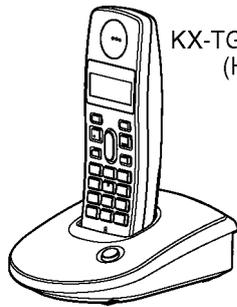


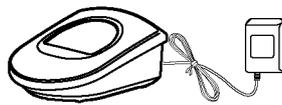
Service Manual

Telephone Equipment

Caller ID Compatible



KX-TGA107EXB/EXC
(HANDSET)



(CHARGER UNIT)

KX-TG1070FXB/FXC
(BASE UNIT)

Configuration for each model

Model No	Base Unit	Handset	Charger Unit
KX-TG1070	1 (TG1070)	1 (TGA107)	
KX-TG1072	1 (TG1070)	2 (TGA107)	1

KX-TG1070FXB

KX-TG1070FXC

KX-TG1072FXB

KX-TGA107EXB

KX-TGA107EXC

Digital Cordless Phone

Black Version

Blue Version

(for Central Europe)

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.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by  in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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.

- When you note the serial number, write down all 11 digits. The serial number may be found on the bottom of the unit.
- The illustrations in this Service Manual may vary slightly from the actual product.

Note for TABLE OF CONTENTS:

Because sections 5, 6 and 7 are the extract from the operating instructions of this model, they are 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 Safety Precautions

1.1. For Service Technicians

ICs and LSIs are vulnerable to static electricity.

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

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

2 Warning

2.1. Battery 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 manufacture's Instructions.

2.2. About Lead Free Solder (Pbf: Pb free)

Note:

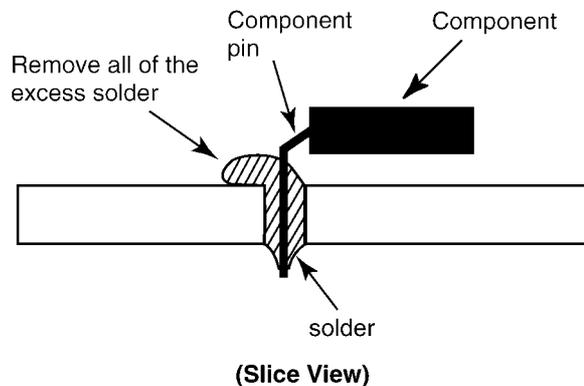
In the information below, Pb, the symbol for lead in the periodic table of elements, will refer to standard solder or solder that contains lead.

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.

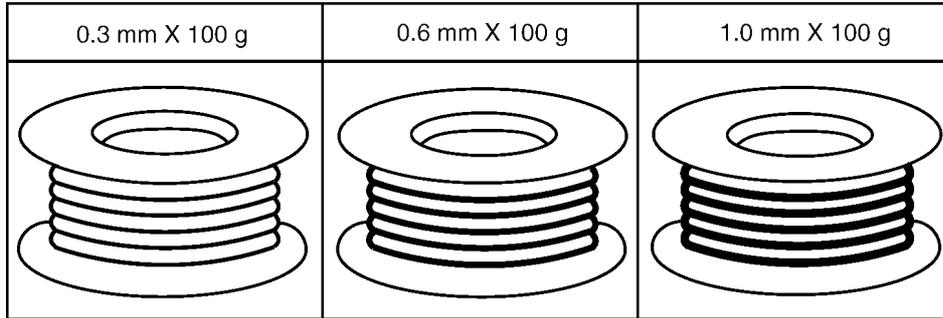
Caution

- 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).
- Exercise care while using higher temperature soldering irons.:
Do not heat the PCB for too long time in order to prevent solder splash or damage to the PCB.
- PbF solder will tend to splash if it is heated much higher than its melting point, approximately 1100 °F (600 °C).
- 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).



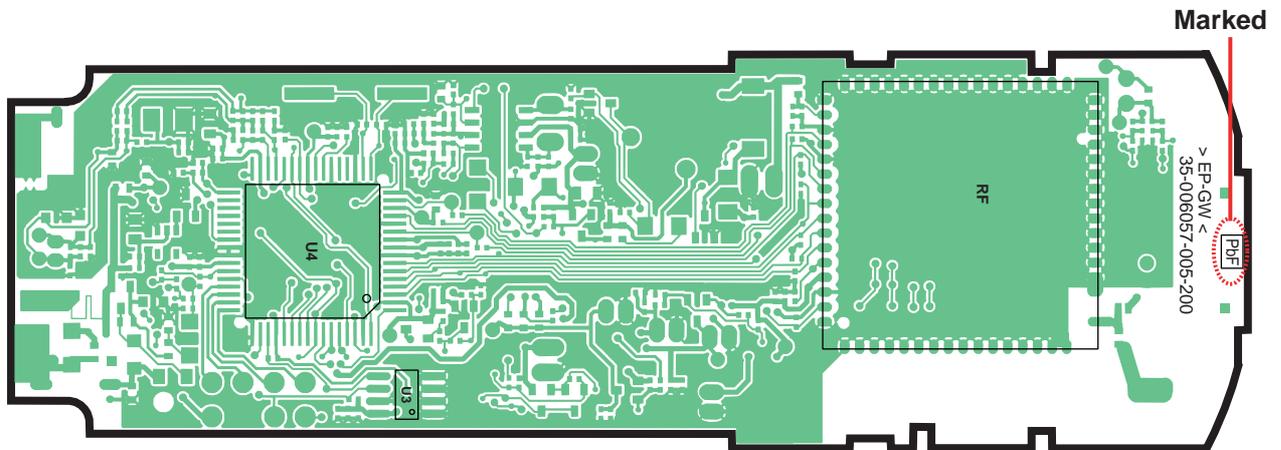
2.2.1. Suggested PbF Solder

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: 0.3 mm, 0.6 mm and 1.0 mm.



2.2.2. How to Recognize that Pb Free Solder is Used

(Example: Handset P.C.B.)



(Component View)

Note:

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

3 Specifications

■ Standard:

DECT (Digital Enhanced Cordless Telecommunications)

■ Number of channels:

120 Duplex Channels

■ Frequency range:

1.88 GHz to 1.9 GHz

■ Duplex procedure:

TDMA (Time Division Multiple Access)

■ Channel spacing:

1,728 kHz

■ Bit rate:

1,152 kbit/s

■ Modulation:

GFSK (Gaussian Frequency Shift Keying)

■ RF transmission power:

Approx. 250 mW

■ Power source (AC Adaptor):

220–240 V, 50 Hz

Base unit: PQWATG1070CE

Charger^{*1}: PQWETGA107CE

■ Voice coding:

ADPCM 32 kbit/s

■ Power consumption:

Base unit:

Standby: Approx. 3.5 W

Maximum: Approx. 9.2 W

Charger^{*1}:

Standby: Approx. 0.6 W

Maximum: Approx. 5.0 W

■ Operating conditions:

5 °C–40 °C, 20%–80% relative air humidity (dry)

■ Dimensions:

Base unit: Approx. 47 mm x 116 mm x 107 mm

Handset: Approx. 142 mm x 34 mm x 47 mm

Charger^{*1}: Approx. 45 mm x 88 mm x 79 mm

■ Mass (weight):

Base unit: Approx. 120 g

Handset: Approx. 120 g

Charger^{*1*2}: Approx. 230 g

*1 KX-TG1072

*2 Includes the AC adaptor.

Note:

- Specifications are subject to change.

Connections:

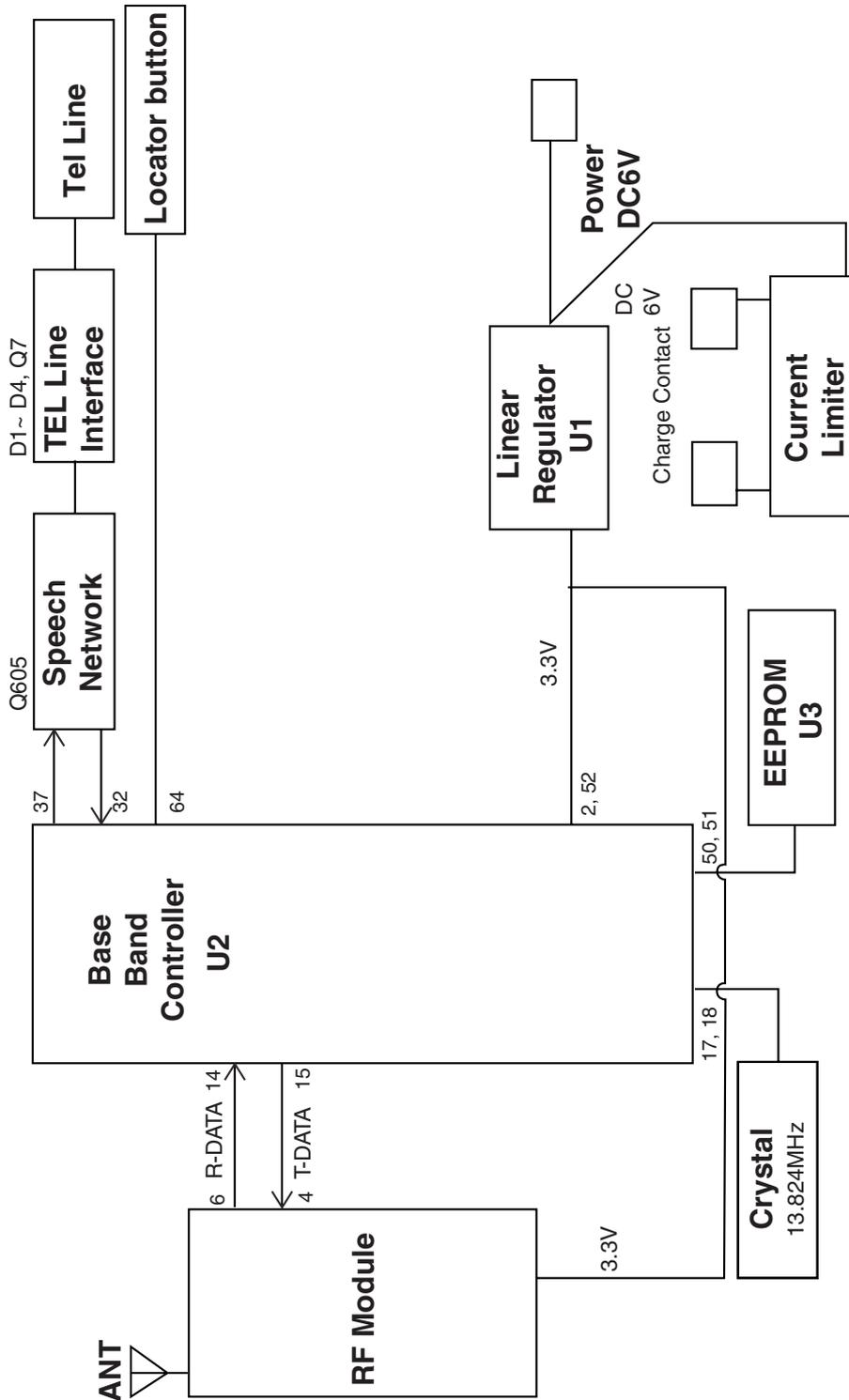
The unit will not work during a power failure. We recommend you connect a standard telephone on the same line for power protection.

