as shown below.

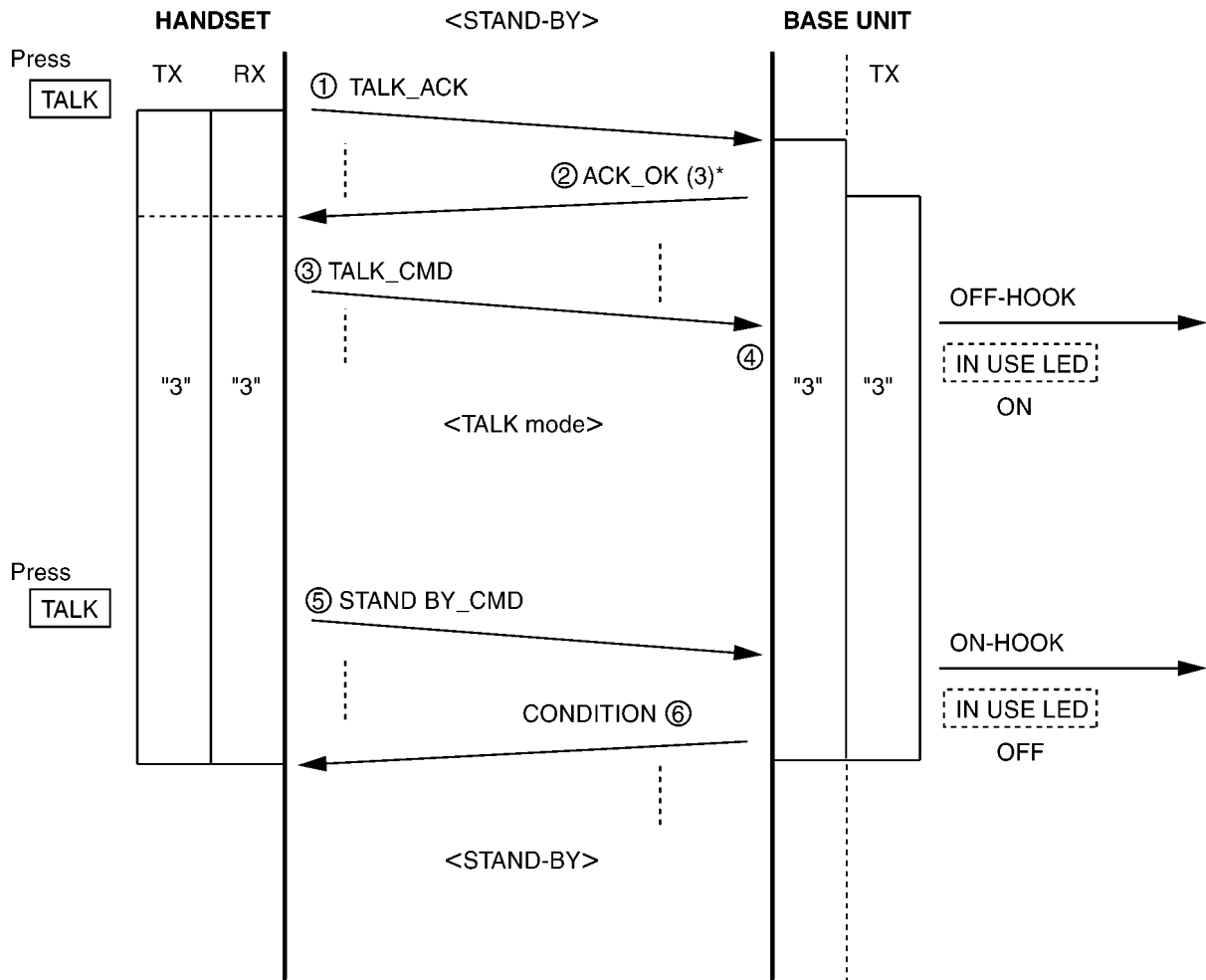


11 FREQUENCY TABLE (MHz)

Channel	BASE UNIT		HANDSET	
	Transmit Frequency	Receive Frequency	Transmit Frequency	Receive Frequency
1	30.075	39.775	39.775	30.075
2	30.125	39.825	39.825	30.125
3	30.175	39.875	39.875	30.175
4	30.225	39.925	39.925	30.225
5	30.275	39.975	39.975	30.275
6	30.100	39.800	39.800	30.100
7	30.150	39.850	39.850	30.150
8	30.200	39.900	39.900	30.200
9	30.250	39.950	39.950	30.250
10	30.300	40.000	40.000	30.300

12 EXPLANATION OF CPU DATA COMMUNICATION

12.1. STAND-BY -> TALK, TALK -> STAND-BY



Press the TALK button

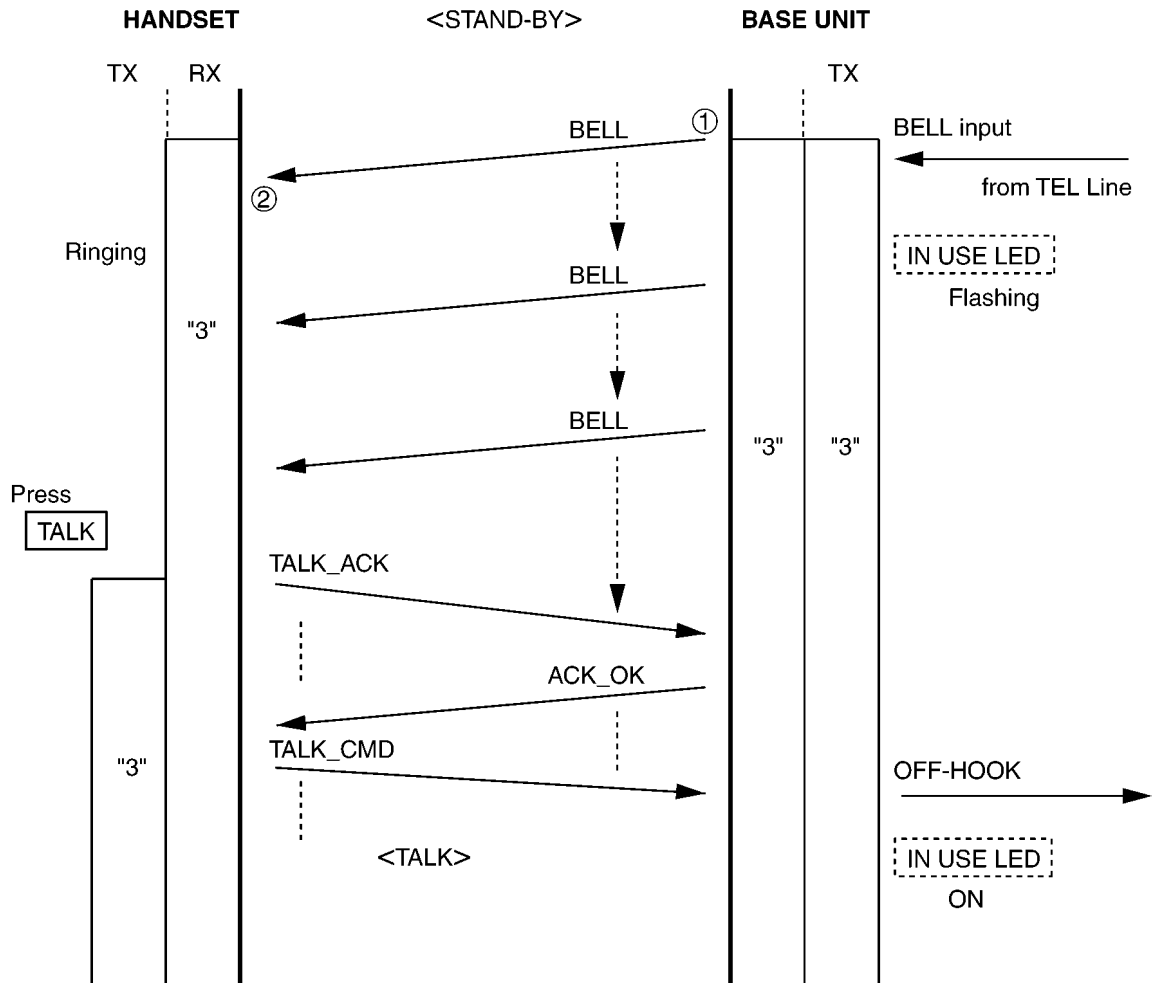
- ① The handset transmits TALK_ACK.
- ② Then base unit transmits ACK_OK including the channel number (Example: "3").
- ③ The handset transmits TALK_CMD.
- ④ The base unit goes to off-Hook mode.

Press the TALK button

- ⑤ The handset transmits STANDBY_CMD at the channel.
- ⑥ The base unit transmits CONDITION at the TALK channel.

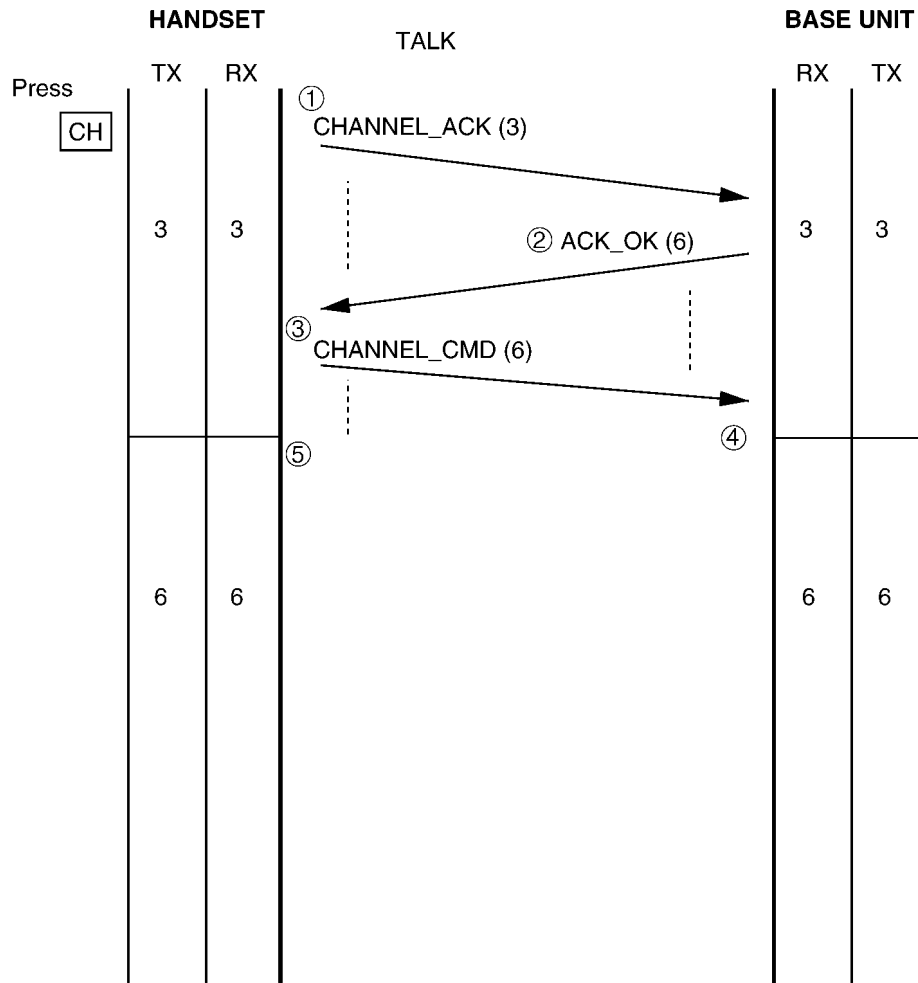
*: The channel is changed if the noise interferes with the conversation.

12.2. Ringing



- ① When the bell signal is input, the base unit transmits BELL.
- ② The handset rings the bell on receiving BELL.

12.3. Changing the Channel



Press the CH button.

- ① The handset transmits CHANNEL_ACK.
- ② The base unit replies with ACK_OK including "vacant channel number (Example: 6)".
Note: The "vacant channel number" is selected at random by the base unit.
- ③ Then handset transmits CHANNEL_CMD.
- ④ The base unit moves to the vacant channel after receiving CHANNEL_CMD.
- ⑤ The handset moves to the vacant channel when the transmission of CHANNEL_CMD has been completed.

12.4. Ports for transmitting and receiving of data

Handset:
 transmitting (TX) ... 25 Pin
 receiving (RX) ... 12 Pin

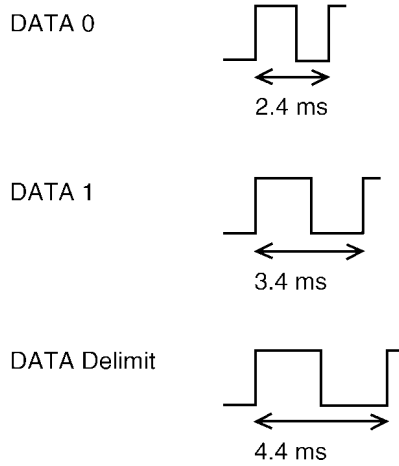
Base Unit:
 transmitting (TX) ... 23 Pin
 receiving (RX) ... 10 Pin

12.5. Waveform of DATA used for cordless transmission and reception

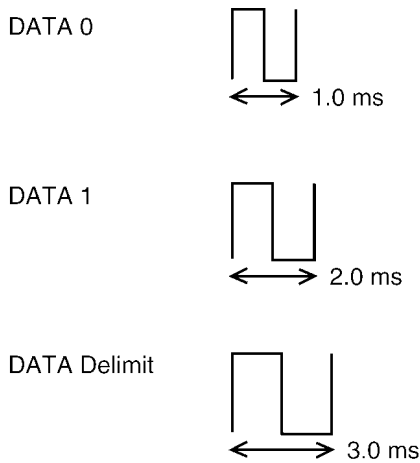
The DATA which is transmitted from the Handset to the Base Unit is combination of DATA 0, DATA 1, DATA Delimit.
 The DATA which is transmitted from the Base Unit to the Handset is combination of DATA 0, DATA 1, DATA Delimit.

