

Service Manual

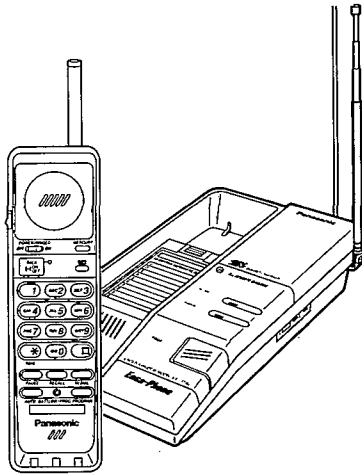
and Technical Guide

Easa-Phone
CORDLESSPHONE

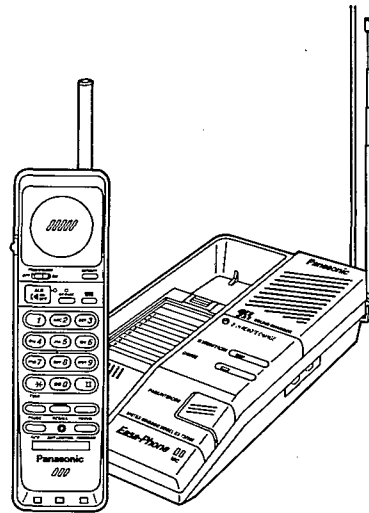
Telephone Equipment

KX-T3716E
KX-T3726E

(for United Kingdom)



(KX-T3716E)



(KX-T3726E)

■ SPECIFICATIONS

General

Modulation:	Base Unit: FM 4 kHz Deviation, Portable Handset: FM 2.5 kHz Deviation
Frequency Stability:	±2.0 kHz
Dial Type:	Tone (DTMF)/Pulse
Redial:	Last dialed number each time the Redial button is pressed
Pause:	3.5 seconds per pause
Memory Capacity:	10 telephone numbers, up to 16 digits per station

	Base Unit	Portable Handset
Power Source: (Receiver Section)	AC adaptor KX-A14BE, Built-in	Built-in rechargeable Ni-Cd battery (KX-A36A)
Receiving Frequency:	2 channel within 47.4 to 47.6 MHz	2 channel within 1.64 to 1.79 MHz
Adjacent Channel Rejection:	40 dB	40 dB
Sensitivity: (Transmitter Section)	1 μ V for 12 dB S/N	2 μ V for 12 dB S/N
Transmitting Frequency:	2 channel within 1.64 to 1.79 MHz	2 channel within 47.4 to 47.6 MHz
Jacks:	DC IN, Telephone line	
Antenna:	Telescopic, Lead Antenna	Retractable Rubber Flexible, Bar Antenna
Speaker:	5 cm (2") PM dynamic (KX-T3726E only)	3 cm (1.2") ceramic type
Microphone:	Condenser microphone	Condenser microphone
Dimensions (HxWxD):	53x133x220 mm (2 $\frac{9}{32}$ "x5 $\frac{1}{4}$ "x8 $\frac{21}{32}$ "	290x61x55 mm (11 $\frac{13}{32}$ "x2 $\frac{13}{32}$ "x2 $\frac{5}{32}$ "
Weight:	380 g (0.84 lbs.)	235 g (0.52 lbs.) with battery

Design and specifications are subject to change without notice.

Panasonic

When you mention the serial number, write down the 11 digits. The serial number may be found on the label affixed to the bottom of the unit.