Note for Service:

- Operation range: Up to 300 m outdoors, Up to 50 m indoors, depending on the condition.
- Analog telephone connection: Telephone Line

4 Technical Descriptions

4.1. Block Diagram (Base Unit)



KX-TG1070/1072 BLOCK DIAGRAM (BASE UNIT)

4.2. Circuit Operation (Base Unit)

The base-station consists of base band controller, speech network, tel-line interface, RF module, linear regulator, EEPROM, crystal and so on. Refer to **Block Diagram (Base Unit)** (P.7).

4.2.1. Base Band Controller

These are parts to control all function of the base-station, we used the Philips XS which is controller for DECT. These devices include all control circuits of the base-station for RF module, tel-line interface, ADPCM codec, series regulator and so on.

4.2.2. Power Supply

The power supply consists with CM1117 voltage regulator ICs.

CM1117 generate DC 3.3V voltage from DC 6V voltage from adaptor. DC 3.3V are used for RF module & I/O port, DC 2.5V & DC1.8V are used for the base band controller and the circumference circuits.

4.2.3. Speech Network

The TR circuit is used for speech network. The function of this connects tel-line interface and the base band controller.

4.2.4. TEL Line Interface

The function of this connects tel-line and speech network. Also, the tel-line interface include the ring detect circuit, caller-ID circuit.

4.2.5. EEPROM

This is 8K bits memory. The each kind of value to set-up at power-on, redial memory, speed-dialing memory, and so on are stored in this device.

4.2.6. RF Module

Receiver part: RF signals induced at the antenna are extracted by the RF control interface. The RF signal to be selected is demodulated into RX_DATA signals. And signals is passed to the base band controller.

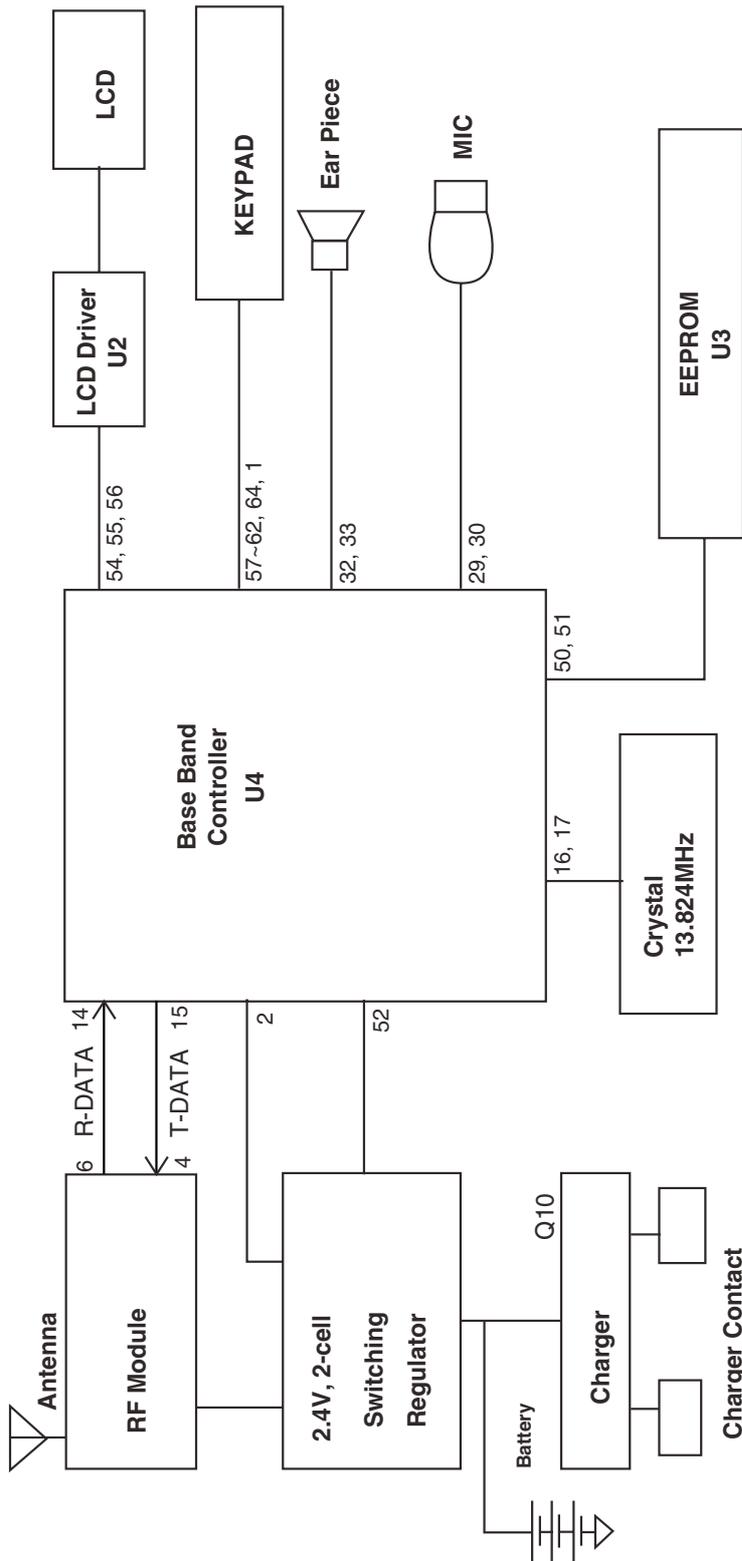
Transmitter part: The signal from transceiver chip-set is fed to the antenna through the RF power amplifier by control of the RF control interface. And then this signal is radiated from antenna.

Logical part: The frequency to be used is generated in transceiver chip-set by control signals (CLK, DATA, ENABLE, SYRI) of the RF control interface.

4.2.7. Current Limiter

The current limiter is circuit to supply the proper current to charge batteries of the handset from DC 6V voltage.

4.3. Block Diagram (Handset)



KX-TGA107 BLOCK DIAGRAM (HANDSET)

4.4. Circuit Operation (Handset)

The handset consists of Base Band Controller, LCD, RF module, keypad, regulator, charger, EEPROM, crystal, earpiece, ringer & microphone, and so on.

4.4.1. Base Band Controller

The base band controller controls all function of the handset, Philips XS for the base band controller is used.

This device include all control circuits of the handset for RF module, LCD controller, keypad interface, earpiece, microphone, ADPCM codec, switching and series regulator and so on.

4.4.2. Charger

The base-station supply DC 6V power to the charger and the charger charges the batteries to use this power. The signal on the charger circuit is generated when the handset is to being charged this signal is used to control the charger circuit and for automatic off-hook by cradle-off when an incoming call is coming.

4.4.3. 2.4V 2 cell & 3.3V output from internal switching regulator

The battery is (2.4V / 2cell) directly supplied to switching regulator which controlling by base band controller and step up the DC 3.3V to the RF module & I/O port. DC 2.5V & DC1.8V are used for the base band and the circumference circuits.

4.4.4. RF Module

Receiver part: RF signals induced at the antenna are extracted by the RF control interface. The RF signal to be selected is demodulated into RX_DATA signals. And signals is passed to the base band controller.

Transmitter part: The signal from transceiver chip-set is fed to the antenna through the RF power amplifier by control of the RF control interface. And then this signal is radiated from antenna.

Logical part: The frequency to be used is generated in transceiver chip-set by control signals (CLK, DATA, ENABLE, SYRI) of the RF control interface.

4.4.5. LCD

The LCD consists of 7-segment, 12 digit display and 13 icon which controlling by the LCD display driver.

4.4.6. Keypad

The keypad consists of 12 dialing keys and 8 function keys.

4.5. Signal Flow

4.5.1. Talk mode:

Rx audio signal from line interface at "LINERX_P" path into B/S MCU (pin 32, 33) and then signal from B/S RF transform, H/S RF receive signal forward to MCU, H/S MCU from (pin 32, 33) receive path output audio signal to receiver.

Tx audio signal from MIC receive audio signal at mic path into H/S MCU and then audio signal from H/S RF transform, B/S RF receive signal forward to MCU, B/S MCU audio signal from (Pin 30, 29) at "LINETX_P" path transmit to line interface out of PSTN.

4.5.2. Ringer detect:

Telephone line have ringer signal from tip ring into Base, and then Base transistor Q8 turn on and ringer data signal for Base MCU (Pin 58_IOP16) detect and the handset buzzer have product "Melody tone".

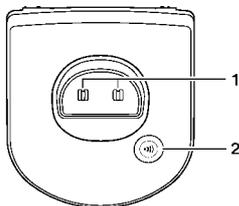
4.5.3. Type I CID receive:

CID signal from tip ring couple CID signal at (CID1_P, CID1_N) path into Base MCU (Pin 29, 30) detect, Handset display show the telephone no.

5 Location of Controls and Components

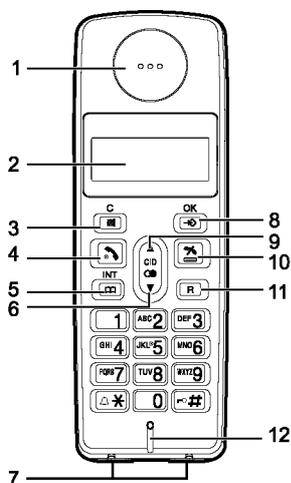
5.1. Controls

5.1.1. Base Unit



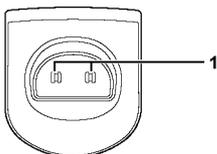
1. Charge contacts
2. [Page] Page

5.1.2. Handset



1. Receiver
2. Display
3. [Mute/Clear] Mute / Clear
4. [Talk] Talk
5. [Phonebook/Intercom] Phonebook / Intercom
6. [Volume down/Redial list] Volume down / Redial list
7. Charge contacts
8. [Setting/OK] Setting / OK
9. [Volume up/Call log] Volume up / Call log
10. [Off] Off
11. [Recall] Recall
12. Microphone

5.1.3. Charger

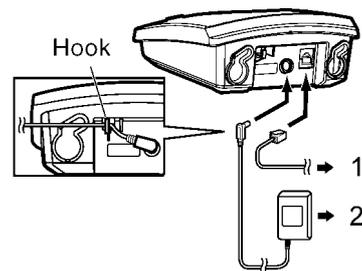


1. Charge contacts

6 Installation Instructions

6.1. Connections

Base Unit

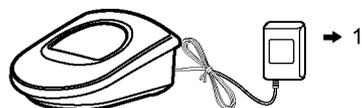


1. To telephone network
2. 220-240 V, 50 Hz

Note:

- Use only the included AC adaptor and telephone line cord.
- Connect the AC adaptor securely to the AC outlet.