12.5.1. Handset

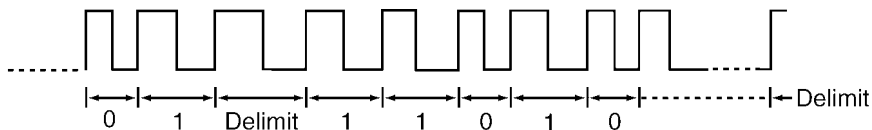
Transmitting DATA Element Format



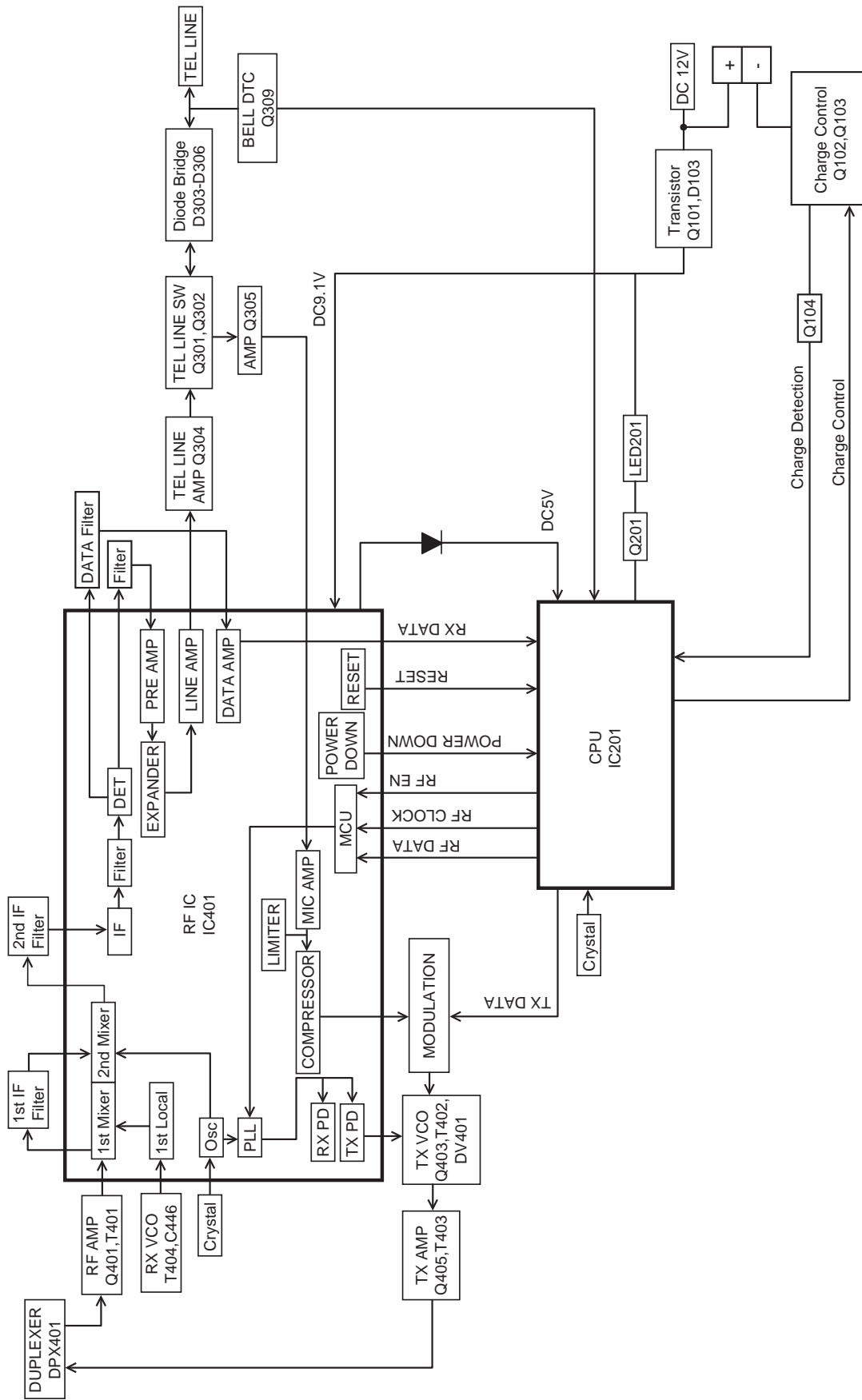
12.5.2. Base Unit



• For example (one of part of data)



13 BLOCK DIAGRAM (BASE UNIT)



KX-TC2106 BLOCK DIAGRAM (BASE UNIT)

14 CIRCUIT OPERATION (BASE UNIT)

14.1. Outline

Base unit consists of the following ICs as shown in **BLOCK DIAGRAM (BASE UNIT)** (P.31).

- CPU: IC201
 - Controlling the whole system
 - Forming/analyzing all data signals (ACK, CMD signal etc.)
 - All interfaces (ex: LED, Detector Circuit (Charge/ Power Down))
- RF IC: IC401
 - PLL Oscillator
 - Detection
 - Compress/ Expander
 - 1st/2nd mixer
 - Amplifier for transmission and reception
 - DC 5.5V regulator
 - Reset Circuit
- Additionally,
 - Power Supply Circuit
 - Charge Circuit
 - Telephone Line Interface Circuit

14.2. Power Supply Circuit

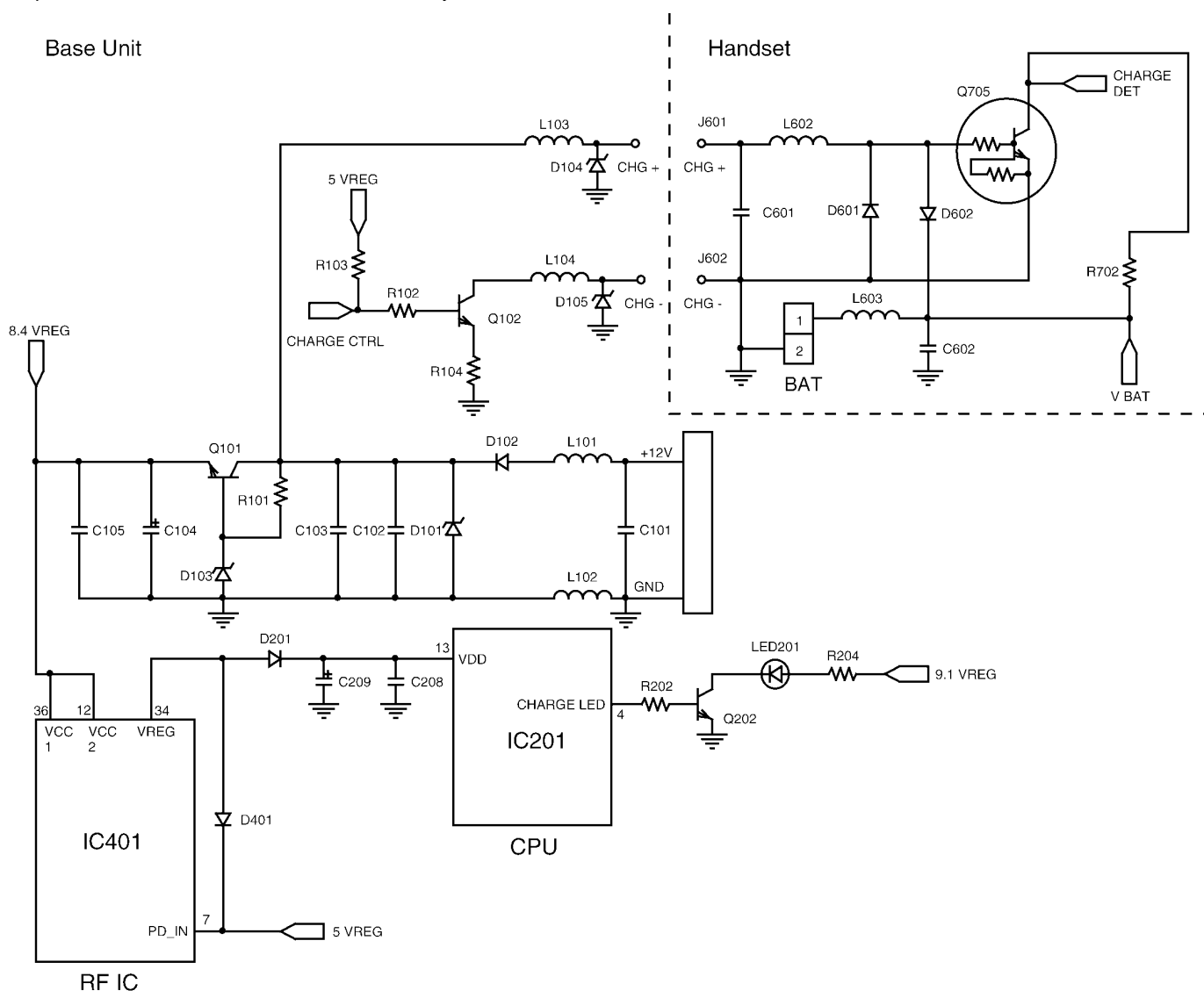
The power supply to the CPU and RF IC from AC Adaptor (+12V) is shown in the diagram below.

The base unit power supply is DC12V. The handset power is supplied from DC 3.6V battery (Nickel-Cadmium battery) which is installed in the handset.

Power supply for transmitter is turned on by pressing "TALK" key on the handset. During the stand-by mode, the unit stops transmitting but receives the signal.

During on-hook condition (the handset is placed on the base unit), backup power for memory of the last dialed number is supplied through the battery (DC 3.6V Nickel-Cadmium in the handset). The memory of this unit is not backed up by the current from the telephone line.

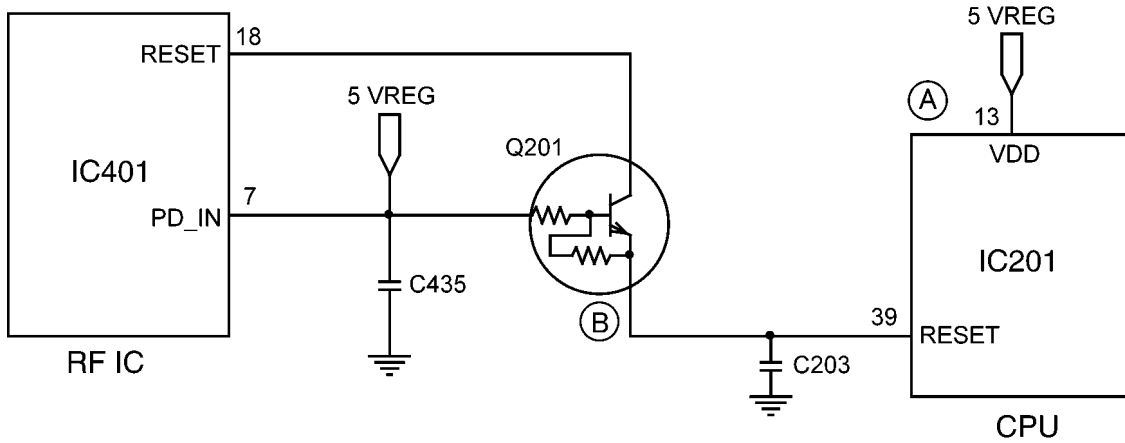
The base unit DC power supply is regulated by Q101, D103. The CPU power is supplied from IC401. IC401 detects AC Adaptor power failure and maintains the unit security code.



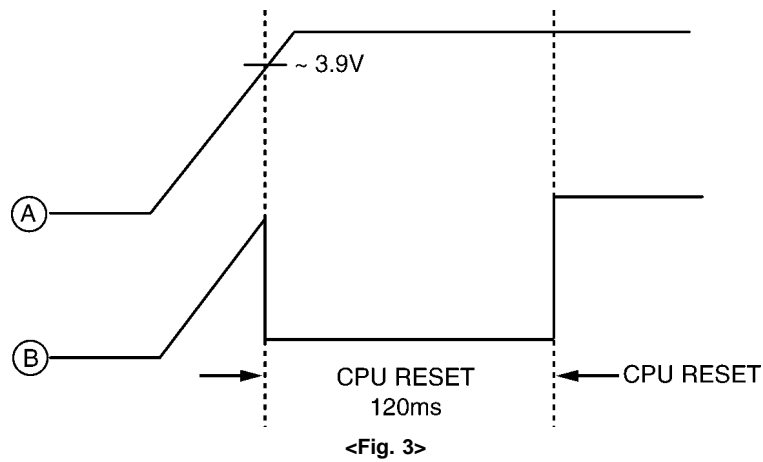
<Fig. 1>

14.3. Reset Circuit

After power supply from AC adaptor, the reset signal for CPU is making in IC401. Refer to the below waveform.



<Fig. 2>



<Fig. 3>

14.4. Charge Circuit

Circuit Operation:

When charging the handset on the base unit, the charge current is as follows;

DC12V → L101 → D102 → L103 → CH+(Base) → +CONTACT J601(Handset) → L602 → D602 → CN1-1 → Battery → CN1-2 → -CONTACT J602(Handset) → CH-(Base) → L104 → Q102 → R104

In this way, the CPU on both units detects the fact that the battery is charged.

The charge current is controlled by switching Q103 of Base Unit. The battery is charged in normal mode for 9 hours and then in trickle mode.

14.5. Telephone Line Interface

Function:

- Bell signal detection
- ON/OFF hook and pulse dial circuit
- Side tone circuit

Bell signal detection and OFF HOOK circuit:

In the idle mode, Q301 is open to cut the DC loop current and decrease the ring load. When ring voltage appears at the Tip (T) and Ring (R) leads (When the telephone rings), the AC ring voltage is transferred as follows:

- JK1 TIP → P0301 → L301 → R334 → C322 → Q309 → IC201 Pin30
- JK1 RING → L302 → R333 → C321 → C323 → Q309 → IC201 Pin30

When the CPU detects a ring signal and press the "TALK" key on the handset, Q302 turns on and then Q301 turns on, thus providing an off-hook condition (active DC current flow through the circuit) and the following signal flow is for the loop current.

- Tip → P0301 → L301 → D303 → Q301 → R303 → Q302 → D306 → L302 → Ring

ON HOOK Circuit:

Q302 is open, Q301 is disconnected as to cut the DC loop current and to cut the voice signal. The unit is consequently in an on-hook condition.

Pulse Dial Circuit:

CPU (Hook) turns Q302 ON/OFF to make the pulse dialing via Q301.

Make/Break ratio when dialing with the Handset 40% : 60%

Side Tone Circuit:

Basically this circuit prevents the TX signal from feeding back to RX signal.

As for this unit, TX signal feed back from Q304 is canceled by the side tone circuit C312, C313, R317, R318 and R319.

14.6. Transmitter/Receiver

Base Unit and Handset mainly consist of RF (Radio Frequency) IC and CPU.

Base Unit and Handset transmit/receive voice signal and data signal through the antenna on carrier frequency.

Signal Path:

*Refer to CDL TX/RX in **SIGNAL ROUTE** (P.41).

14.6.1. Base to Handset

Circuit Operation:

The voice signal input from the TEL LINE interface goes to RF IC as shown in **BLOCK DIAGRAM (BASE UNIT)** (P.31).

In the talk mode (off-hook) condition, the telephone line voice signal passes through D303, Q301, C313, R320 and C315.

The signal goes through the compressor of RF IC, and it is output to transmitter circuit.

The signal of the data sent to the handset is applied in the anode of the variable capacitor diode (VARICAP : DV401).

The capacitor of VARICAP is changing in accordance with the voice signal from telephone line interface or TX DATA signal from CPU. Therefore, the carrier frequency which is generated by TX VCO will be changed, and Frequency modulated RF signal is generated and amplified by RF AMP (Q405, T403). It passes through the Duplexer DPX401 and is radiated from Antenna.

The signal is transmitted from the base unit and received by the handset antenna and amplified by RF amplifier (Q801) through DPX1 as shown in **BLOCK DIAGRAM (HANDSET)** (P.38). And then it is converted to 10.7 MHz and 450 KHz Intermediate frequency by RF IC and related components.

The demodulated audio signal is output from RF IC (DET OUT) and passed through "Expander" process to reduce noise, then voice signal amplified by "Receiver amplifier" is output to receiver (REC1).

The receiver loudness is adjustable by using "LOUD" key on the handset.

TX data (to Handset):

CPU (VTX) becomes low to turn on the transmission power transistor Q805, and CPU (TX-data) sends data signal. It is FM-modulated by TX VCO and driven by RF AMP, then transmitted to the handset.

14.6.2. Handset to Base

Circuit Operation:

The voice signal from the handset user is picked up by the microphone (MIC), then it passes through "Compressor" process to reduce noise as shown in **BLOCK DIAGRAM (HANDSET)** (P.38). And the voice is FM-modulated by VARICAP (DV1).

The carrier frequency is generated by TX VCO. The transmitter power transistor Q805 is turned on/off by CPU (VTX).

The carrier signal is amplified by RF AMP and sent to the handset duplexer and antenna.

The signal of 39 MHz band (39.775~40.000 MHz) which is input from ANT is filtered at DPX401 as shown in **BLOCK DIAGRAM (BASE UNIT)** (P.31), then it is input to RF IC.

The signal input to RF IC is converted through Mixer inside of RF IC, RF filter (CF1, CF2) and Expander.