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LOCATION OF CONTROLS

Base Unit

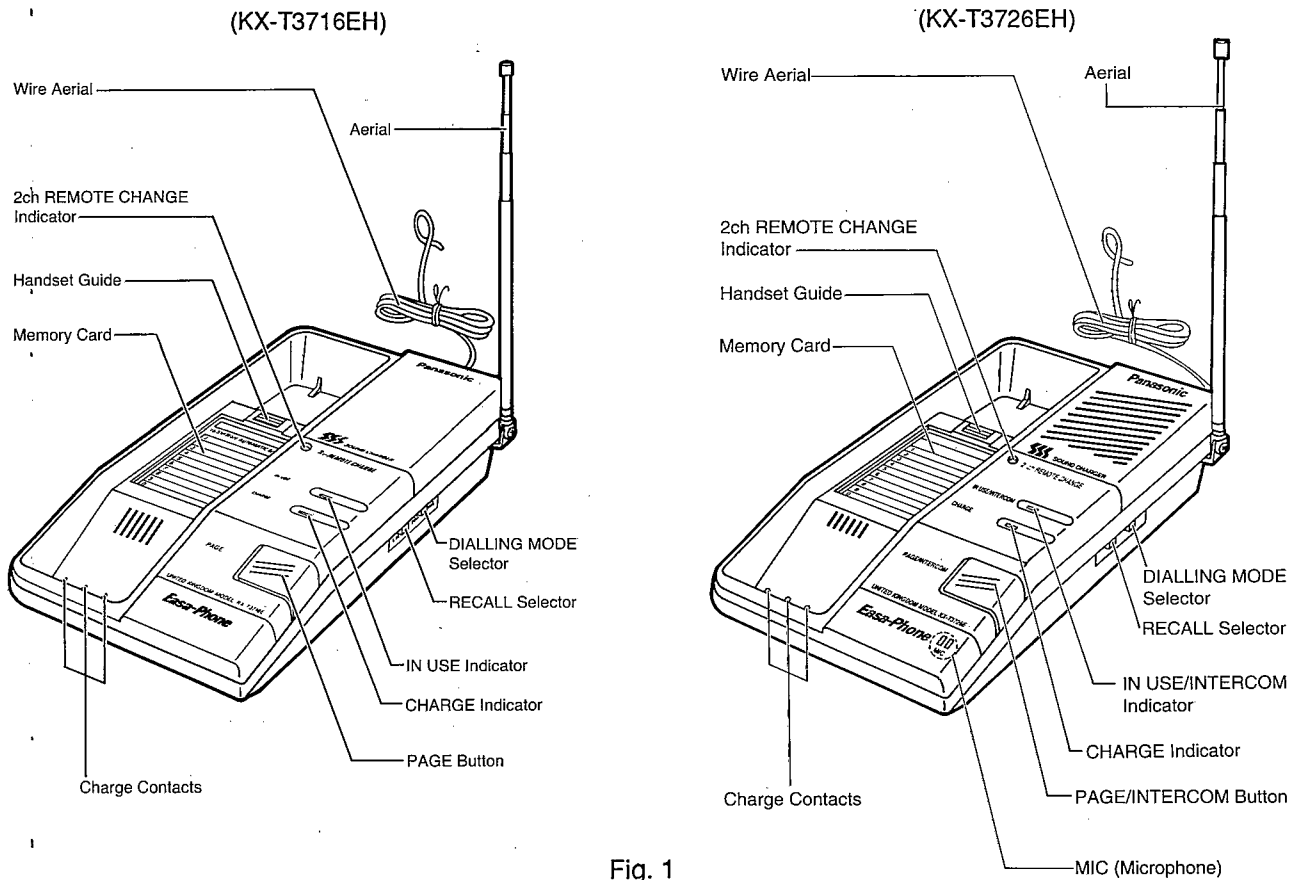


Fig. 1

Portable Handset

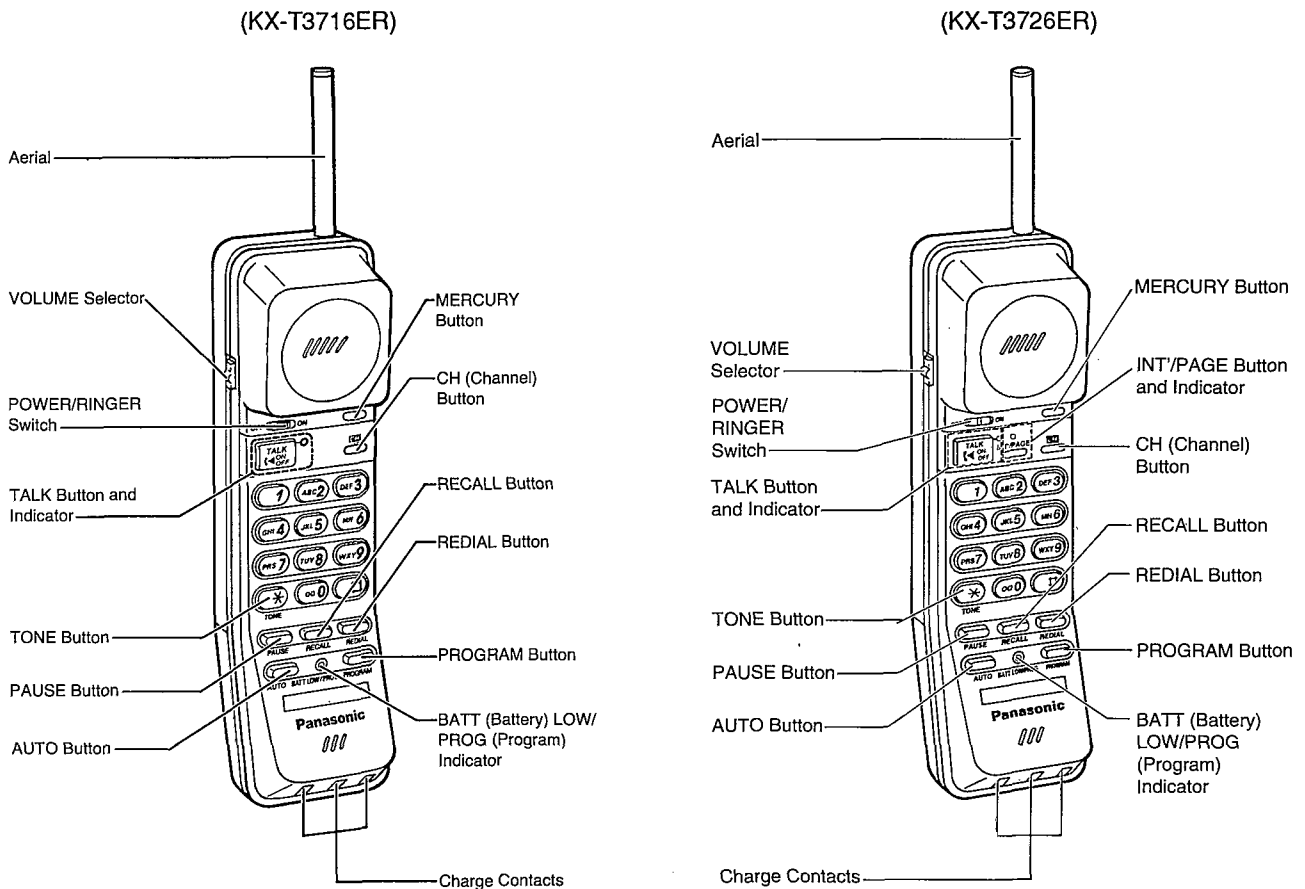


Fig. 2

BATTERY REPLACEMENT

Standard battery life

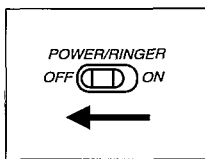
If your Panasonic battery is fully charged:

In TALK mode	Up to about 7 hours
In Stand-by mode	Up to 7 days

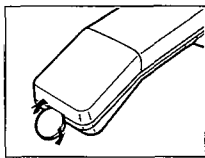
(Battery life may vary depending on usage condition and surrounding temperature.)

Replace the battery with a new one if the BATT LOW/PROG indicator flashes after a few telephone calls even when the battery has been charged for 10 hours.

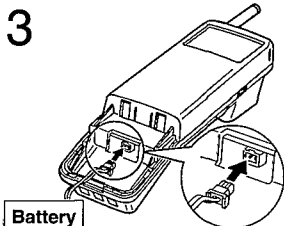
- 1**



Set the POWER/RINGER switch on the portable handset to the OFF position, to prevent the memory loss.
- 2**



Remove the battery compartment cover using an object such as a coin.
- 3**



Replace the battery.