Charger



1. 220-240 V, 50 Hz

Note:

- Never install telephone wiring during a lightning storm.
- Do not connect the AC adaptor to a ceiling-mounted AC outlet, as the weight of the adaptor may cause it to become disconnected.

Location

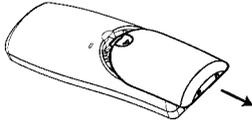
- For maximum distance and noise-free operation, place your base unit:
 - Away from electrical appliances such as TVs, radios, personal computers or other phones.
 - In a convenient, high and central location.

6.2. Battery

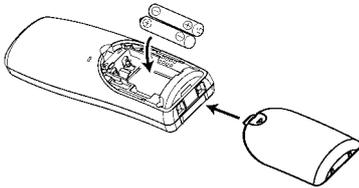
6.2.1. Battery Installation

Important:

- Wipe the battery ends (+, -) with a dry cloth.
 - Install the batteries without touching the battery ends (+, -) or the unit contacts.
- 1 Press the notch of the handset cover firmly and slide it in the direction of the arrow.



- 2 Insert the batteries negative (-) terminal first. Close the handset cover.



Note:

- Use only the included rechargeable batteries HHR-55AAAB or HHR-4EPT.

6.2.2. Battery Charge

Place the handset on the base unit or charger for about 10 hours before initial use. When charging,  and  are alternately shown on the display. When the batteries are highly charged,  remains on the display.

6.2.3. Battery Strength

Battery icon	Meaning
	The handset can be used.
	Needs to be charged.

6.2.4. Panasonic Ni-MH Battery Performance

When you charge the batteries for 10 hours from the battery empty status, the following performance is available.

Operation	Operation time
In continuous use	10 hours max.*
In continuous standby mode	120 hours max.*

* When operation temperature is 25 °C.

Note:

- It takes 10 hours to fully charge the batteries, however, you can use the handset if  remains on the display while charging.
- It is normal for batteries not to reach full capacity at the initial charge. Maximum battery performance is reached after a few complete cycles of charge/discharge (use).
- Actual battery performance depends on a combination of how often the handset is in use and how often it is not in use (standby).
- Even after the handset is fully charged, the handset can be left on the base unit or charger without any ill effect on the batteries.
- The battery strength may not be displayed correctly after you replace the batteries. In this case, place the handset on the base unit or charger and charge for at least 10 hours.

7 Operation Instructions

7.1. Guide to Telephone Settings

For your reference, a chart of all items which can be customized for the telephone is printed below.

Items	Default setting
Date and time	-
12 and 24-hour display format	24-hour
Handset ringer tone	1
Handset ringer volume	5
Handset key tone	On
Dial mode*	Tone
Auto talk	Off
Recall time*	600 ms
PIN*	0000

* You do not need to program the same item using another handset (for models with 2 or more handsets included).

7.2. Handset Registration

The included handset and base unit are preregistered. If ∇ is not shown on the handset display when the unit is turned on, the handset is not registered to the base unit. Register the handset.

1 Base unit:

Press and hold page button [\bullet] for about 10 seconds to go to registration mode.

- If all registered handsets start ringing in step 1, press [\bullet] to stop and try again.

2 Handset:

[\rightarrow /OK] > [∇] > Input PIN (factory setting "0000") > [\rightarrow /OK].

- "-Sub-" flashes on the display.
- Handset will search base unit for registration.
- When the registration is completed, ∇ lights and a beep sounds.

7.3. For Service Hint

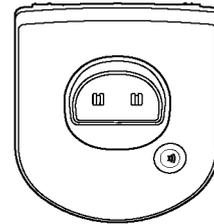
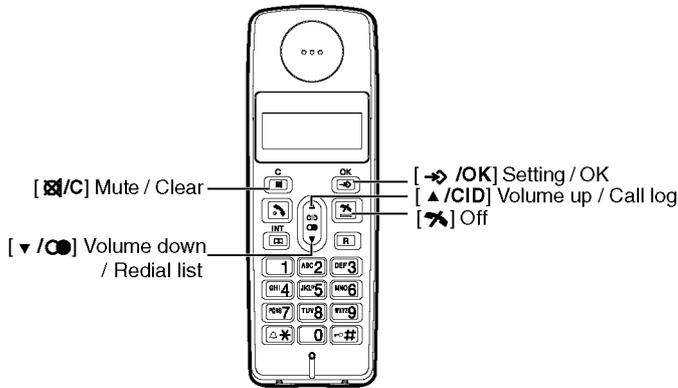
Items	Contents
Battery	You could use other rechargeable batteries sold in a market, but the unit is not guaranteed to work properly.

8 Service Mode

8.1. Engineering Mode

8.1.1. Base Unit

Important:
Make sure the address on LCD is correct when entering new data. Otherwise, you may ruin the unit.



H/S key operation

- 1). Register a handset to a base unit. (*1)
- 2). Press "[OK], 5, *, 7, 8, 9, 0, #".

- 3). Select "BS Eng Test" menu using [▲] or [▼].

- 4). Press [OK].

- 5). Press [1] Set EEPROM menu. ----- ①
 Press [2] Check Software Version ----- ②
 Press [3] Check ID Number ----- ③

- ① Enter "●", "●", "●", "●" (address). (*2)

Press [OK] to switch from eeprom address field to edit eeprom value.

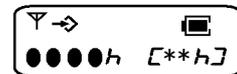
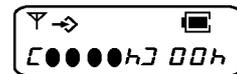
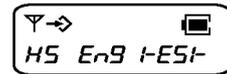
Enter "*", "*" (value). (*2)

- Press [OK] to switch from eeprom value field to eeprom address, and save the setting.
- Press [C] to exit eeprom edit mode.
- After completing all editing, unplug the cable to reload the updated setting to system.

- ② The display value is the software version.
Press [C] to exit the menu.

- ③ The display value is the ID number in hex format.

H/S LCD



Note:

(*1) Refer to **Handset Registration** (P.14).

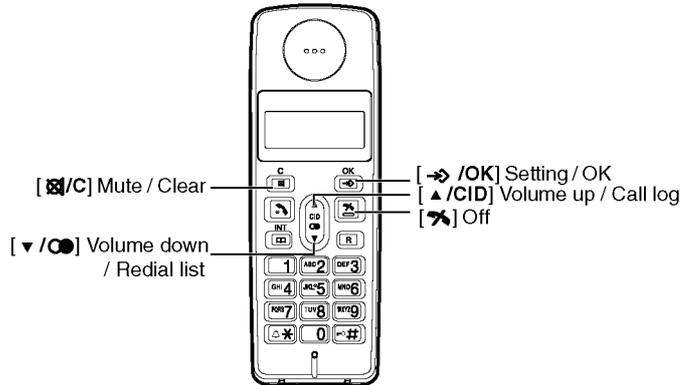
(*2) When you enter the address or New Data, please refer to the table below.

Desired Number (hex.)	Input Keys	Desired Number (hex.)	Input Keys
0	0	A	[*] + 1
1	1	B	[*] + 2
.	.	C	[*] + 3
.	.	D	[*] + 4
.	.	E	[*] + 5
9	9	F	[*] + 6

8.1.2. Handset

Important:

Make sure the address on LCD is correct when entering new data. Otherwise, you may ruin the unit.



H/S key operation

1). Press "[OK], 5, *, 7, 8, 9, 0, #".

2). Press [OK] to select "HS Eng Test" menu.

- 3). Press [1] Set EEPROM menu. ----- ①
 Press [2] Check Software Version ----- ②
 Press [3] Check ID Number ----- ③

① Enter "●", "●", "●", "●" (address). (*1)

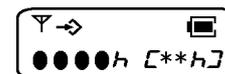
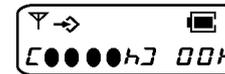
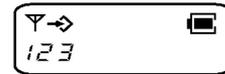
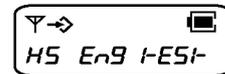
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- Press [C] to exit eeprom edit mode.
- After completing all editing, remove the batteries to reload the updated setting to system.

② The display value is the software version.
 Press [C] to exit the menu.

③ The display value is the ID number in hex format.
 Press [C] to exit the menu.

H/S LCD

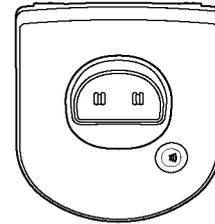
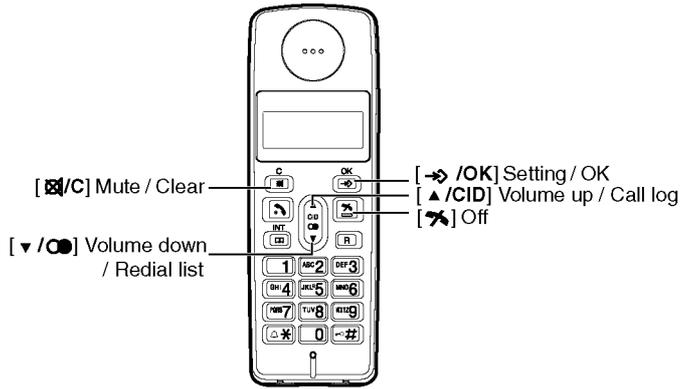


Note:

(*1) When you enter the address or New Data, please refer to the table below.

Desired Number (hex.)	Input Keys	Desired Number (hex.)	Input Keys
0	0	A	[*] + 1
1	1	B	[*] + 2
.	.	C	[*] + 3
.	.	D	[*] + 4
.	.	E	[*] + 5
9	9	F	[*] + 6

8.2. How to Clear User Setting



H/S key operation

H/S LCD

- 1). Press "[OK], 5, *, *, 8, 8, #, #".

If you want to change handset settings, press [OK] then go to step 3.
If you want to change base unit settings, go to step2.