The signal is transmitted from the handset and received by the base unit antenna and amplified by RF amplifier Q401, then it is converted to 10.7 MHz and 450 KHz Intermediate by RF IC. The demodulated audio signal is output from RF IC (DET OUT) and passed through "Expander" process to reduce noise, then voice signal is led to LINE AMP. The signal passes through TELEPHONE INTERFACE and Tel-line.

RX data (from Handset):

The data signal from handset (ex: Talk, ACK, COM) is also included in 39 MHz band same as the voice data. After second if filter, the data signal is made square shape by data limiting AMP of the RF IC. RX data is output to CPU (RX Data).

14.6.3. RF signal operation/control and PLL operation (RF UNIT)

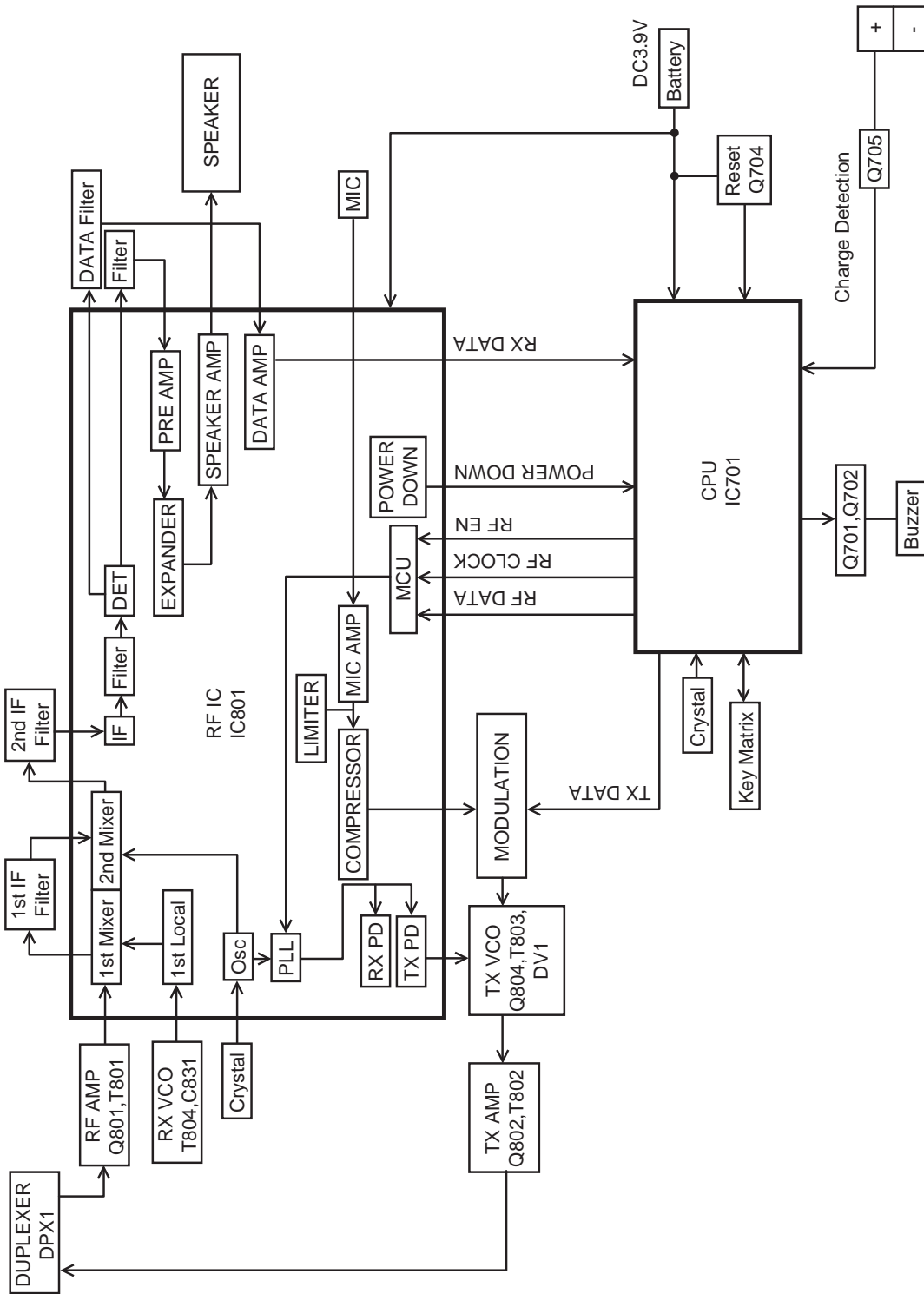
Base unit radio frequency signal received by antenna passes through duplexer (DPX401).

RF signal is amplified by RF AMP. RF signal received from RF IC is mixed with RX local frequency at Mixer to generate 10.7 MHz wide band IF. The reference frequency is generated by X801 10.240 MHz crystal.

The 10.7 MHz is mixed with reference and 450 KHz narrow band IF is generated.

RF IC is controlled by CPU (RF EN, RF DATA, RF CLOCK). The RX local frequency is generated by RX VCO.

15 BLOCK DIAGRAM (HANDSET)



KX-TC2106 BLOCK DIAGRAM (HANDSET)

16 CIRCUIT OPERATION (HANDSET)

16.1. Outline

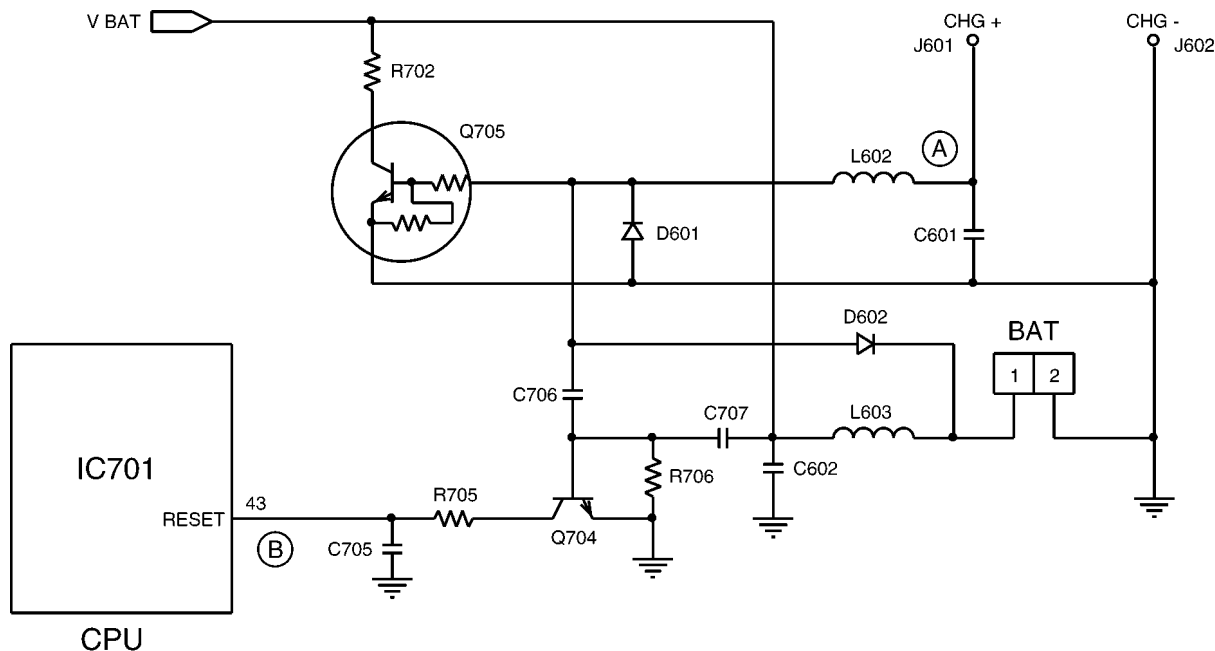
Handset consists of the following ICs as shown in **BLOCK DIAGRAM (HANDSET)** (P.38).

- CPU: IC701
 - Forming/analyzing all data signals (ACK or CMD signal)
 - All interfaces (ex; LED, Key, Buzzer, Detector Circuit, Charge/Battery Low)
 - RAM for keeping the data (CH Number, ID Code, etc.)
- RF IC: IC801
 - PLL Oscillator
 - Detection
 - Compress/Expander
 - 1st/2nd mixer
 - Amplifier for transmission and reception

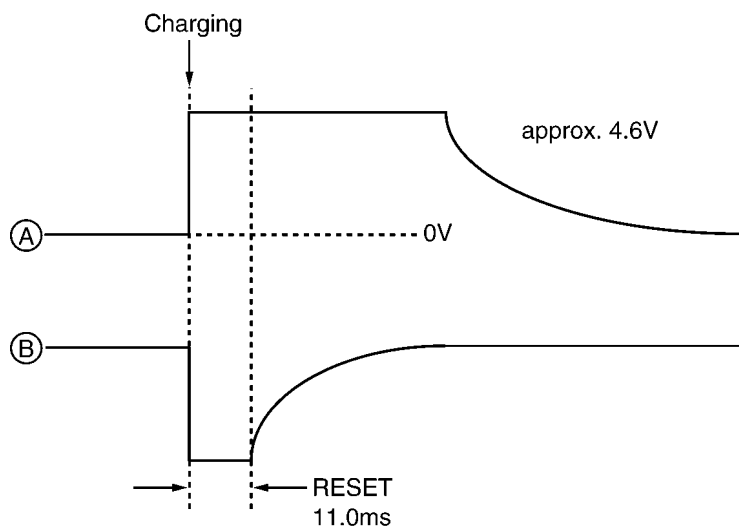
16.2. Reset Circuit

The power of handset is supplied by battery.

Whenever the battery is recharged or inserted, the impulse at CHG+ becomes Reset signal through Q704, and it is sent to CPU.



<Fig. 4>



<Fig. 5>

16.3. Battery Low / Power Down Detector

Circuit Operation:

“Battery Low” and “Power Down” are detected by RF IC which check the voltage from battery. Shortly, every detected blocks are inside of RF IC. The detected voltage is as follows;

- Battery Low

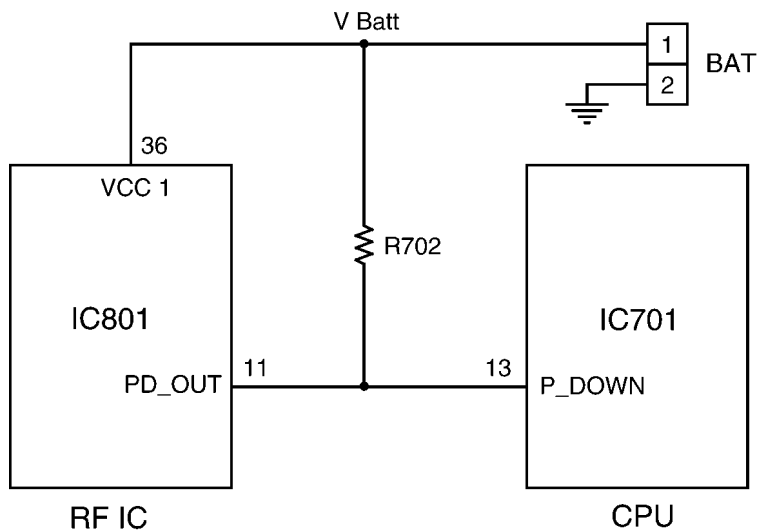
Battery voltage : $V(\text{Batt}) < 3.457\text{V}$

The CPU detects the level and “Recharge battery” LED starts flashing.

- Power Down

Battery voltage : $V(\text{Batt}) < 3.0\text{V}$

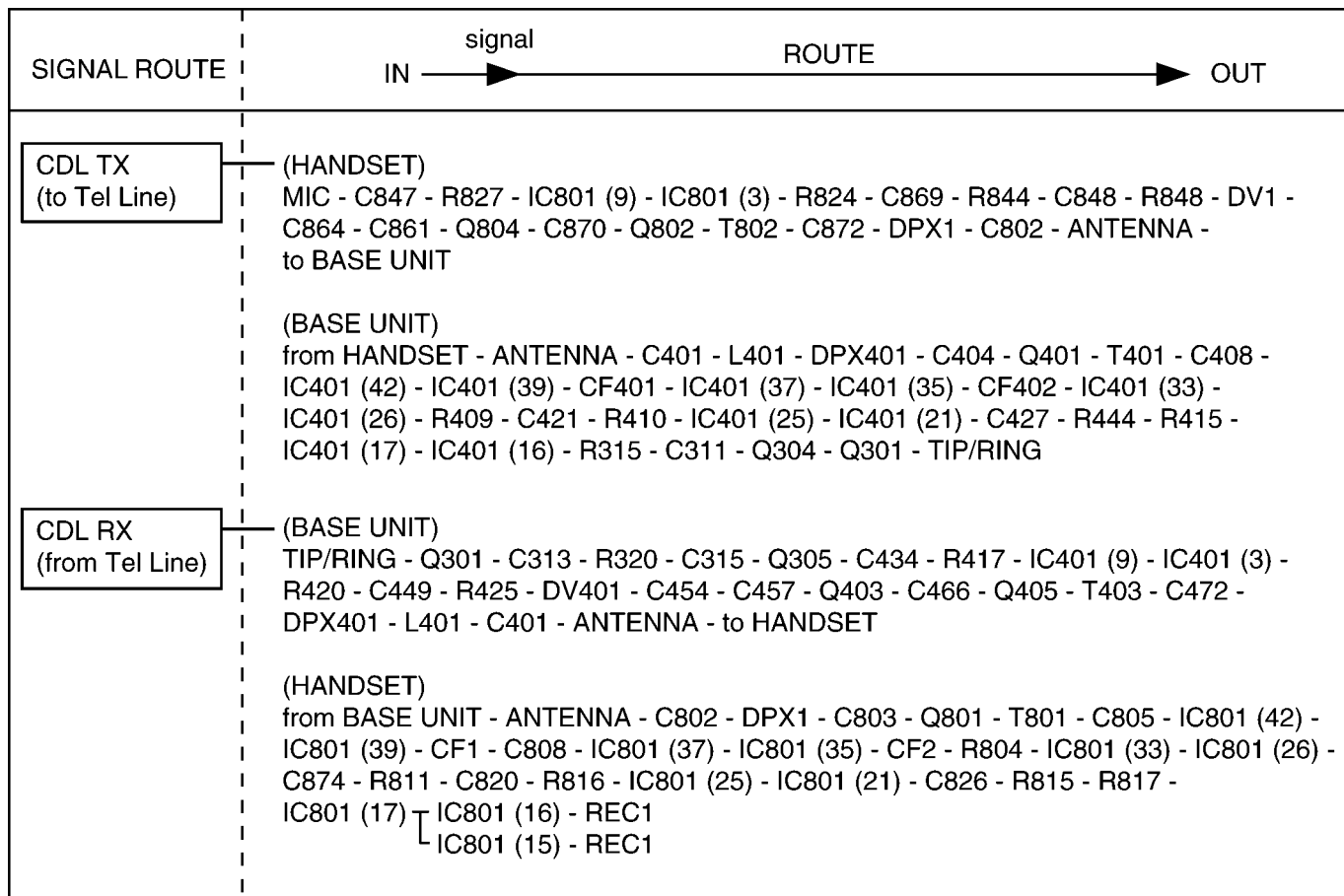
The output of RF IC (Power Down) becomes low level, then CPU stops working to keep the data (CH number, ID Code, etc.)



<Fig. 6>

17 SIGNAL ROUTE

Each signal route is as follows.



18 CPU DATA (Base Unit)

18.1. IC201

Pin	Description	I/O	High	High-z	Low
1	OPT_9	D.I	Normal	--	Active
2	OPT_10	D.I	Normal	--	Active
3	LOCATOR	D.I	Normal	--	Active
4	CHARGE LED	D.O	ON	--	OFF
5	LINE CURRENT	D.I	Active	--	Active
6	OPT_11	D.I	Normal	--	Active
7	OPT_12	D.I	Normal	--	Active
8	OPT_13	D.I	Normal	--	Active
9	OPT_14	D.I	Normal	--	Active
10	RXDATA	D.I	Active	--	Active
11	POW_DOWN	D.I	Normal	--	Active
12	SIGOUT	D.I	Active	--	Active
13	VDD	--	Normal	--	--
14	XOUT	O	Normal	--	Normal
15	XIN	I	Normal	--	Normal
16	GND	GND	--	--	--
17	--	--	--	--	--
18	RF_DATA	D.O	Active	--	Active
19	NC	D.O	--	--	fixed
20	RF_CLOCK	D.O	Active	--	Active
21	RF_EN	D.O	Active	--	Active
22	DTMF	D.O	Active	--	Normal
23	TXDATA	D.O	Active	--	Active
24	TRICKLE	D.O	--	Normal	Active
25	VTX	D.O	--	OFF	ON
26	NC	D.O	--	--	fixed
27	CHARG_DET	D.I	OFF	--	Charge
28	OPT_15	D.I	Normal	--	Active
29	CH_UP	D.I	Normal	--	Active
30	RING_DET	D.I	Normal	--	Active
31	CHARG_CTRL	D.O	Normal	--	Active
32	HOOK	D.O	Active	--	Normal
33	LINE_SEIZURE	D.O	Active	--	Normal
34	OPT_0	D.I	Normal	--	Active
35	OPT_1	D.I	Normal	--	Active
36	OPT_2	D.I	Normal	--	Active
37	OPT_3	D.I	Normal	--	Active
38	OPT_4	D.I	Normal	--	Active
39	RESET	I	Normal	--	Reset
40	MMOD	--	on board write	--	Normal
41	OPT_5	D.I	Normal	--	Active
42	OPT_6	D.I	Normal	--	Active
43	OPT_7	D.I	Normal	--	Active
44	OPT_8	D.I	Normal	--	Active

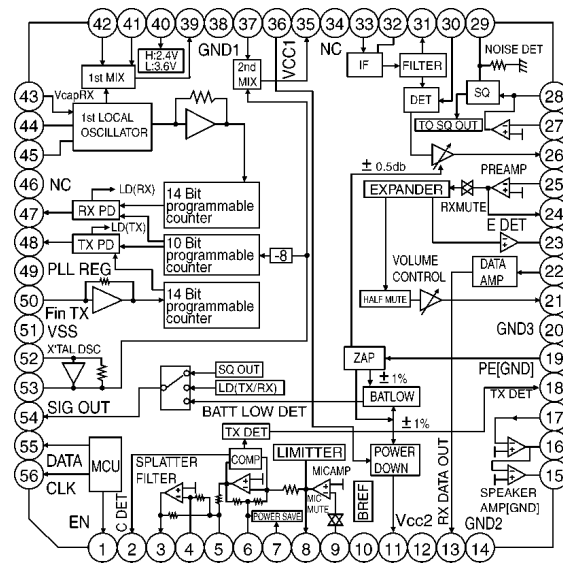
19 CPU DATA (Handset)

19.1. IC701

Pin	Description	I/O	High	Hi-z	Low
1	CHAG_DET	D.I	OFF	--	Charge
2	BCKLED	D.O	ON	--	OFF
3	TALK/RECHARGELED	D.O	--	OFF	ON
4	VTX	D.O	--	OFF	ON
5	--	--	--	--	--
6	OPT_A	D.I	Normal	--	Active
7	OPT_B	D.I	Normal	--	Active
8	OPT_C	D.I	Normal	--	Active
9	OPT_D	D.I	Normal	--	Active
10	OPT_E	D.I	Normal	--	Active
11	OPT_F	D.I	Normal	--	Active
12	RXDATA	D.I	Active	--	Active
13	POW_DOWN	D.I	Normal	--	Active
14	VDD	--	Normal	--	--
15	OSC2	I	Normal	--	Normal
16	OSC1	O	Normal	--	Normal
17	GND	GND	--	--	--
18	XI	I	Normal	--	Normal
19	XO	O	Normal	--	Normal
20	RF_DATA	D.O	Active	--	Active
21	NC	D.O	--	--	fix
22	RF_CLOCK	D.O	Active	--	Active
23	Ringer_ON/OFF	D.O	Normal	--	Active
24	RF_EN	D.O	Active	--	Active
25	TXDATA	D.O	Active	--	Active
26	OPT_G	D.I	Normal	--	Active
27	OPT_H	D.I	Normal	--	Active
28	OPT_I	D.I	Normal	--	Active
29	OPT_J	D.I	Normal	--	Active
30	OPT_K	D.I	Normal	--	Active
31	OPT_L	D.I	Normal	--	Active
32	SIGOUT	D.I	Active	--	Active
33	NC	D.O	--	--	fix
34	PowerSave	D.O	STBY	--	STOP
35	Ringer_HIGH/Low	D.O	HIGH	--	LOW
36	Ringer_MID	D.O	HIGH/MID	--	LOW
37	ROW0	D.O	Normal	--	Active
38	ROW1	D.O	Normal	--	Active
39	ROW2	D.O	Normal	--	Active
40	ROW3	D.O	Normal	--	Active
41	ROW4	D.O	Normal	--	Active
42	NC	D.O	--	--	fix
43	RESET	I	Normal	--	Reset
44	MMOD	--	on board write	--	Normal
45	KEY_IN0	D.I	Active	--	Normal
46	KEY_IN1	D.I	Active	--	Normal
47	KEY_IN2	D.I	Active	--	Normal
48	KEY_IN3	D.I	Active	--	Normal

20 RF IC (Base Unit and Handset)

20.1. Base Unit: IC401, Handset: IC801



Pin No.	Description	Pin No.	Description
1	EN	29	N-DET
2	C-DET	30	QUAD
3	SF-OUT	31	PH-OUT
4	SF-P	32	IF-PASS
5	COMP-OUT	33	IF-IN
6	COMP-REF	34	IF-VREF
7	PD IN	35	2MIX-OUT
8	MIC-OUT	36	VCC 1
9	MIC-IN	37	2MIX-IN
10	BREF	38	GND 1
11	PD OUT	39	1MIX-OUT
12	VCC 2	40	PDSW
13	DATA-AMP-OUT	41	RF-IN2
14	GND 2	42	RF-IN1
15	SP-OUT2	43	VA-CONT
16	SP-OUT1	44	1st-Lo1
17	SP-IN	45	1st-Lo2
18	TX-DET	46	NC
19	PE	47	RX-PD
20	GND 3	48	TX-PD
21	VOL OUT	49	PLL-REG
22	DATA-AMP-IN	50	F IN TX
23	E-DET	51	VSS
24	Pre-AMP-OUT	52	2Lo-IN
25	Pre-AMP-IN	53	2Lo-OUT
26	DET-OUT	54	Sig-OUT
27	N FIL-IN	55	DATA
28	N FIL-OUT	56	CLK

21 HOW TO REPLACE THE FLAT PACKAGE IC

Even if you do not have the special tools (for example, a spot heater) to remove the Flat IC, with some solder (large amount), a soldering iron and a cutter knife, you can easily remove the ICs that have more than 100 pins.

21.1. PREPARATION

- PbF (: Pb free) Solder
- Soldering Iron

Tip Temperature of 700°F ± 20°F (370°C ± 10°C)

Note: We recommend a 30 to 40 Watt soldering iron. An expert may be able to use a 60 to 80 Watt iron where someone with less experience could overheat and damage the PCB foil.

- Flux

Recommended Flux: Specific Gravity → 0.82.

Type → RMA (lower residue, non-cleaning type)

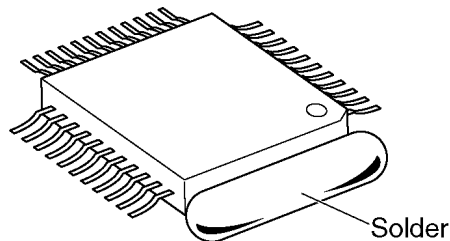
Note: See **ABOUT LEAD FREE SOLDER (PbF: Pb free) (P.4)**

21.2. FLAT PACKAGE IC REMOVAL PROCEDURE

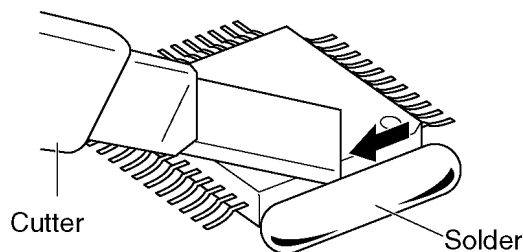
1. Put plenty of solder on the IC pins so that the pins can be completely covered.

Note:

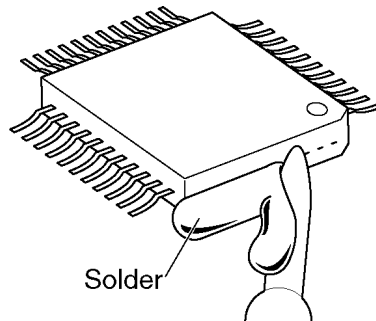
If the IC pins are not soldered enough, you may give pressure to the P.C. board when cutting the pins with a cutter.



2. Make a few cuts into the joint (between the IC and its pins) first and then cut off the pins thoroughly.



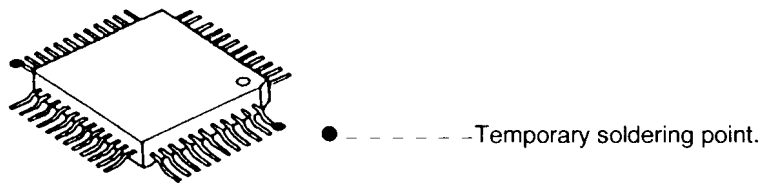
3. While the solder melts, remove it together with the IC pins.



When you attach a new IC to the board, remove all solder left on the land with some tools like a soldering wire. If some solder is left at the joint on the board, the new IC will not be attached properly.

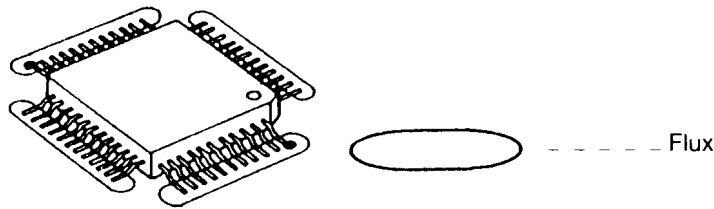
21.3. FLAT PACKAGE IC INSTALLATION PROCEDURE

1. Temporarily fix the FLAT PACKAGE IC, soldering the two marked pins.

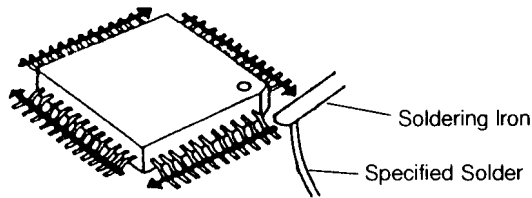


*Check the accuracy of the IC setting with the corresponding soldering foil.

2. Apply flux to all pins of the FLAT PACKAGE IC.



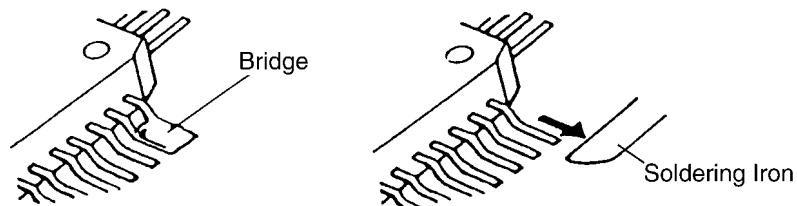
3. Solder the pins, sliding the soldering iron in the direction of the arrow.