- 2). Select "BS Service" menu using [▲] or [▼], then press [OK].



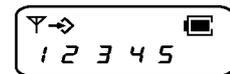
- 3). 1: Reset user settings and PIN ----- ①

2: Reset ID information ----- ②

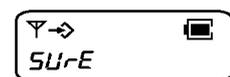
3: Reserved (for future use)

4: Reserved (for future use)

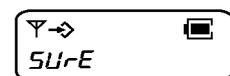
5: Reserved (for future use)



- ① Press "1", then the confirmation screen (SURE) will be shown.
Press [OK], it will reset all the settings including CID information and PIN on a base unit or a handset.
Press [C], it will go back to the previous page.



- ② Press "2", then the confirmation screen (SURE) will be shown.
Press [OK], it will reset ID information on a base unit or a handset.
Press [C], it will go back to the previous page.



- 4). Press [C] to exit the menu.

Note:

Press [C] to go back to the previous page.

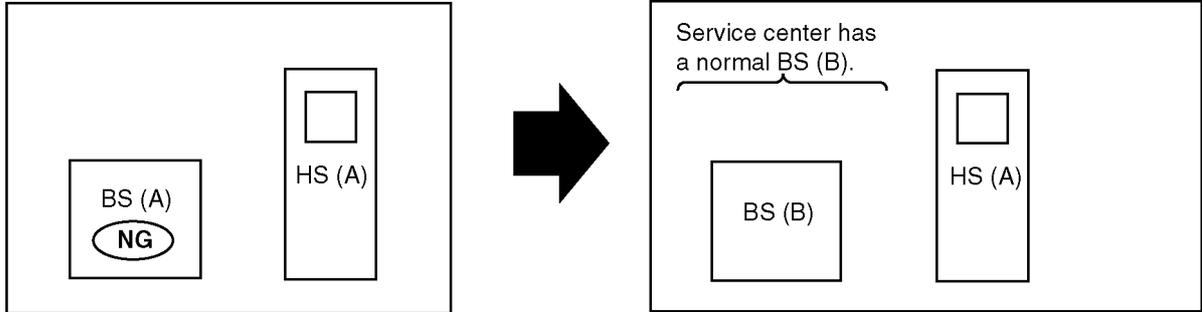
8.3. How to Set When Replacing Unit

If base unit or handset has a defect, replace with new base unit or handset. Refer to the following procedures.

Note:

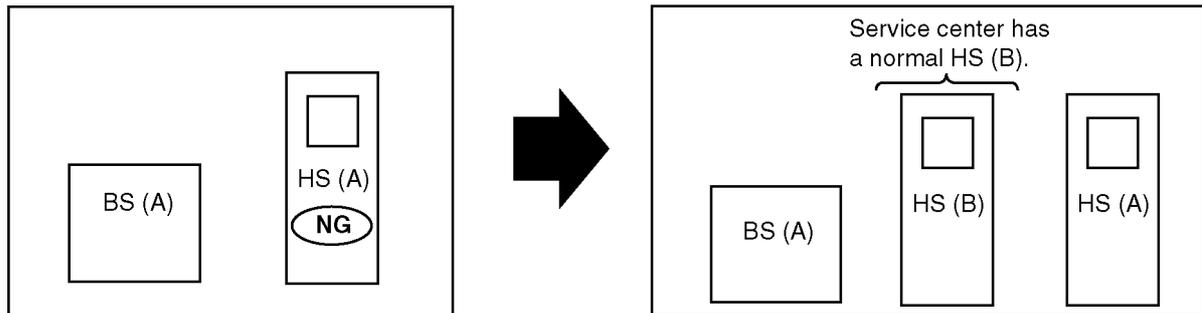
- BS=Base unit, HS=Handset
- To register handset, refer to **Handset Registration** (P.14)

Case 1: A base unit has a defect.



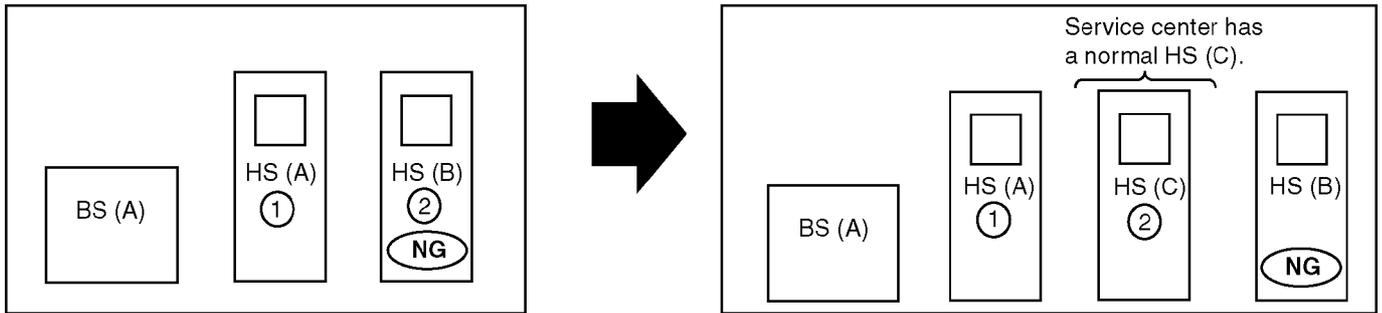
1. Register HS (A) to BS (B).

Case 2: A handset has a defect.



1. Reset the HS (A) ID info. in BS (A).
 - Disconnect BS (A) AC adaptor.
 - While pressing [**•••**] button for more than 30 seconds, connect BS (A) AC adaptor.
2. Register HS (B) to BS (A).

Case 3: A handset has a defect. (for a bundle model)



1. Reset BS (A) ID info. by HS (A).
 - Press " [OK], 5, *, *, 8, #, # ".
 - (*1) - Select " *bs SERVICE* ", then press [OK].
 - Press " 2 ", then " *SURE* " will be displayed.
 - Press [OK].
2. Register HS (A) to BS (A) as a handset no. 1.
3. Register HS (C) to BS (A) as a handset no. 2.

Note:

(*1) Refer to **How to Clear User Setting** (P.19)

9 Troubleshooting Guide

If your telephone does not work properly, try to solve the problem according to the following table.

Problem	Possible cause	Solution
After pressing the talk button, no dial tone is audible, the line is not busy.	The telephone cable of the base station is not plugged in properly.	Check the plugs and jacks of the base station and the telephone wall socket (if in doubt, unplug and plug in again).
	The power supply cable for the base station is not plugged in properly.	Check if the power supply cable is properly plugged in to the base station and the power outlet (possibly unplug and plug in).
	The line is occupied by another handset.	Wait until the switched line is free.
📶 disappears.	Base station is out of range.	Decrease distance to the base station.
	Base station is not connected to power outlet.	Plug in power cable.
	Handset is not registered.	Register handset. (*1)
The base station does not ring.	The ringer volume is turned off.	Adjust the ringer volume.
No display	Handset is turned off.	Press offhook key to turn on handset.
	Low batteries	Recharge batteries.

Note:

(*1) Refer to **Handset Registration** (P.14).

9.1. 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.

9.1.1. 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)

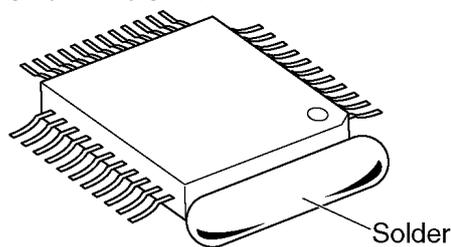
Note: See **About Lead Free Solder (Pbf: Pb free)** (P.4)

9.1.2. How to Remove the IC

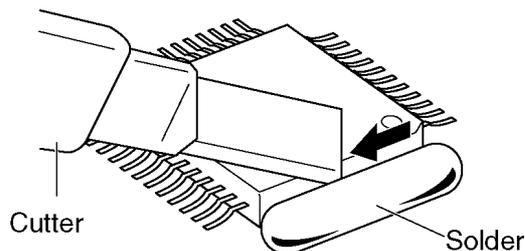
1. Put plenty of solder on the IC pins so that the pins can be completely covered.

Note:

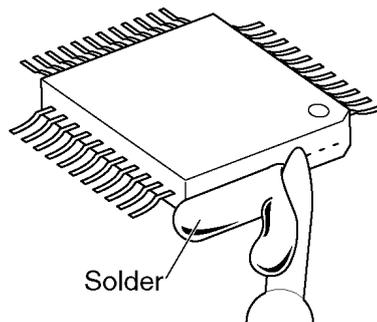
If the IC pins are not soldered enough, you may give pressure to the P.C. board when cutting the pins with a cutter.



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



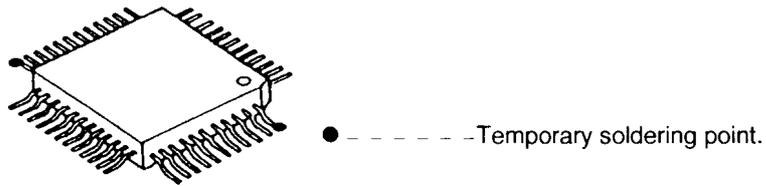
3. While the solder melts, remove it together with the IC pins.



When you attach a new IC to the board, remove all solder left on the board 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.

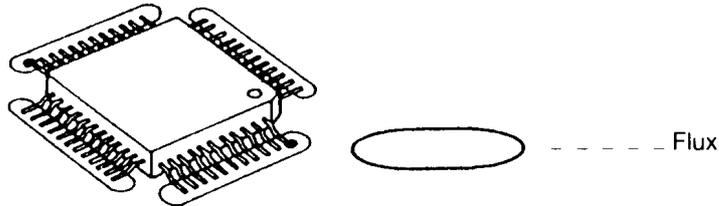
9.1.3. How to Install the IC

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

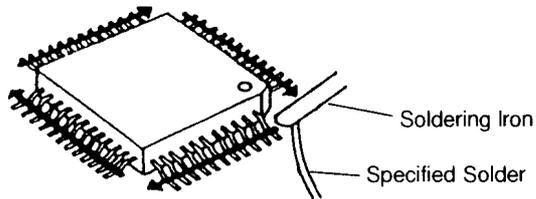


*Check the accuracy of the IC setting with the corresponding soldering foil.