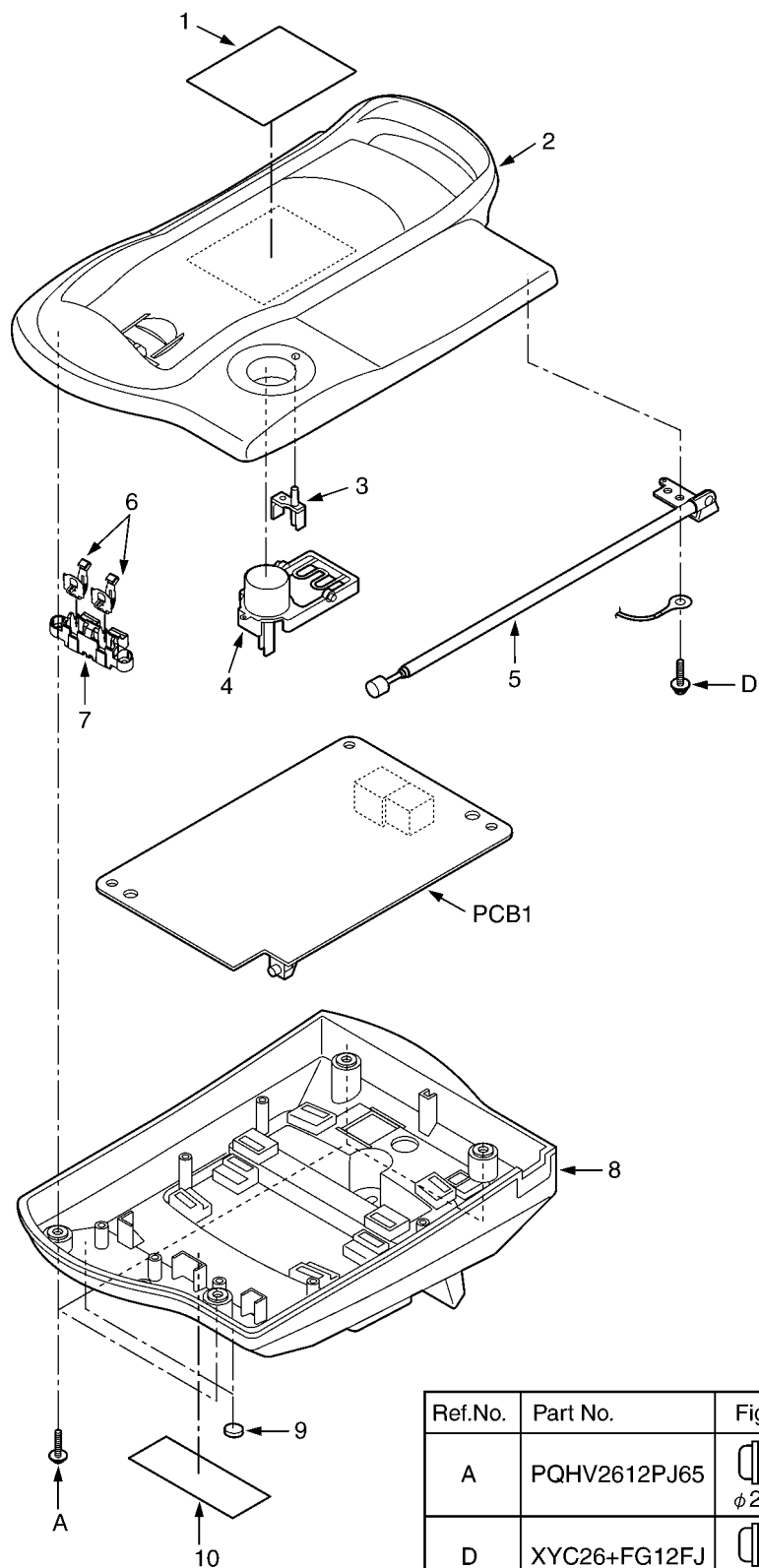
21.4. BRIDGE MODIFICATION PROCEDURE

1. Lightly resolder the bridged portion.

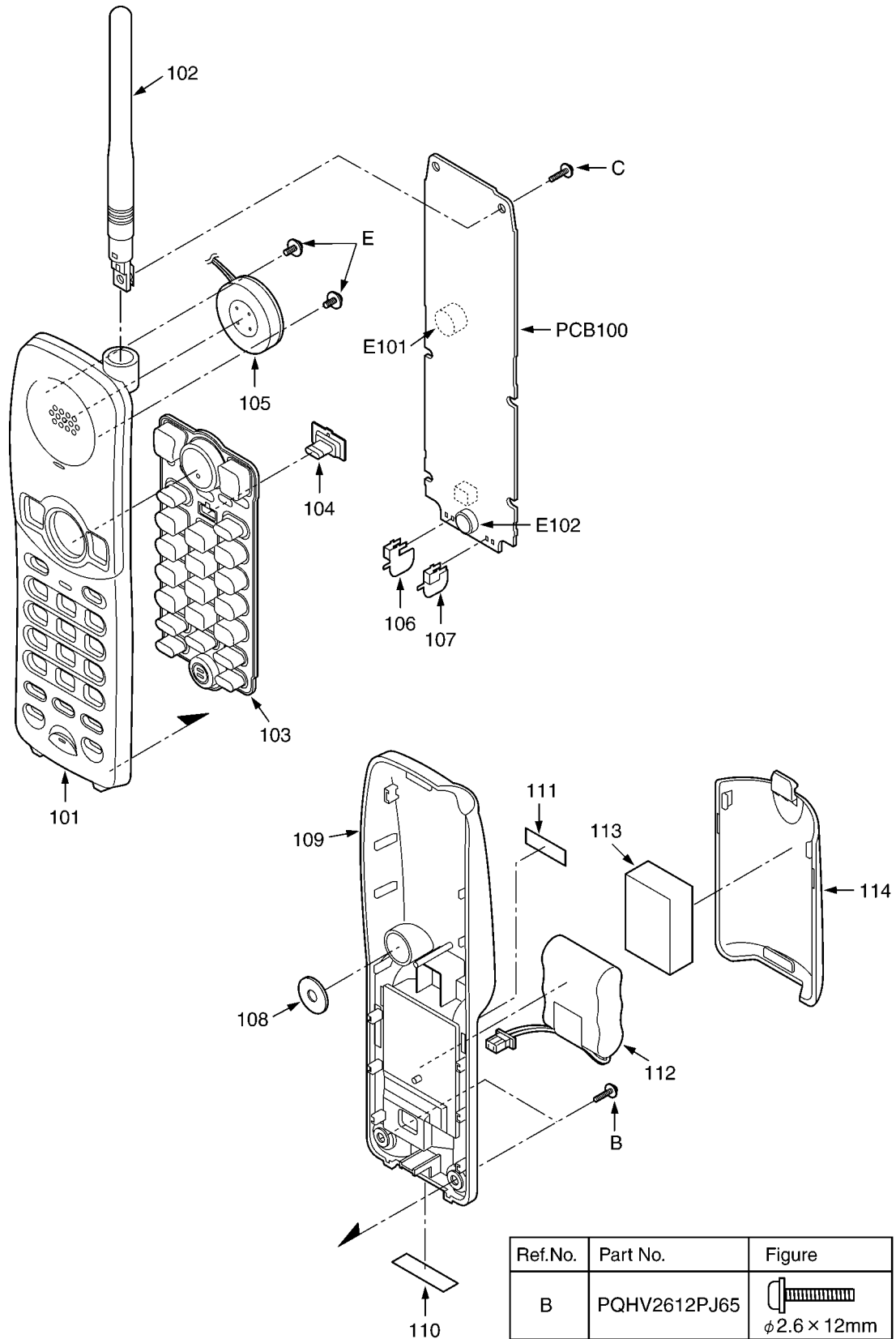
2. Remove the remaining solder along the pins using a soldering iron as shown in the figure below.

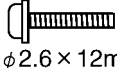
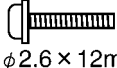



22 CABINET AND ELECTRICAL PARTS (BASE UNIT)

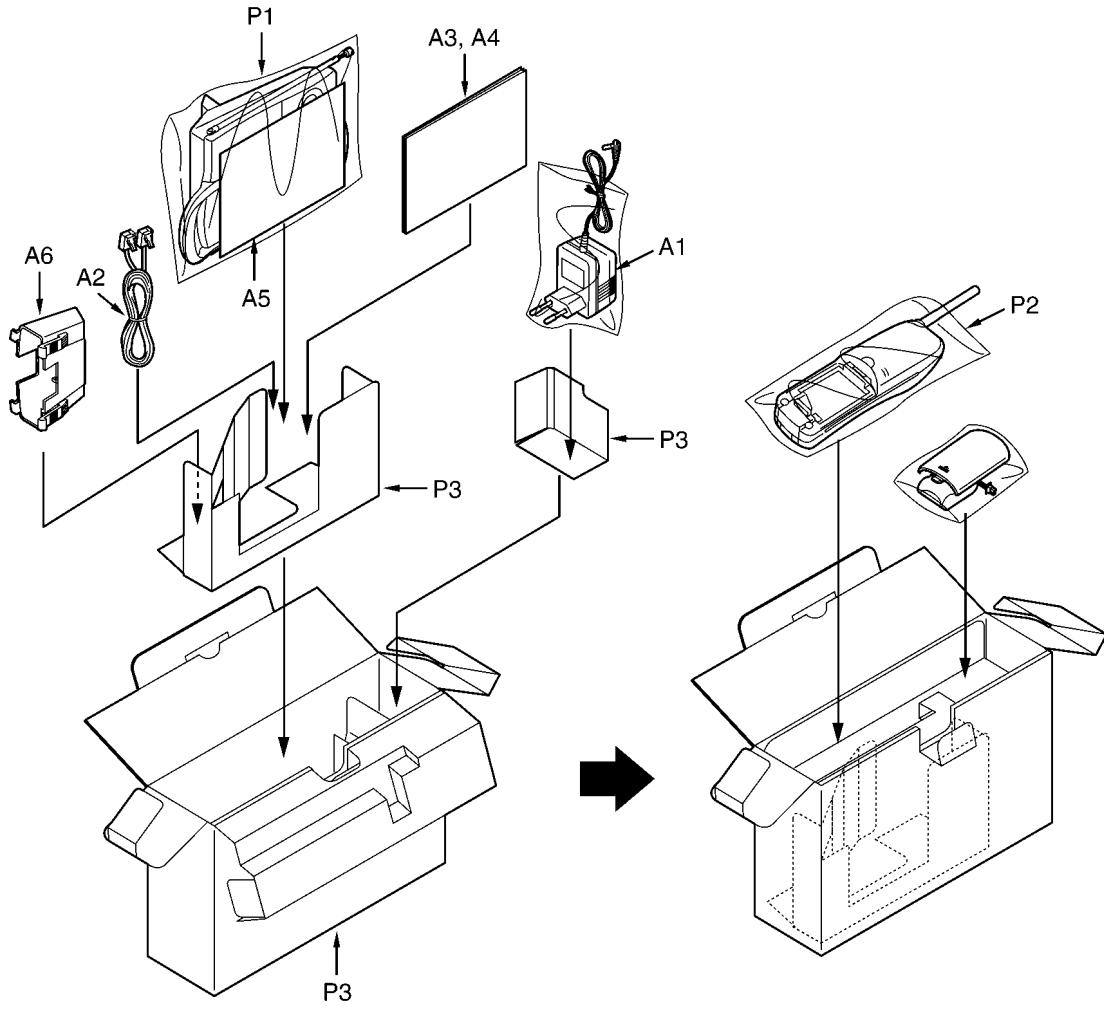


23 CABINET AND ELECTRICAL PARTS (HANDSET)



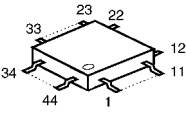
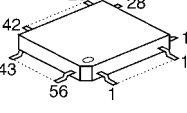
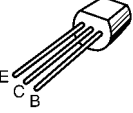
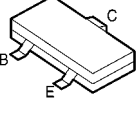
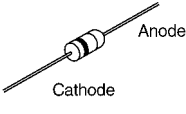
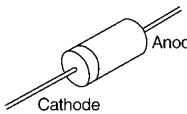
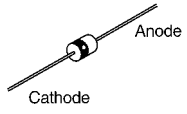
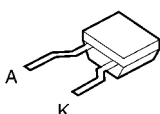
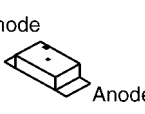
Ref.No.	Part No.	Figure
B	PQHV2612PJ65	 φ2.6 × 12mm
C	PQHV2612PJ65	 φ2.6 × 12mm
E	XTW26+6PFJ75	 φ2.6 × 6mm

24 ACCESSORIES AND PACKING MATERIALS

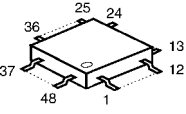
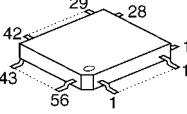
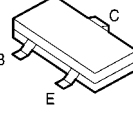
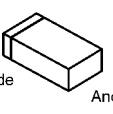
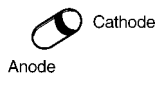
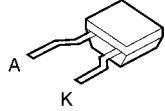
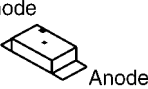


25 TERMINAL GUIDE OF THE ICs, TRANSISTORS AND DIODES

25.1. Base Unit

 <p>MN101C94AKA</p>	 <p>AN6266FA</p>	 <p>B1AADE000014, B1AAJC000010 B1ACGP000007, PQVT2N6517CA</p>		 <p>B1GBCFGG00028 B1GDCFNN00021 B1ABDE000020</p>
 <p>MA4300, MA4100 MA4180, MA4033</p>	 <p>B0EAKP000126</p>	 <p>B0EAAD000001</p>	 <p>B0CAAB000021</p>	 <p>PQVDSML310MT</p>

25.2. Handset

 <p>MN101C427AP</p>	 <p>AN6265FA</p>	 <p>B1GBCFGJ0011 B1GDCFNN00021, B1GBCFGG00028 B1ADDE000022, B1ABDE000020</p>		 <p>MA8056H, MA111</p>
 <p>B0ACCL000002</p>	 <p>B0CAAB000021</p>	 <p>PQVDSML310MT</p>		

26 REPLACEMENT PARTS LIST

1. RTL (Retention Time Limited)

Note:

The marking (RTL) indicates that the Retention Time is limited for this item.

After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

2. Important safety notice

Components identified by the Δ mark indicates special characteristics important for safety. When replacing any of these components, only use specified manufacture's parts.

3. The S mark means the part is one of some identical parts. For that reason, it may be different from the installed part.

4. ISO code (Example: ABS-94HB) of the remarks column shows quality of the material and a flame resisting grade about plastics.

5. RESISTORS & CAPACITORS

Unless otherwise specified;

All resistors are in ohms (Ω) K=1000 Ω , M=1000k Ω

All capacitors are in MICRO FARADS (μ F)P= μ F

*Type & Wattage of Resistor

Type

ERC:Solid ERDS:Carbon ERJ:Chip	ERX:Metal Film ERG:Metal Oxide ER0:Metal Film	PQ4R:Chip ERS:Fusible Resistor ERF:Cement Resistor
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Wattage

10,16:1/8W	14,25:1/4W	12:1/2W	1:1W	2:2W	3:3W
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*Type & Voltage Of Capacitor

Type

ECFD:Semi-Conductor ECQS:Styrol ECUV,PQCUV,ECUE:Chip ECQMS:Mica	ECCD,ECKD,ECBT,F1K,ECUV: Ceramic ECQE,ECQV,ECQG: Polyester ECEA,ECST,EEE: Electlytic ECQP: Polypropylene
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Voltage

ECQ Type	ECQG ECQV Type	ECSZ Type	Others		
1H:50V 2A:100V 2E:250V 2H:500V	05:50V 1:100V 2:200V	0F:3.15V 1A:10V 1V:35V 0J:6.3V	0J :6.3V 1A :10V 1C :16V 1E,25:25V	1V :35V 50,1H:50V 1J :16V 2A :100V	

26.1. Base Unit

26.1.1. Cabinet and Electrical Parts

Ref. No.	Part No.	Part Name & Description	Remarks
1	PQQT22975Z	LABEL, CHARGE	
2	PQKM10675V1	CABINET BODY (for KX-TC2106UAB)	PS-HB
2	PQKM10675U3	CABINET BODY (for KX-TC2106UAS)	PS-HB
2	PQKM10675U4	CABINET BODY (for KX-TC2106UAT)	PS-HB
2	PQKM10675V2	CABINET BODY (for KX-TC2106UAW)	PS-HB
3	PQHR11113Z	OPTIC CONDUCTIVE PARTS, LED LENS	PS-HB

Ref. No.	Part No.	Part Name & Description	Remarks
4	PQBC10428Z1	BUTTON, LOCATOR (for KX-TC2106UAB)	ABS-HB
4	PQBC10428Y3	BUTTON, LOCATOR (for KX-TC2106UAS) (for KX-TC2106UAT)	ABS-HB
4	PQBC10428Z2	BUTTON, LOCATOR (for KX-TC2106UAW)	ABS-HB
5	PQSA10104Y	ANTENNA	
6	PQJT10229Z	CHARGE TERMINAL	
7	PQHR11115Z	CASE, CHARGE TERMINAL (for KX-TC2106UAB) (for KX-TC2106UAT)	PS-HB
7	PQHR11115Y	CASE, CHARGE TERMINAL (for KX-TC2106UAS) (for KX-TC2106UAW)	PS-HB
8	PQKF10666Z1	CABINET COVER (for KX-TC2106UAB) (for KX-TC2106UAT)	PS-HB
8	PQKF10666Z3	CABINET COVER (for KX-TC2106UAS)	PS-HB
8	PQKF10666Z2	CABINET COVER (for KX-TC2106UAW)	PS-HB
9	PQHA10030Z	RUBBER PARTS, FOOT RUBBER	
10	PQGT18163Z	NAME PLATE (for KX-TC2106UAB)	
10	PQGT18167Z	NAME PLATE (for KX-TC2106UAS)	
10	PQGT18169Z	NAME PLATE (for KX-TC2106UAT)	
10	PQGT18165Z	NAME PLATE (for KX-TC2106UAW)	

26.1.2. Main P.C.Board Parts

Ref. No.	Part No.	Part Name & Description	Remarks
PCB1	PQWPC2106UAH	MAIN P.C.BOARD ASS'Y (RTL)	
		(ICs)	
IC201	MN101C94AKA	IC	
IC401	AN6266FA	IC	
		(TRANSISTORS)	
Q101	B1AADE000014	TRANSISTOR (SI)	
Q102	B1AADE000014	TRANSISTOR (SI)	
Q103	B1AADE000014	TRANSISTOR (SI)	
Q104	B1ABDE000020	TRANSISTOR (SI)	
Q201	B1GBCFGG0028	TRANSISTOR (SI)	
Q202	B1ABDE000020	TRANSISTOR (SI)	
Q301	B1ACGP000007	TRANSISTOR (SI)	S
Q302	PQVT2N6517CA	TRANSISTOR (SI)	S
Q303	B1AAJC000010	TRANSISTOR (SI)	
Q304	B1AAJC000010	TRANSISTOR (SI)	
Q305	B1ABDE000020	TRANSISTOR (SI)	
Q309	B1ABDE000020	TRANSISTOR (SI)	
Q401	B1ABDE000020	TRANSISTOR (SI)	
Q402	B1GDCFNNO021	TRANSISTOR (SI)	
Q403	B1ABDE000020	TRANSISTOR (SI)	
Q404	B1ABDE000020	TRANSISTOR (SI)	
Q405	B1ABDE000020	TRANSISTOR (SI)	
		(DIODES)	
D101	MA4300	DIODE (SI)	S
D102	BOEAKP000126	DIODE (SI)	
D103	MA4100	DIODE (SI)	S
D105	MA4300	DIODE (SI)	S
D201	BOEAAD000001	DIODE (SI)	
D301	MA4033	DIODE (SI)	S
D302	MA4033	DIODE (SI)	S
D303	BOEAKP000126	DIODE (SI)	
D304	BOEAKP000126	DIODE (SI)	
D305	BOEAKP000126	DIODE (SI)	
D306	BOEAKP000126	DIODE (SI)	
D307	MA4180	DIODE (SI)	S
D308	BOEAAD000001	DIODE (SI)	
D401	BOEAAD000001	DIODE (SI)	
DV401	BOCAAB000021	DIODE (SI)	
LED201	PQVDSML310MT	LED	S
		(COILS)	
L101	G0C100K00039	COIL	
L104	PQLQZM100K	COIL	S