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

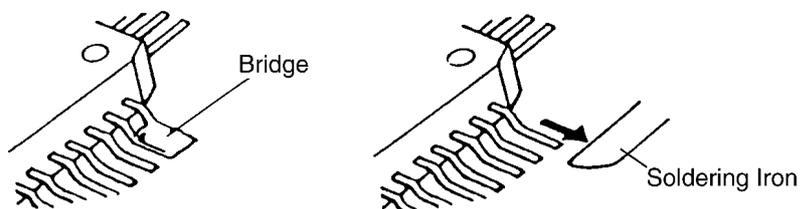


3. Solder the pins, sliding the soldering iron in the direction of the arrow.



9.1.4. How to Remove a Solder Bridge

1. Lightly resolder the bridged portion.
2. Remove the remaining solder along the pins using a soldering iron as shown in the figure below.

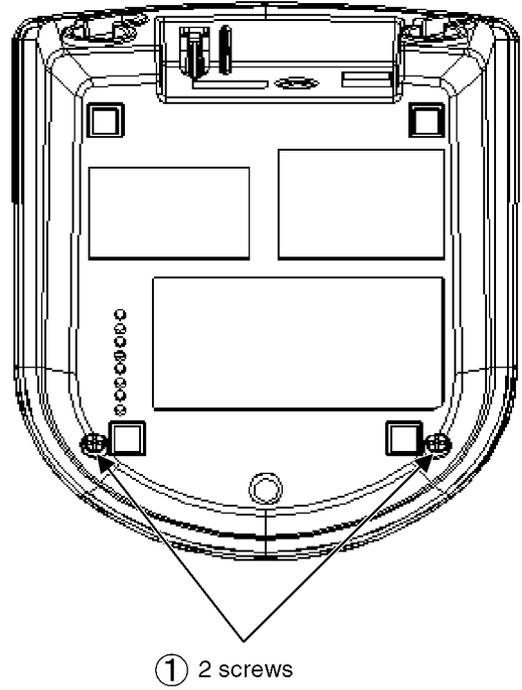


10 Disassembly and Assembly Instructions

10.1. Disassembly Instructions

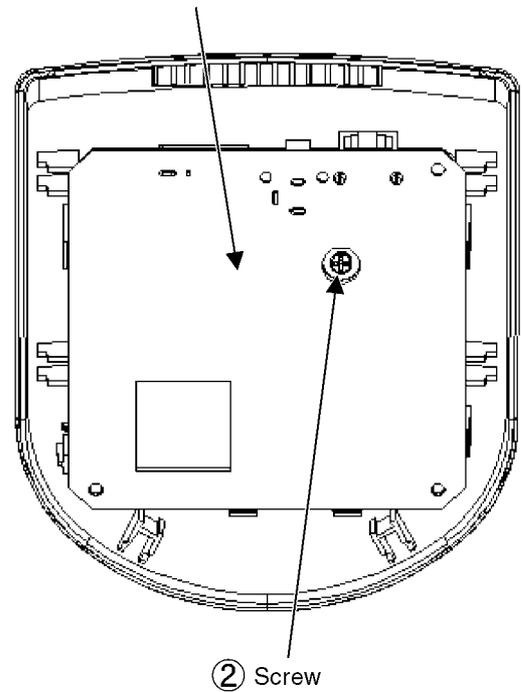
10.1.1. Base Unit

- ① Remove the 2 screws.



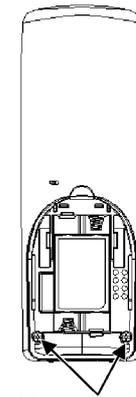
- ② Remove the screw to remove the main P. C. board.

Remove the main P. C. board.



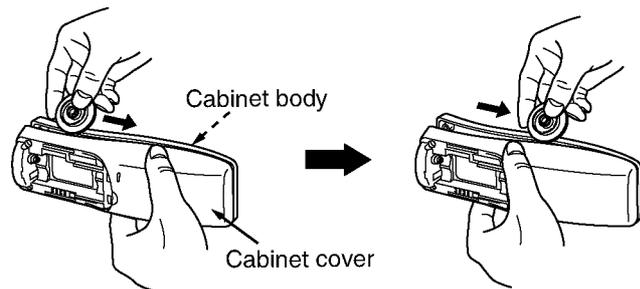
10.1.2. Handset

- ① Remove the 2 screws.

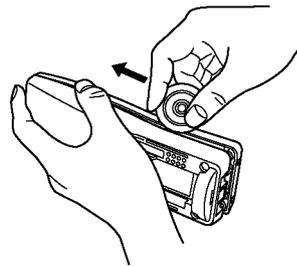


① 2 screws

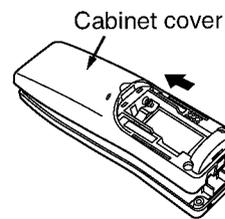
- ② Insert a JIG (PQDJ10006Y) between the cabinet body and the cabinet cover, then pull it along the gap to open the cabinet.



- ③ Likewise, open the other side of the cabinet.

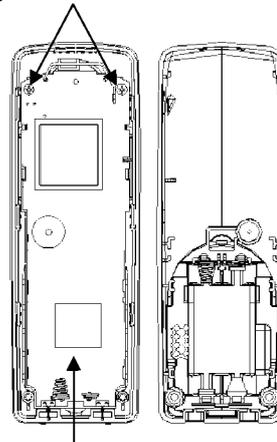


- ④ Remove the cabinet cover by pushing it upward.



- ⑤ Remove the 2 screws to remove the main P. C. board.

⑤ 2 screws



Remove the main P. C. board.

11 Schematic Diagram

11.1. For Schematic Diagram

11.1.1. Base Unit (Schematic Diagram (Base Unit_Main))

Notes:

1. DC voltage measurements are taken with voltmeter from the negative voltage line.

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.

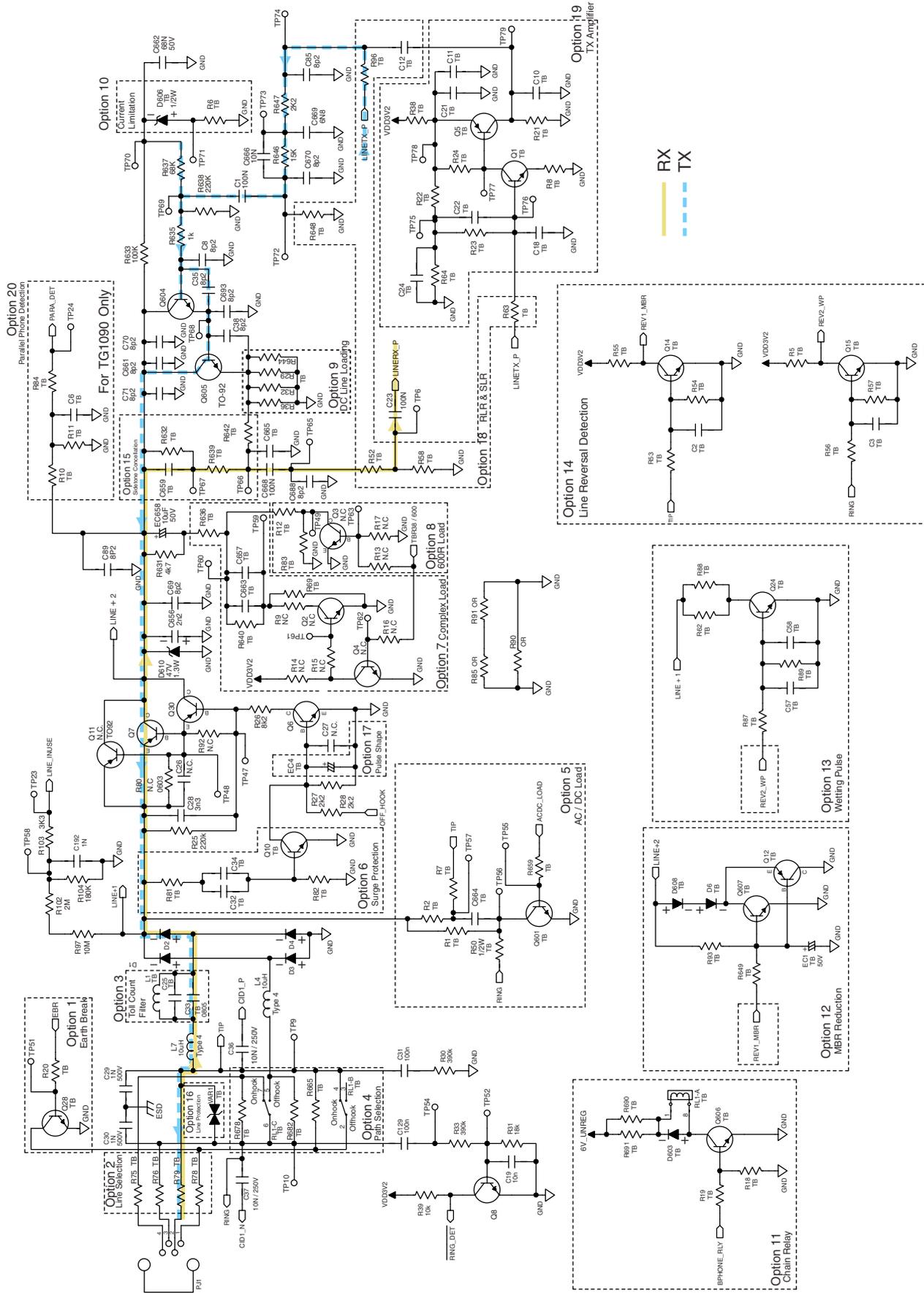
2. The schematic diagrams may be modified at any time with the development of new technology.