Ref. No.	Part No.	Part Name & Description	Remarks
L301	PQLQZK3R3K	COIL	S
L302	PQLQZK3R3K	COIL	S
L401	PQLQZK2R2K	COIL	S
T401	G2BRC0000010	COIL	
T402	PQL04B006	COIL	
T403	G2BRC0000009	COIL	
T404	PQL04B005	COIL	
		(CERAMIC FILTERS)	
CF401	J0B1075A0127	CERAMIC FILTER	
CF402	J0B4503A0066	CERAMIC FILTER	
		(CRYSTAL OSCILLATORS)	
X201	H0D795400007	CRYSTAL OSCILLATOR	
X401	H0D111500003	CRYSTAL OSCILLATOR	
		(VARISTORS)	
SA301	J0LF00000026	VARISTOR (SURGE ABSORBER)	S
SA302	J0LF00000026	VARISTOR (SURGE ABSORBER)	S
		(RESISTORS)	
R101	ERDS2TJ221	220	
R102	ERJ3GEYJ102	1K	
R103	ERJ3GEYJ102	1K	
R104	ERDS2TJ151	150	
R105	ERJ3GEYJ102	1K	
R106	ERJ3GEYJ391	390	
R107	PQ4R10XJ101	100	S
R108	PQ4R10XJ270	27	S
R109	ERJ3GEYJ103	10K	
R110	ERJ3GEYJ104	100K	
R202	ERJ3GEYJ103	10K	
R203	ERJ3GEYJ104	100K	
R204	ERJ3GEYJ681	680	
R205	ERJ3GEYJ104	100K	
R206	ERJ3GEYJ104	100K	
R207	ERJ3GEYJ102	1K	
R208	ERJ3GEYJ103	10K	
R209	ERJ3GEYJ223	22K	
R210	ERJ3GEYJ223	22K	
R211	ERJ3GEY0R00	0	
R215	ERJ3GEYJ472	4.7K	
R216	ERJ3GEYJ472	4.7K	
R217	ERJ3GEYJ472	4.7K	
R224	ERJ3GEY0R00	0	
R228	ERJ3GEY0R00	0	
R233	ERJ3GEY0R00	0	
R301	ERDS2TJ153	15K	
R302	PQ4R10XJ104	100K	S
R303	PQ4R10XJ472	4.7K	S
R305	ERJ3GEYJ472	4.7K	
R306	ERDS1VJ100	10	
R307	ERDS2TJ104	100K	
R308	ERJ3GEYJ473	47K	
R311	PQ4R10XJ821	820	S
R312	PQ4R10XJ103	10K	S
R314	ERDS1TJ680	68	
R315	ERJ3GEYJ333	33K	
R317	ERJ3GEYJ222	2.2K	
R318	ERJ3GEYJ222	2.2K	
R319	ERJ3GEYJ181	180	
R320	ERJ3GEYJ123	12K	
R321	ERJ3GEYJ224	220K	
R322	ERJ3GEYJ152	1.5K	
R323	ERJ3GEYJ221	220	
R333	PQ4R10XJ683	68K	S
R334	PQ4R10XJ683	68K	S
R335	PQ4R10XJ472	4.7K	S
R336	ERJ3GEYJ473	47K	
R337	PQ4R10XJ222	2.2K	S
R401	ERJ3GEYJ102	1K	
R402	ERJ3GEYJ101	100	
R403	ERJ3GEYJ392	3.9K	
R404	ERJ3GEYJ470	47	
R405	ERJ3GEYJ331	330	
R407	ERJ3GEYJ224	220K	
R408	ERJ3GEYJ472	4.7K	

Ref. No.	Part No.	Part Name & Description	Remarks
R409	ERJ3GEYJ563	56K	
R410	ERJ3GEYJ333	33K	
R412	ERJ3GEYJ823	82K	
R413	ERJ3GEYJ153	15K	
R415	ERJ3GEYJ183	18K	
R416	ERJ3GEYJ184	180K	
R418	EVNDXAA03B25	200K	
R419	ERJ3GEYJ823	82K	
R420	ERJ3GEYJ153	15K	
R421	ERJ3GEYJ103	10K	
R422	ERJ3GEYJ682	6.8K	
R423	ERJ3GEYJ222	2.2K	
R424	ERJ3GEYJ103	10K	
R425	ERJ3GEYJ104	100K	
R426	ERJ3GEYJ105	1M	
R427	ERJ3GEYJ104	100K	
R428	ERJ3GEYJ474	470K	
R429	ERJ3GEYJ822	8.2K	
R430	ERJ3GEYJ473	47K	
R431	ERJ3GEYJ332	3.3K	
R433	ERJ3GEYJ393	39K	
R434	ERJ3GEYJ272	2.7K	
R435	ERJ3GEYJ330	33	
R436	ERJ3GEYJ101	100	
R437	ERJ3GEYJ103	10K	
R438	ERJ3GEYJ153	15K	
R439	ERJ3GEYJ101	100	
R440	ERJ3GEYJ681	680	
R441	ERJ3GEYJ823	82K	
R442	ERJ3GEYJ222	2.2K	
R443	ERJ3GEYJ820	82	
R444	ERJ3GEY0R00	0	
R445	ERJ3GEYJ472	4.7K	
		(CAPACITORS)	
C101	ECUV1C104KEV	0.1	
C102	ECEA1EKA100	10	
C103	ECUV1C104KEV	0.1	
C104	ECEA1CK101	100	S
C105	ECUV1C104KEV	0.1	
C201	ECUV1H220JCV	22P	
C202	ECUV1H220JCV	22P	
C203	ECUV1E223KEV	0.022	
C204	ECUV1C393KEV	0.039	
C205	ECUV1H392KEV	0.0039	
C207	ECUV1C104KEV	0.1	
C208	ECUV1H332KEV	0.0033	
C209	ECEA0JU471	470	
C301	ECKD2H681KB	680P	S
C302	ECQE2E105KZ	1	S
C303	ECKD2H681KB	680P	S
C304	ECKD2H681KB	680P	S
C305	PQCUV1H472KB	0.0047	
C308	ECEA1HKS220	22	S
C309	PQCUV1H101JC	100P	
C310	PQCUV1H103KB	0.01	
C311	ECUV1C224KEV	0.22	
C312	ECEA1HKA3R3	3.3	
C313	ECUV1E273KEV	0.027	
C314	ECUV1H272KEV	0.0027	
C315	ECUV1H103KEV	0.01	
C321	PQCUV1H154KR	0.15	
C322	PQCUV1H154KR	0.15	
C323	PQCUV1A684KB	0.68	
C401	ECKERS102MB	0.001	S
C404	ECUV1H150JCV	15P	
C407	ECUV1H332KEV	0.0033	
C408	ECUV1H103KEV	0.01	
C409	ECUV1H103KEV	0.01	
C410	ECUV1C104KEV	0.1	
C411	ECUV1C104KEV	0.1	
C412	ECUV1C104KEV	0.1	
C413	ECEA1EKA100	10	
C414	ECUV1C104KEV	0.1	

Ref. No.	Part No.	Part Name & Description	Remarks
C415	ECUV1H680JCV	68P	
C416	ECUV1C104KBV	0.1	
C417	ECUV1H121JCV	120P	
C418	ECUV1H121JCV	120P	
C419	ECUV1H103KBV	0.01	
C420	ECUV1H821KBV	820P	
C421	ECUV1C104KBV	0.1	
C422	ECUV1H222KBV	0.0022	
C423	ECUV1C104KBV	0.1	
C424	ECUV1E223KBV	0.022	
C425	ECUV1C104KBV	0.1	
C426	ECUV1C473KBV	0.047	
C427	ECUV1H333KDV	0.033	S
C428	ECJ1VC1H271J	270P	
C429	ECUV1H152KBV	0.0015	
C430	ECUV1H103KBV	0.01	
C431	ECEA1CKA470	47	
C432	ECUV1H103KBV	0.01	
C433	ECUV1H330JCV	33P	
C434	ECUV1H103KBV	0.01	
C435	ECEA1CKS220	22	S
C436	ECUV1C104KBV	0.1	
C437	ECUV1H182KBV	0.0018	
C438	ECUV1H560JCV	56P	
C439	ECUV1C104KBV	0.1	
C440	ECUV1H430GCV	43P	
C441	ECUV1H270GCV	27P	
C442	ECUV1H103KBV	0.01	
C443	ECEA1EKA100	10	
C444	ECEA1HKS2R2	2.2	S
C445	ECUV1C224KBV	0.22	
C446	ECUV1H180JCV	18P	
C447	ECUV1H103KBV	0.01	
C448	ECUV1H103KBV	0.01	
C449	ECUV1E223KBV	0.022	
C450	ECUV1H103KBV	0.01	
C451	ECUV1H821KBV	820P	
C452	ECUV1H821KBV	820P	
C453	ECUV1C104KBV	0.1	
C454	ECUV1H270JCV	27P	
C455	ECUV1H332KBV	0.0033	
C456	ECUV1H150JCV	15P	
C457	ECUV1H390JCV	39P	
C458	ECUV1H390JCV	39P	
C459	ECUV1H390JCV	39P	
C460	ECEA1CKS220	22	S
C461	ECUV1H103KBV	0.01	
C462	ECEA1CKA470	47	
C463	ECUV1H100DCV	10P	
C464	ECUV1H180JCV	18P	
C465	ECUV1H103KBV	0.01	
C467	ECUV1H270JCV	27P	
C468	ECUV1H103KBV	0.01	
C469	ECEA1CKA470	47	
C470	ECUV1H103KBV	0.01	
C472	ECUV1H102KBV	0.001	
		(OTHERS)	
DPX401	J0E3115A0002	IC FILTER	
JK1	K2LD104A0001	JACK	S
SW201	K0H1BB000018	SPECIAL SWITCH	

26.2. Handset

26.2.1. Cabinet and Electrical Parts

Ref. No.	Part No.	Part Name & Description	Remarks
101	PQKM10676Z1	CABINET BODY (for KX-TC2106UAB)	ABS-HB
101	PQKM10676Y3	CABINET BODY (for KX-TC2106UAS)	ABS-HB
101	PQKM10676Y4	CABINET BODY (for KX-TC2106UAT)	ABS-HB

Ref. No.	Part No.	Part Name & Description	Remarks
101	PQKM10676Z2	CABINET BODY (for KX-TC2106UAW)	ABS-HB
102	PQSA10170X	ANTENNA (for KX-TC2106UAB) (for KX-TC2106UAT)	
102	PQSA10170W	ANTENNA (for KX-TC2106UAS) (for KX-TC2106UAW)	
103	PQSX10296S	KEYBOARD SWITCH (for KX-TC2106UAB)	
103	PQSX10296Q	KEYBOARD SWITCH (for KX-TC2106UAS)	
103	PQSX10296P	KEYBOARD SWITCH (for KX-TC2106UAT)	
103	PQSX10296R	KEYBOARD SWITCH (for KX-TC2106UAW)	
104	PQHR11114Z	OPTIC CONDUCTIVE PARTS, LED LENS	PS-HB
105	L0AD02A00029	SPEAKER	
106	PQJT10230Z	CHARGE TERMINAL (L)	
107	PQJT10231Z	CHARGE TERMINAL (R)	
108	PQHS10696Z	SPACER, BUZZER SHEET	
109	PQKF10667Z1	CABINET COVER (for KX-TC2106UAB)	ABS-HB
109	PQKF10667Y3	CABINET COVER (for KX-TC2106UAS)	ABS-HB
109	PQKF10667Y4	CABINET COVER (for KX-TC2106UAT)	ABS-HB
109	PQKF10667Z2	CABINET COVER (for KX-TC2106UAW)	ABS-HB
110	PQGT18164Z	NAME PLATE (for KX-TC2106UAB)	
110	PQGT18168Z	NAME PLATE (for KX-TC2106UAS)	
110	PQGT18170Z	NAME PLATE (for KX-TC2106UAT)	
110	PQGT18166Z	NAME PLATE (for KX-TC2106UAW)	
111	PQQT22966Z	LABEL, CAUTION	
112	PQXA36ASVC	BATTERY	
113	PQHE10161Z	SPACER	
114	PQKK10589Z1	LID, BATTERY COVER (for KX-TC2106UAB)	ABS-HB
114	PQKK10589Y3	LID, BATTERY COVER (for KX-TC2106UAS)	ABS-HB
114	PQKK10589Y4	LID, BATTERY COVER (for KX-TC2106UAT)	ABS-HB
114	PQKK10589Z2	LID, BATTERY COVER (for KX-TC2106UAW)	ABS-HB

26.2.2. Main P.C.Board Parts

Ref. No.	Part No.	Part Name & Description	Remarks
PCB100	PQWPC2106UAR	MAIN P.C.BOARD ASS'Y (RTL) (ICs)	
IC701	MN101C427AP	IC	
IC801	AN6265FA	IC (TRANSISTORS)	
Q701	BIADDE000022	TRANSISTOR (SI)	
Q702	BIADDE000020	TRANSISTOR (SI)	
Q703	BIADDE000020	TRANSISTOR (SI)	
Q704	BIADDE000020	TRANSISTOR (SI)	
Q705	BIADDE000020	TRANSISTOR (SI)	
Q706	BIADDE000028	TRANSISTOR (SI)	
Q801	BIADDE000020	TRANSISTOR (SI)	
Q802	BIADDE000020	TRANSISTOR (SI)	
Q803	BIADDE000020	TRANSISTOR (SI)	
Q804	BIADDE000020	TRANSISTOR (SI)	
Q805	BIADDE000021	TRANSISTOR (SI) (DIODES)	
D601	MA8056H	DIODE (SI)	S
D602	MA111	DIODE (SI)	S
D701	BOACCL000002	DIODE (SI)	
D702	MA111	DIODE (SI)	S
DV1	BOCAAB000021	DIODE (SI)	
LED701	PQVDSML310MT	LED	S
LED702	PQVDSML310MT	LED	S
LED703	PQVDSML310MT	LED	S
LED704	PQVDSML310MT	LED	S
LED705	PQVDSML310MT	LED	S
		(COILS)	

Ref. No.	Part No.	Part Name & Description	Remarks
L603	PQLQZK1R0K	COIL	S
L801	PQLQZK1R0K	COIL	S
T801	G2BRC0000011	COIL	
T802	G2AYYYC00059	COIL	
T803	PQL04V001	COIL	
T804	G2A1R8C00003	COIL	
		(CERAMIC FILTERS)	
CF1	J0B1075A0127	CERAMIC FILTER	
CF2	J0B4503A0066	CERAMIC FILTER	
		(CRYSTAL OSCILLATORS)	
X701	H0D399400013	CRYSTAL OSCILLATOR	
X801	H0D111500003	CRYSTAL OSCILLATOR	
		(RESISTORS)	
R701	ERJ3GEYJ334	330K	
R702	ERJ3GEYJ104	100K	
R703	ERJ3GEYJ334	330K	
R704	PQ4R18XJ820	82	S
R705	ERJ3GEYJ102	1K	
R706	ERJ3GEYJ104	100K	
R707	ERJ3GEYJ331	330	
R708	ERJ3GEYJ334	330K	
R709	ERJ3GEYJ221	220	
R710	ERJ3GEY0R00	0	
R711	ERJ3GEYJ102	1K	
R712	ERJ3GEYJ102	1K	
R713	ERJ3GEYJ222	2.2K	
R714	ERJ3GEYJ104	100K	
R715	ERJ3GEYJ222	2.2K	
R720	ERJ3GEY0R00	0	
R721	ERJ3GEY0R00	0	
R722	ERJ3GEY0R00	0	
R727	ERJ3GEY0R00	0	
R728	ERJ3GEY0R00	0	
R729	ERJ3GEYJ222	2.2K	
R730	ERJ3GEYJ222	2.2K	
R731	ERJ3GEYJ222	2.2K	
R801	ERJ3GEYJ823	82K	
R802	ERJ3GEYJ820	82	
R803	ERJ3GEYJ331	330	
R804	ERJ3GEYJ562	5.6K	
R805	ERJ3GEYJ681	680	
R806	ERJ3GEYJ564	560K	
R807	ERJ3GEYJ223	22K	
R808	ERJ3GEYJ223	22K	
R809	ERJ3GEYJ473	47K	
R811	ERJ3GEYJ103	10K	
R812	ERJ3GEYJ153	15K	
R815	ERJ3GEYJ273	27K	
R816	ERJ3GEYJ333	33K	
R817	ERJ3GEY0R00	0	
R818	ERJ3GEYJ333	33K	
R819	ERJ3GEYJ223	22K	
R820	ERJ3GEY0R00	0	
R821	ERJ3GEY0R00	0	
R822	ERJ3GEYJ103	10K	
R823	ERJ3GEYJ123	12K	
R824	ERJ3GEY0R00	0	
R825	ERJ3GEYJ222	2.2K	
R826	ERJ3GEYJ224	220K	
R827	ERJ3GEYJ822	8.2K	
R829	ERJ3GEYJ222	2.2K	
R830	ERJ3GEYJ222	2.2K	
R831	ERJ3GEYJ683	68K	
R832	ERJ3GEYJ221	220	
R833	ERJ3GEY0R00	0	
R834	ERJ3GEYJ681	680	
R835	ERJ3GEYJ153	15K	
R836	ERJ3GEYJ103	10K	
R837	ERJ3GEYJ101	100	
R838	ERJ3GEYJ103	10K	
R839	ERJ3GEYJ122	1.2K	
R841	ERJ3GEYJ473	47K	
R842	ERJ3GEYJ473	47K	

Ref. No.	Part No.	Part Name & Description	Remarks
R843	ERJ3GEYJ122	1.2K	
R844	ERJ3GEY0R00	0	
R845	ERJ3GEYJ564	560K	
R848	ERJ3GEYJ683	68K	
R850	ERJ3GEY0R00	0	
R851	ERJ3GEY0R00	0	
R852	ERJ3GEYJ104	100K	
C869	ERJ3GEY0R00	0	
C874	ERJ3GEY0R00	0	
		(CAPACITORS)	
C701	ECEA0JKA101	100	
C702	ECUV1C104KBV	0.1	
C703	ECUV1H220JCV	22P	
C704	ECUV1H220JCV	22P	
C705	ECUV1C473KBV	0.047	
C706	ECUV1C104KBV	0.1	
C707	ECUV1C104KBV	0.1	
C801	ECUV1H2R5CCV	2.5P	
C803	ECUV1H100DCV	10P	
C804	ECUV1H103KBV	0.01	
C805	ECUV1H103KBV	0.01	
C807	ECUV1H103KBV	0.01	
C808	ECUV1H103KBV	0.01	
C809	ECUV1C104KBV	0.1	
C810	ECUV1H103KBV	0.01	
C811	ECUV1C104KBV	0.1	
C812	ECUV1H680JCV	68P	
C813	ECUV1C104KBV	0.1	
C814	ECEA1CKA100	10	
C815	ECUV1H121JCV	120P	
C816	ECUV1H121JCV	120P	
C817	ECUV1C104KBV	0.1	
C818	ECUV1H471JCV	470P	S
C820	ECUV1C104KBV	0.1	
C821	ECJ1VB1H472K	0.0047	
C822	ECUV1C104KBV	0.1	
C823	ECUV1H103KBV	0.01	
C824	ECUV1C473KBV	0.047	
C825	ECUV1C104KBV	0.1	
C826	ECUV1C104KBV	0.1	
C827	ECUV1H103KBV	0.01	
C828	ECUV1H103KBV	0.01	
C829	ECJ1VB1H472K	0.0047	
C830	ECJ1VB1H472K	0.0047	
C831	ECUV1H220JCV	22P	
C833	ECUV1C224KBV	0.22	
C834	ECUV1H103KBV	0.01	
C835	ECUV1A474KBV	0.47	
C836	ECUV1C104KBV	0.1	
C837	ECST0JY106	10	S
C838	ECUV1H390GCV	39P	
C839	ECUV1H220GCV	22P	
C840	ECUV1C104KBV	0.1	
C841	ECUV1H680JCV	68P	
C842	ECUV1H562KBV	0.0056	
C843	ECUV1C104KBV	0.1	
C844	ECUV1H101JCV	100P	
C845	ECEA1CKA100	10	
C846	ECUV1H103KBV	0.01	
C847	ECUV1H123KBV	0.012	
C848	ECUV1C104KBV	0.1	
C850	ECUV1C104KBV	0.1	
C852	ECUV1H150JCV	15P	
C853	ECUV1H103KBV	0.01	
C854	ECUV1H103KBV	0.01	
C855	ECUV1H220JCV	22P	
C856	ECUV1H103KBV	0.01	
C857	ECUV1H680JCV	68P	
C858	ECUV1H100JCV	10P	
C859	ECEA1CKA100	10	
C860	ECUV1H103KBV	0.01	
C861	ECUV1H330JCV	33P	
C862	ECUV1H390JCV	39P	

Ref. No.	Part No.	Part Name & Description	Remarks
C863	ECUV1H390JCV	39P	
C864	ECUV1H470JCV	47P	
C865	ECUV1H220JCV	22P	
C866	ECUV1H103KBV	0.01	
C867	ECUV1E223KBV	0.022	
C868	ECUV1C104KBV	0.1	
C872	ECUV1H560JCV	56P	
C876	ECST0JY106	10	S
		(OTHERS)	
E101	PQEFBDB111GF	BUZZER	
E102	PQJMI22Z	MICROPHONE	
CN1	PQJP2D13Z	CONNECTOR	S
DPX1	JOE4005A0002	IC FILTER	

26.3. Accessories and Packing Materials

Note:

(*1) You can download and refer to the Operating Instructions (Instruction book) on TSN Server.

Ref. No.	Part No.	Part Name & Description	Remarks
A1	PQLV16CEX	AC ADAPTOR	△
A2	PQJA10075Z	CORD, TELEPHONE	
A3	PQQX14816Z	INSTRUCTION BOOK (for Ukrainian) (*1)	
A4	PQQX14814Z	INSTRUCTION BOOK (for Russian) (*1)	
A5	PQQW14833Z	LEAFLET, WALL MOUNT	
A6	PQKL10069Z1	STAND, WALL MOUNT (for KX-TC2106UAB) (for KX-TC2106UAT)	ABS-HB
A6	PQKL10069Z3	STAND, WALL MOUNT (for KX-TC2106UAS)	ABS-HB
A6	PQKL10069Z2	STAND, WALL MOUNT (for KX-TC2106UAW)	ABS-HB
P1	PQPP10104Z	PROTECTION COVER (for Base Unit)	
P2	PQPP10105Z	PROTECTION COVER (for Handset)	
P3	PQPK14920Z	GIFT BOX	

27 FOR SCHEMATIC DIAGRAM

27.1. Base Unit (SCHEMATIC DIAGRAM (BASE UNIT))

1. DC voltage measurements are taken with an oscilloscope or a tester with a ground.
2. The schematic diagrams and circuit board may be modified at any time with the development of new technology.

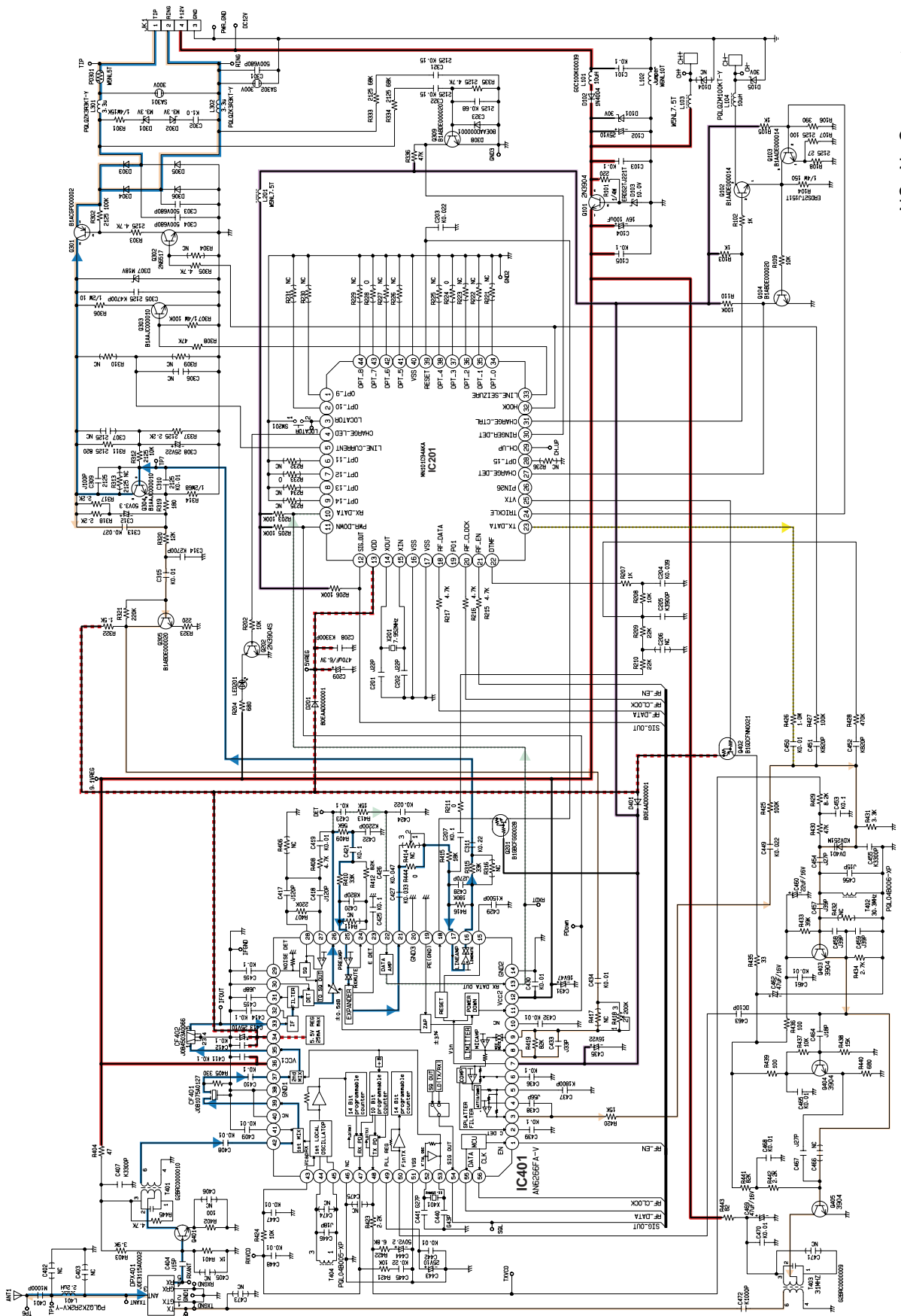
Important Safety Notice:

Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only the manufacturer's specified parts.

27.2. Handset (SCHEMATIC DIAGRAM (HANDSET))

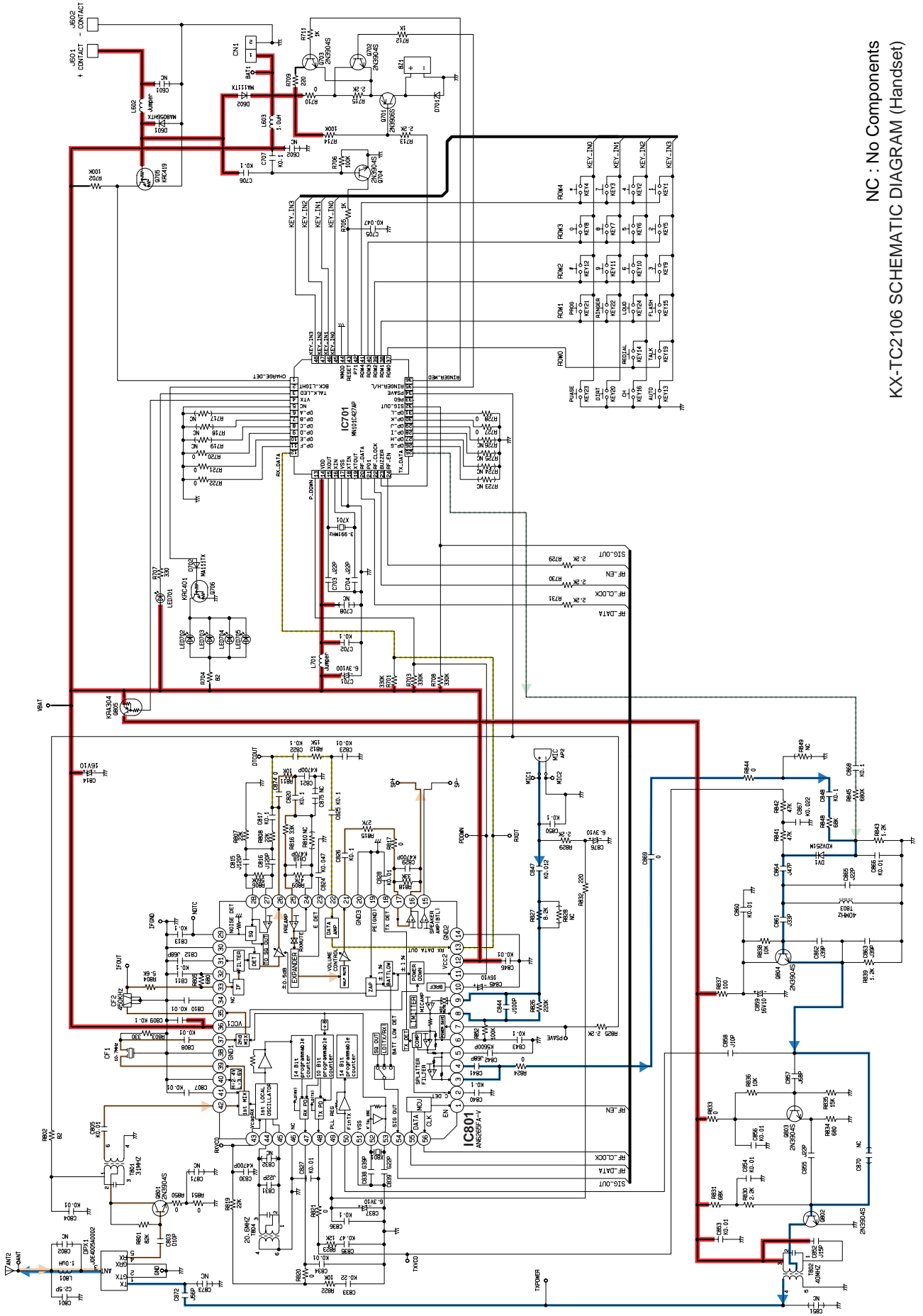
1. DC voltage measurements are taken with an oscilloscope or a tester with a ground.
2. The schematic diagrams and circuit board may be modified at any time with the development of new technology.