11.1.2. Handset (Schematic Diagram (Handset))

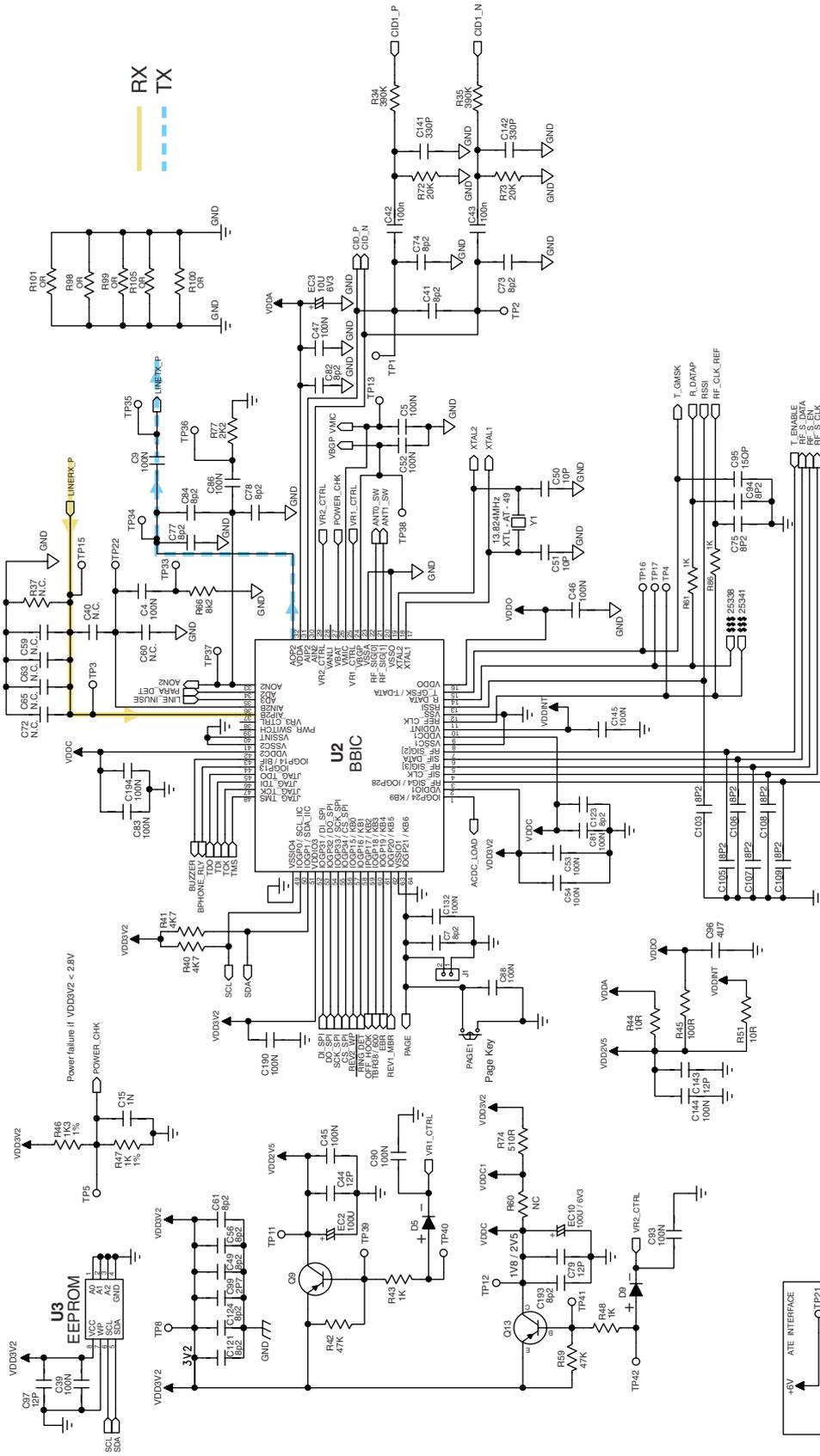
Notes:

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

11.2. Schematic Diagram (Base Unit_Main)

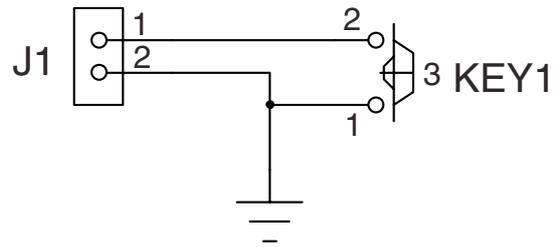


N.C: No Components
 KX-TG1070/1072FX SCHEMATIC DIAGRAM (Base Unit_Main 1/3)

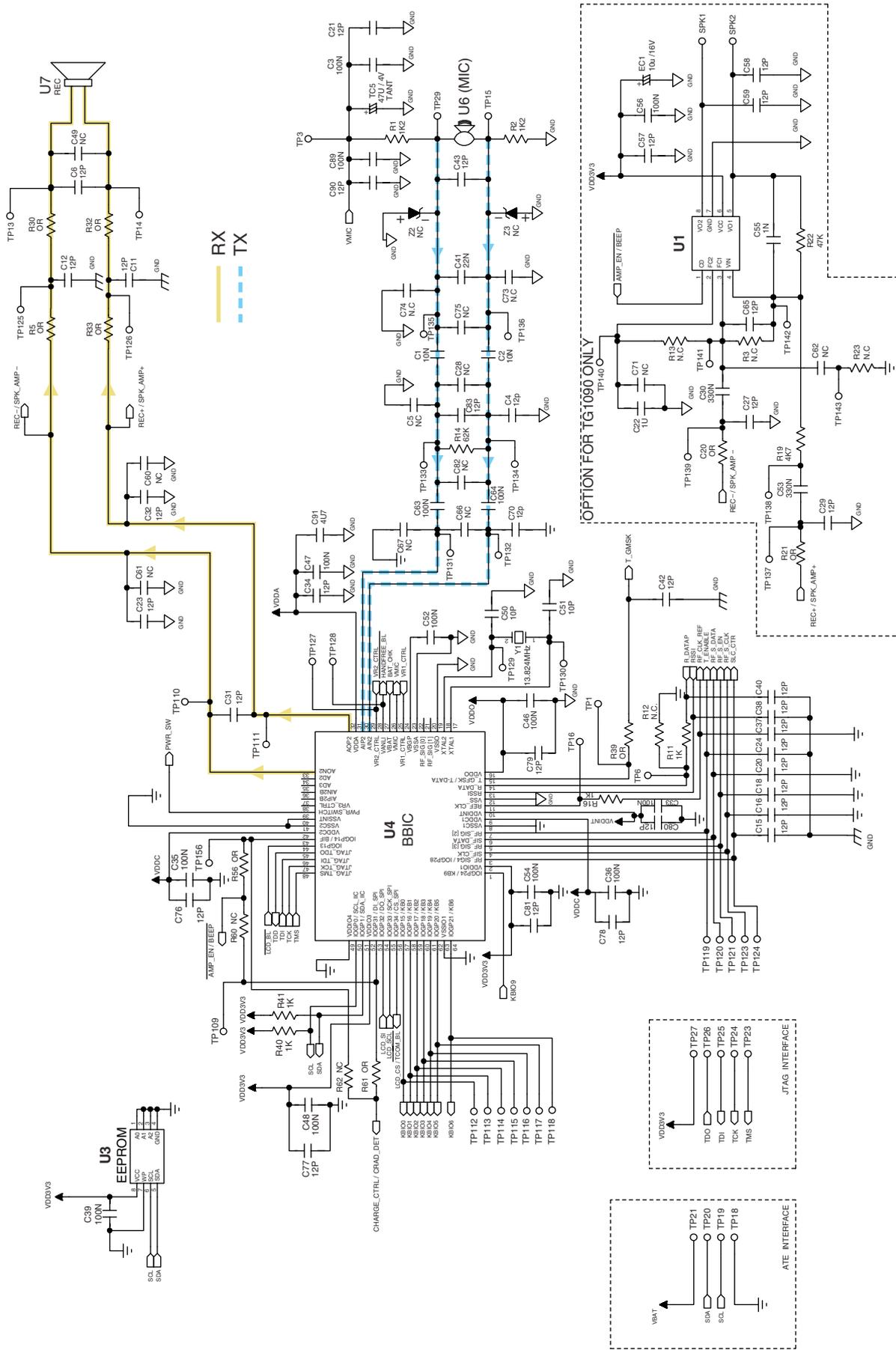


N.C.: No Components
 KX-TG1070/1072FX SCHEMATIC DIAGRAM (Base Unit_Main 2/3)

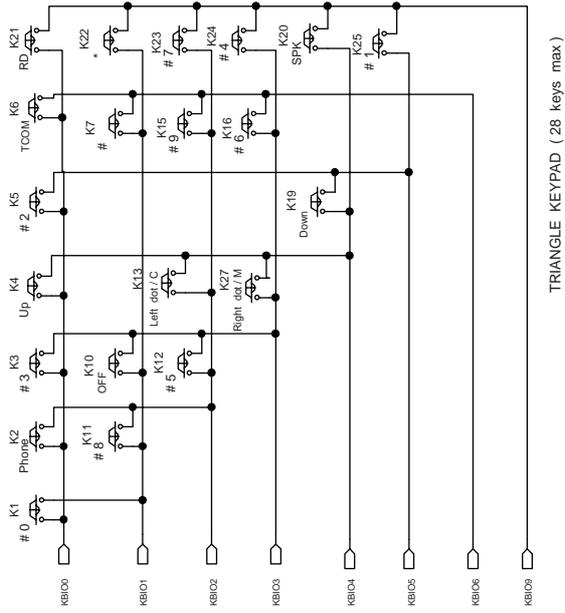
11.3. Schematic Diagram (Base Unit_Operation)



KX-TG1070/1072 SCHEMATIC DIAGRAM (Base Unit_Operation)



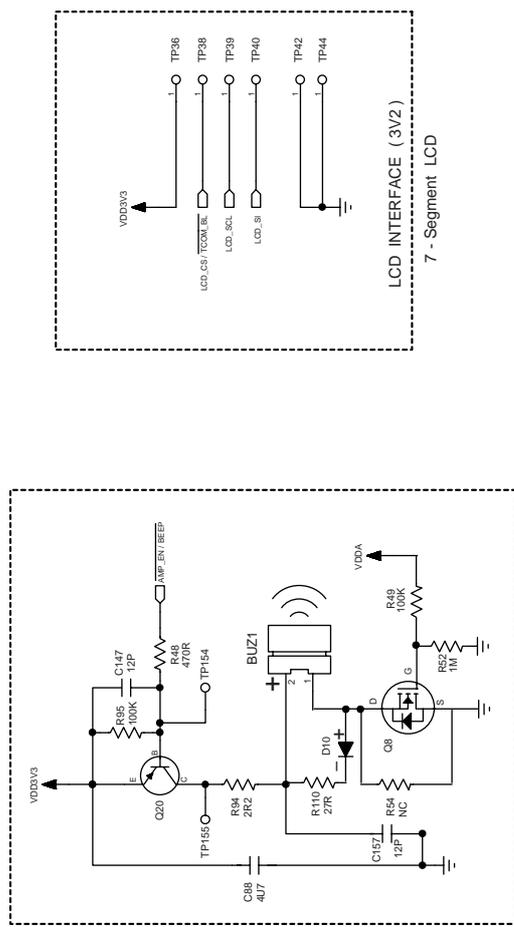
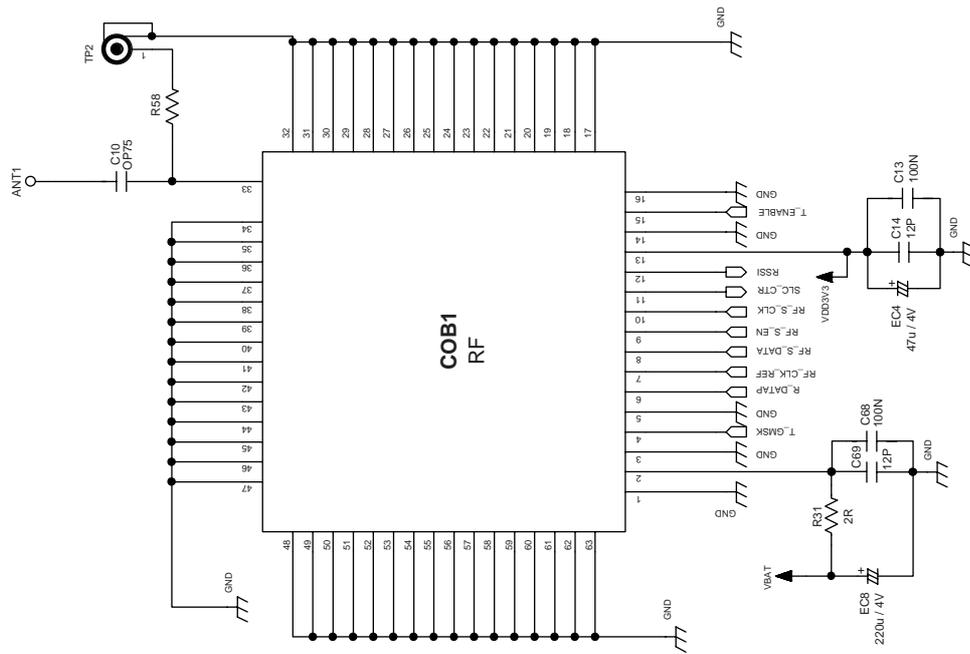
N.C: No Components
KX-TGA107 SCHEMATIC DIAGRAM (Handset_Main 2/3)



TRIANGLE KEYPAD (28 keys max)

C	K13	OK	K27
Off - H	K20	On - H	PWR
Up	K4	Off	K21
Down	K19	R	K10
1	K25	2	K5
4	K24	5	K12
7	K23	8	K11
*	K22	0	K1
		#	K7

Key Assignment

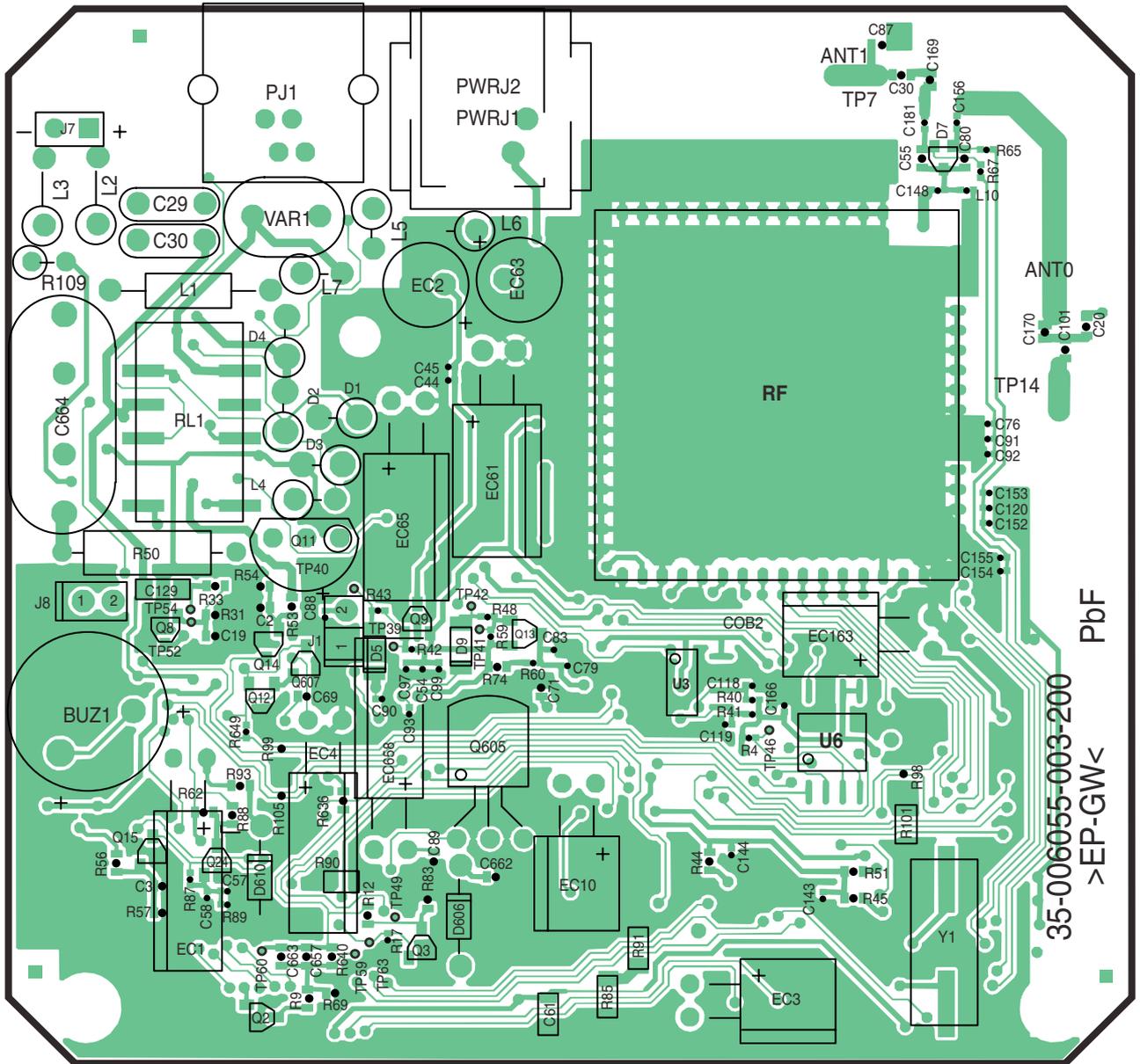


7 - Segment LCD

12 Printed Circuit Board

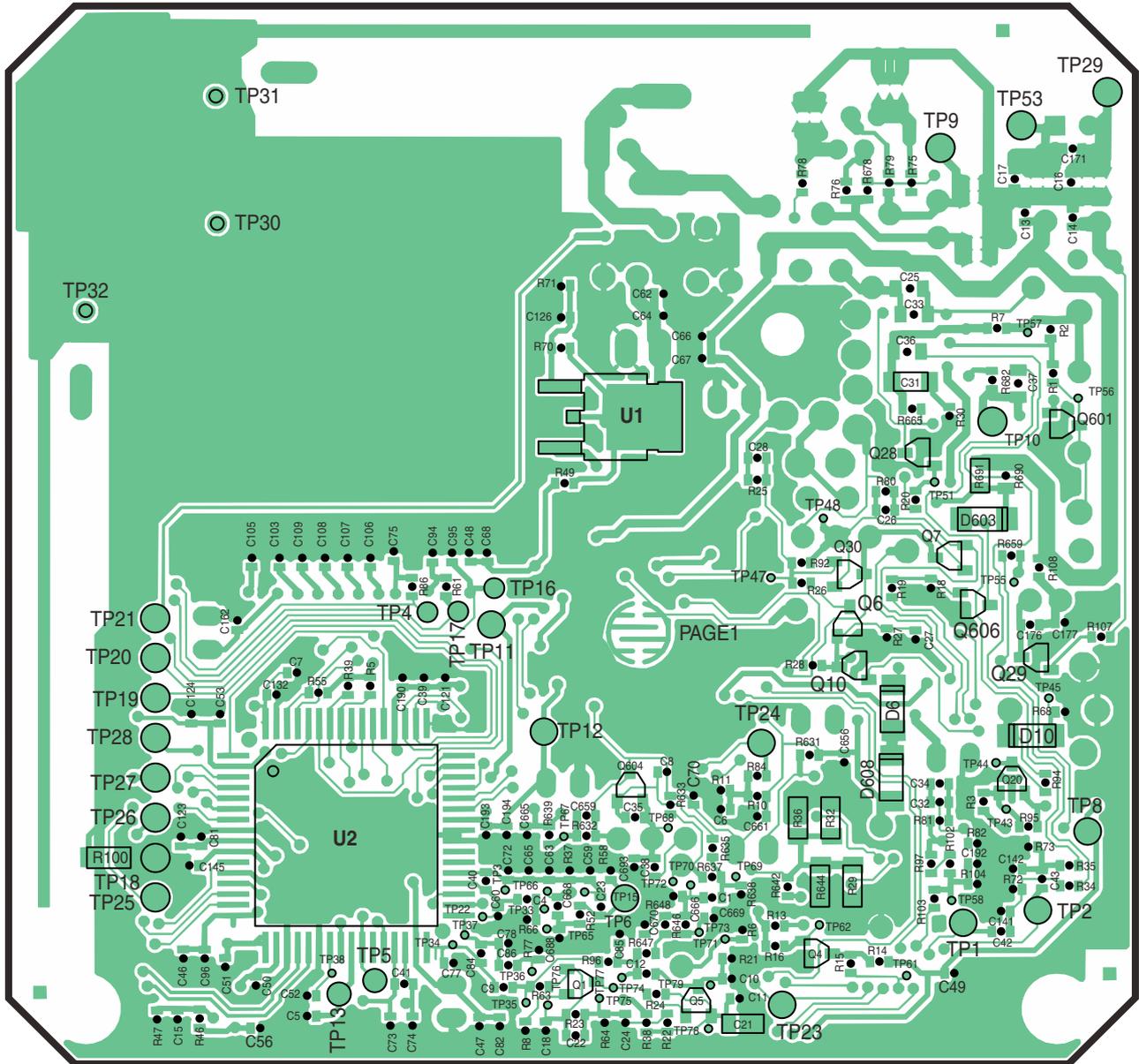
12.1. Circuit Board (Base Unit)

12.1.1. Component View



KX-TG1070/1072 CIRCUIT BOARD (Base Unit (Component View))