28 SCHEMATIC DIAGRAM (BASE UNIT)



NC : No Components
 KX-TC2106 SCHEMATIC DIAGRAM (Base Unit)

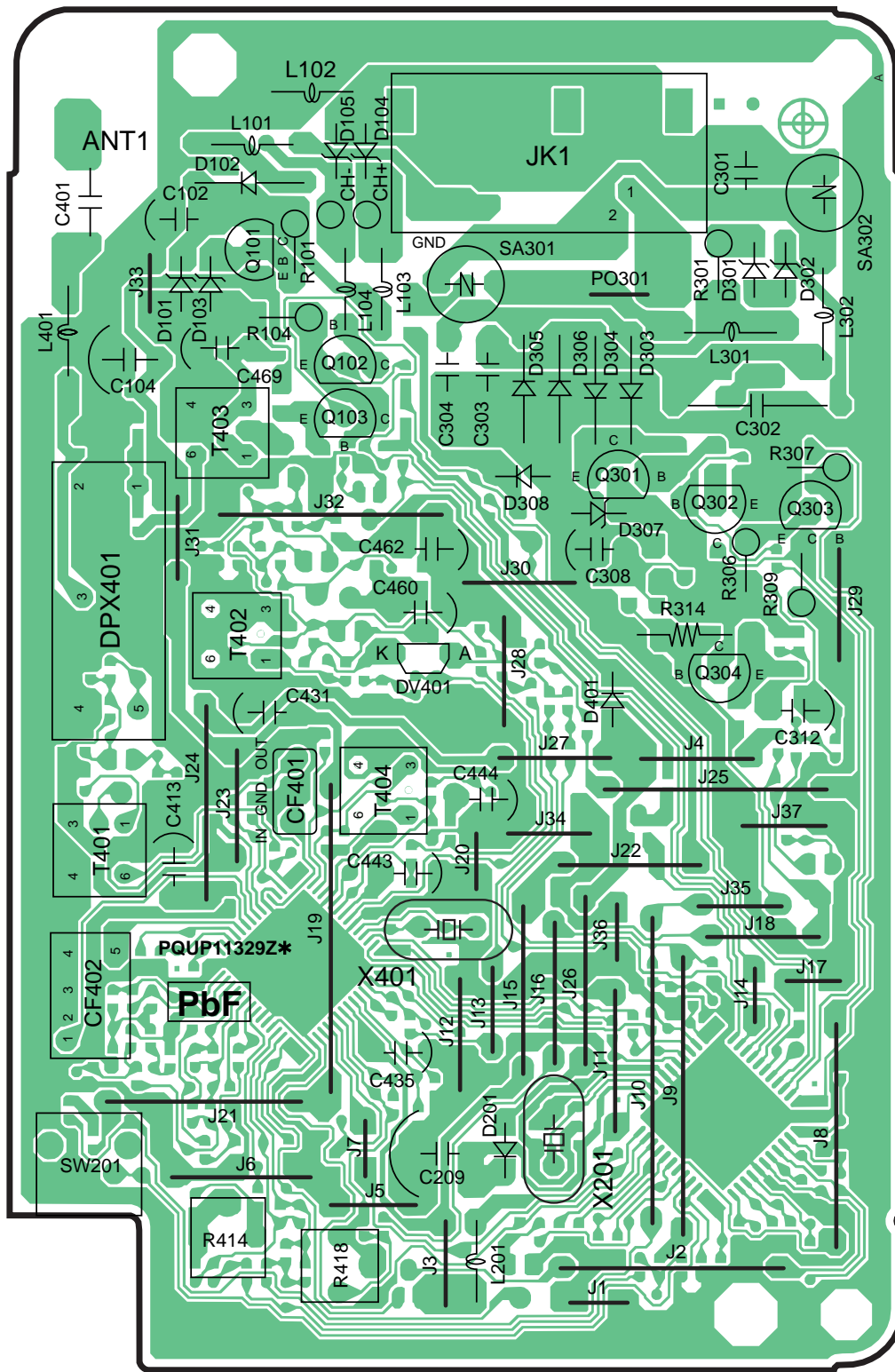
29 SCHEMATIC DIAGRAM (HANDSET)



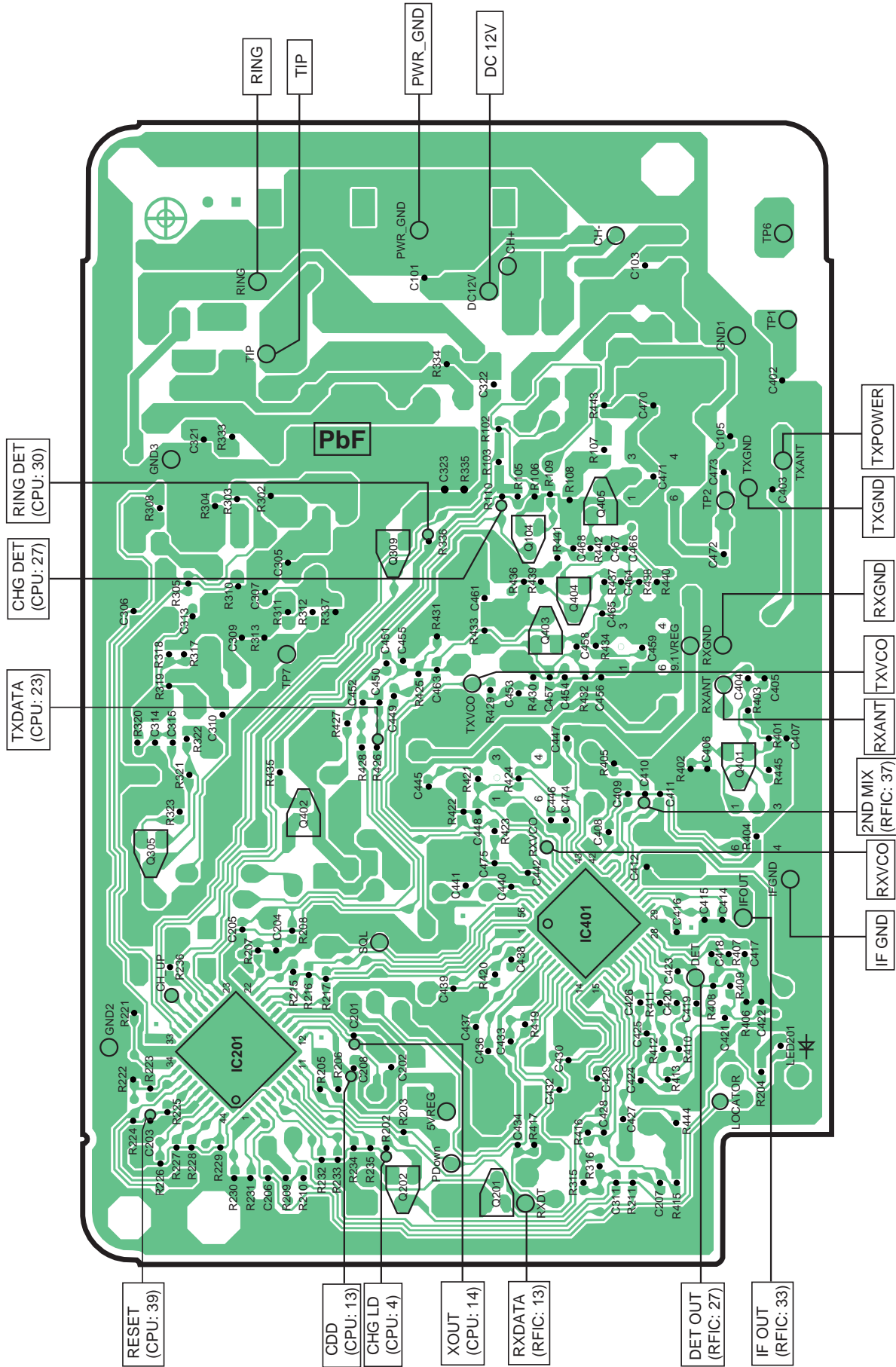
NC : No Components
KX-TC2106 SCHEMATIC DIAGRAM (Handset)

30 CIRCUIT BOARD (BASE UNIT)

30.1. Component View



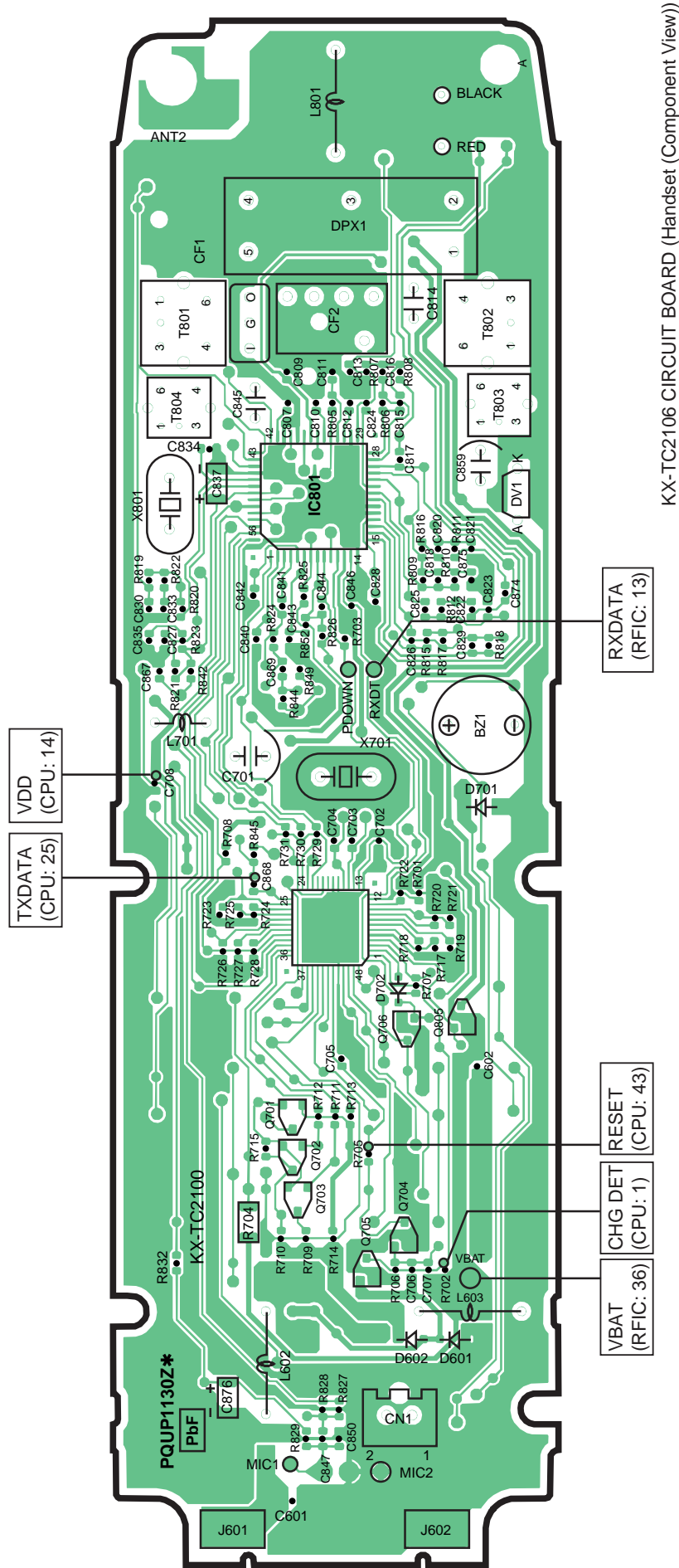
30.2. Flow Solder Side View



KX-TC2106 CIRCUIT BOARD (Base Unit (Flow Solder Side View))

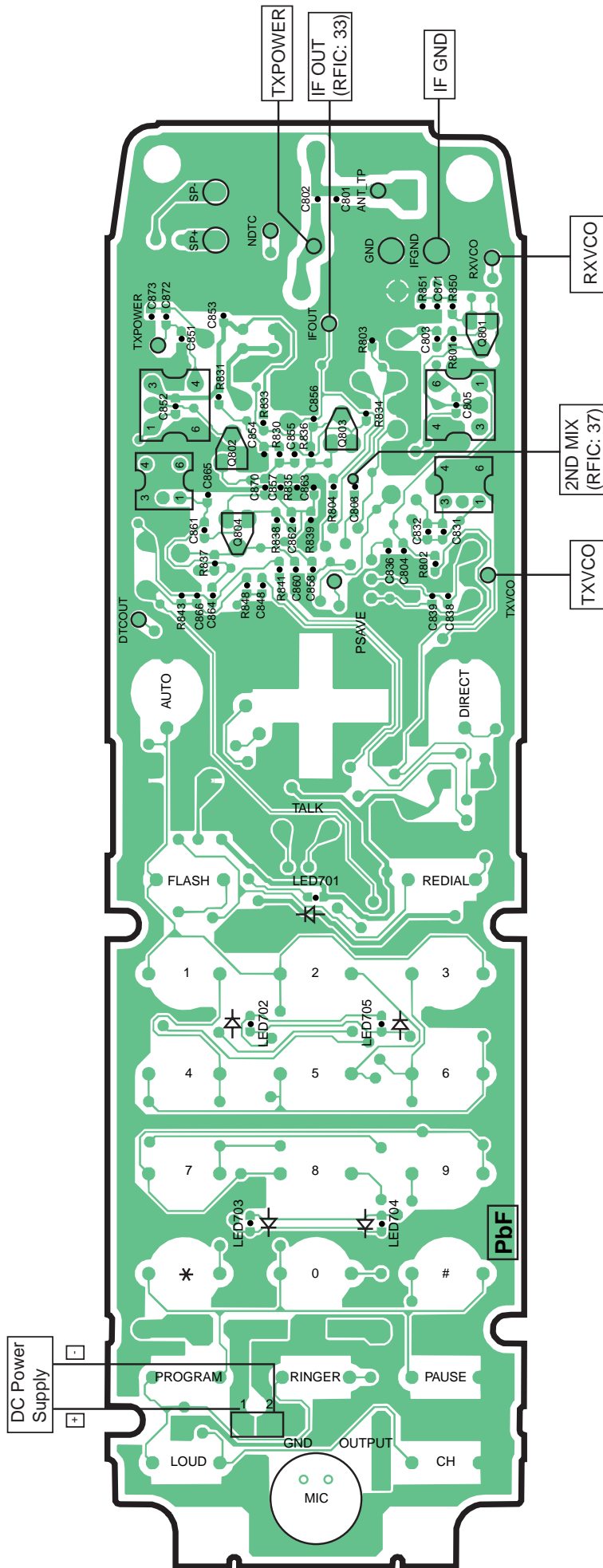
31 CIRCUIT BOARD (HANDSET)

31.1. Component View



KX-TC2106 CIRCUIT BOARD (Handset (Component View))

31.2. Flow Solder Side View



KX-TC2106 CIRCUIT BOARD (Handset (Flow Solder Side View))

G/N
KXTC2106UAB
KXTC2106UAS
KXTC2106UAT
KXTC2106UAW