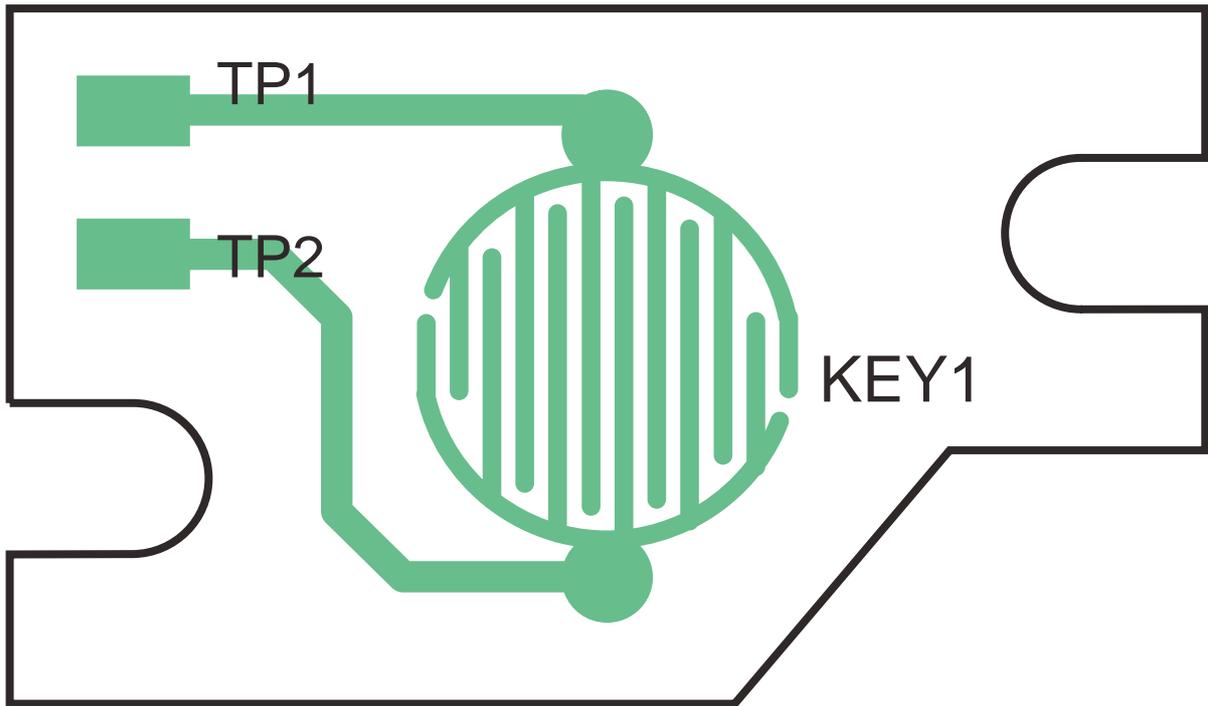
12.1.2. Flow Solder Side View



KX-TG1070/1072 CIRCUIT BOARD (Base Unit (Flow Solder Side View))

12.2. Circuit Board (Base Unit_Page key)

12.2.1. Component View

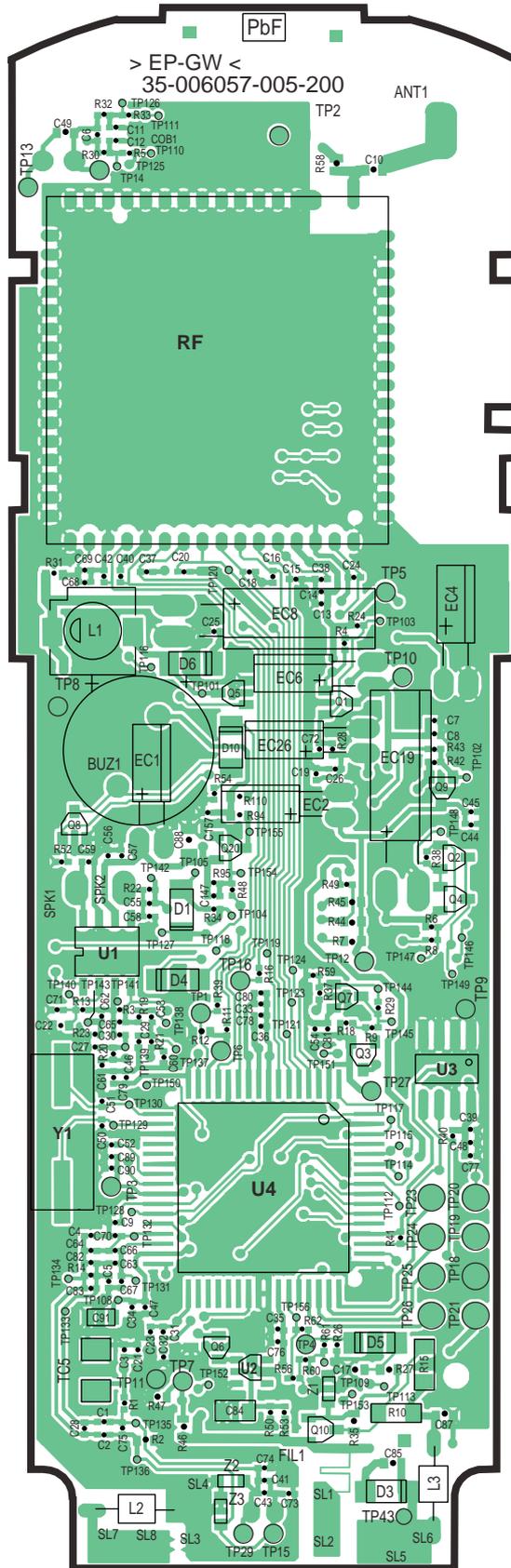


KX-TG1070/1072 CIRCUIT BOARD (Base Unit_page key (Component View))

Memo

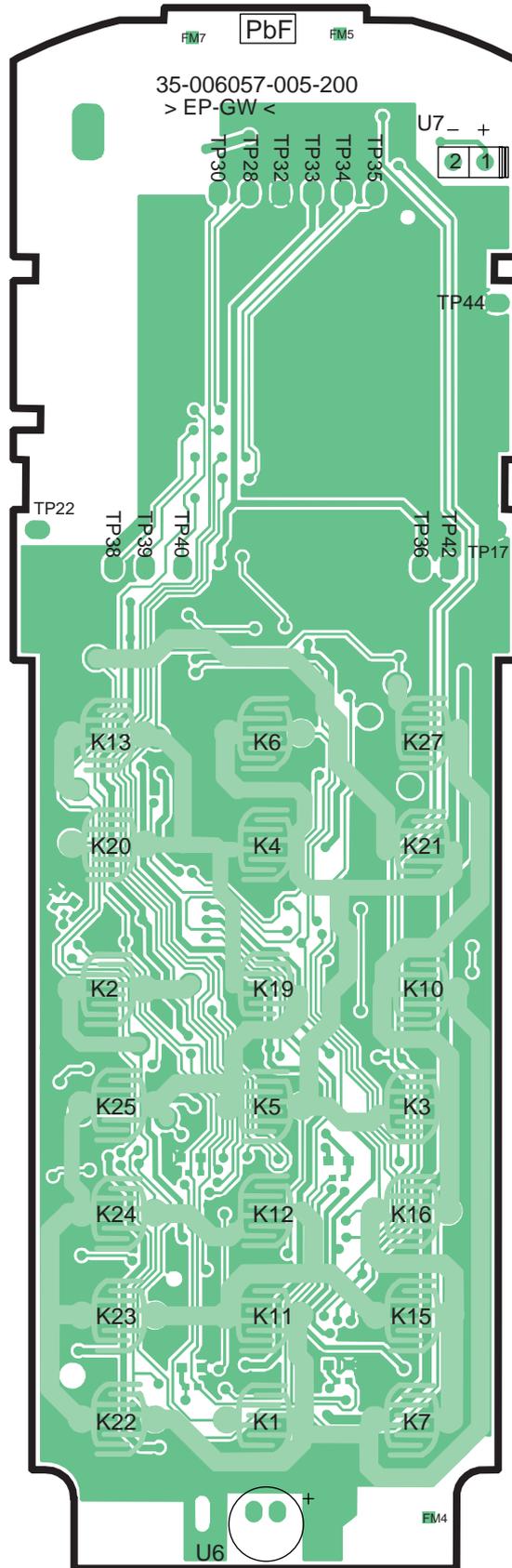
12.3. Circuit Board (Handset)

12.3.1. Component View



KX-TGA107 CIRCUIT BOARD (Handset (Component View))

12.3.2. Flow Solder Side View



KX-TGA107 CIRCUIT BOARD (Handset (Flow Solder Side View))

13 Exploded View and 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.

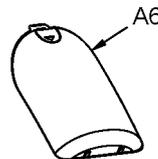
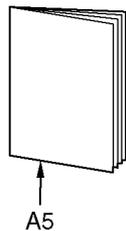
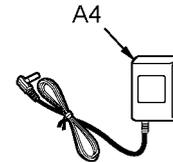
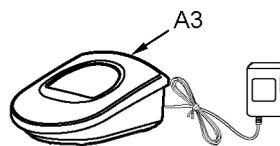
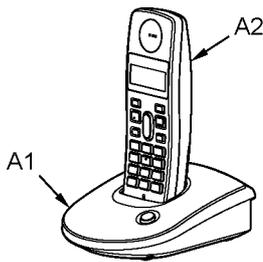
3. ISO code (Example: ABS-94HB) of the remarks column shows quality of the material and a flame resisting grade about plastics.

Note:

(*1) HANDSET without BATTERY COVER ASS'Y

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

Ref. No.	Part No.	Part Name & Description	Remarks
A1	PQZBG1070FXB	BASE UNIT (RTL) (for KX-TG1070FXB/1072FXB)	
A1	PQZBG1070FXC	BASE UNIT (RTL) (for KX-TG1070FXC)	
A2	PQZHGA107EXB	HANDSET (RTL) (for KX-TG1070FXB/1072FXB) (*1)	
A2	PQZHGA107EXC	HANDSET (RTL) (for KX-TG1070FXC) (*1)	
A3	PQWETGA107CE	CHARGER UNIT with AC ADAPTOR (RTL) (for KX-TG1072FXB)	Δ
A4	PQWATG1070CE	AC ADAPTOR (for Base Unit)	Δ
A5	PQX15467Z	INSTRUCTION BOOK (*2)	
A6	8060094500	LID, BATTERY COVER ASS'Y (for KX-TG1070FXB/1072FXB)	ABS-HB
A6	8060094600	LID, BATTERY COVER ASS'Y (for KX-TG1070FXC)	ABS-HB



G/N
 KXTG1070FXB
 KXTG1070FXC
 KXTG1072FXB
 KXTGA107EXB
 KXTGA107EXC