Fig. 3

DISASSEMBLY INSTRUCTIONS

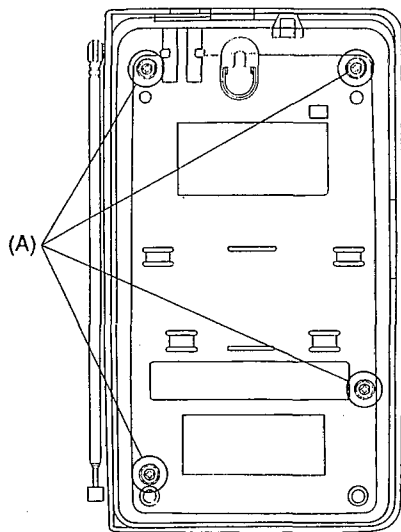
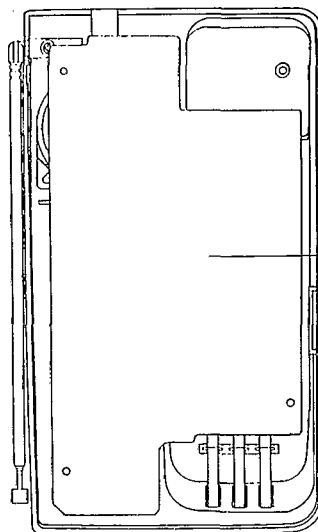


Fig. 4



Remove the P.C. Board

Fig. 5

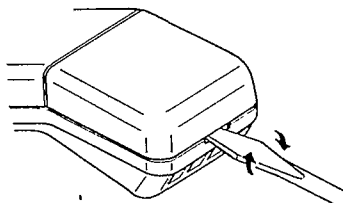


Fig. 6

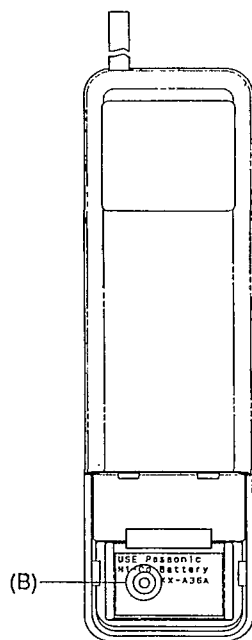


Fig. 7

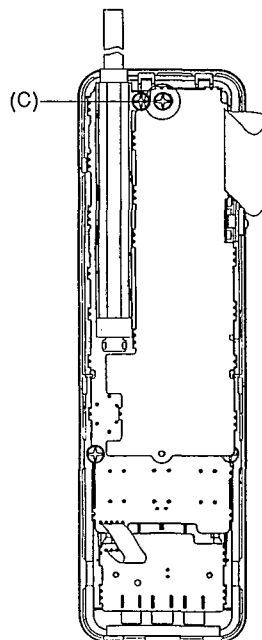


Fig. 8

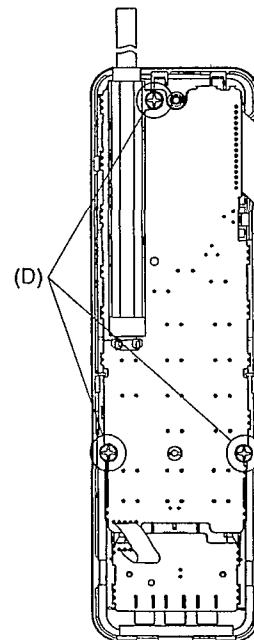


Fig. 9

Ref. No.	Procedure	Shown In Fig.—	To remove—.	Remove—.
1	1	4	Lower Cabinet	Screws (3×14) (A)×4
2	1, 2	5	Printed Circuit Board	Remove the P.C. Board
3	3, 4	6	Rear Cabinet	*
4		7		Screw (2.6×10) (B)×1
5	3-5	8	Printed Circuit Board	Screw (2.6×10) (C)×1
6	3-6	9		Screws (2.6×10, 2.6×8) (D)×3

*Open the cover by inserting a screwdriver in the slot and twist it to pry the battery cover off, see Fig. 6.

CONNECTION TO A TELEPHONE LINE

USE ONLY Panasonic AC ADAPTOR KX-A14BE AND BATTERY BOX KX-A91E.

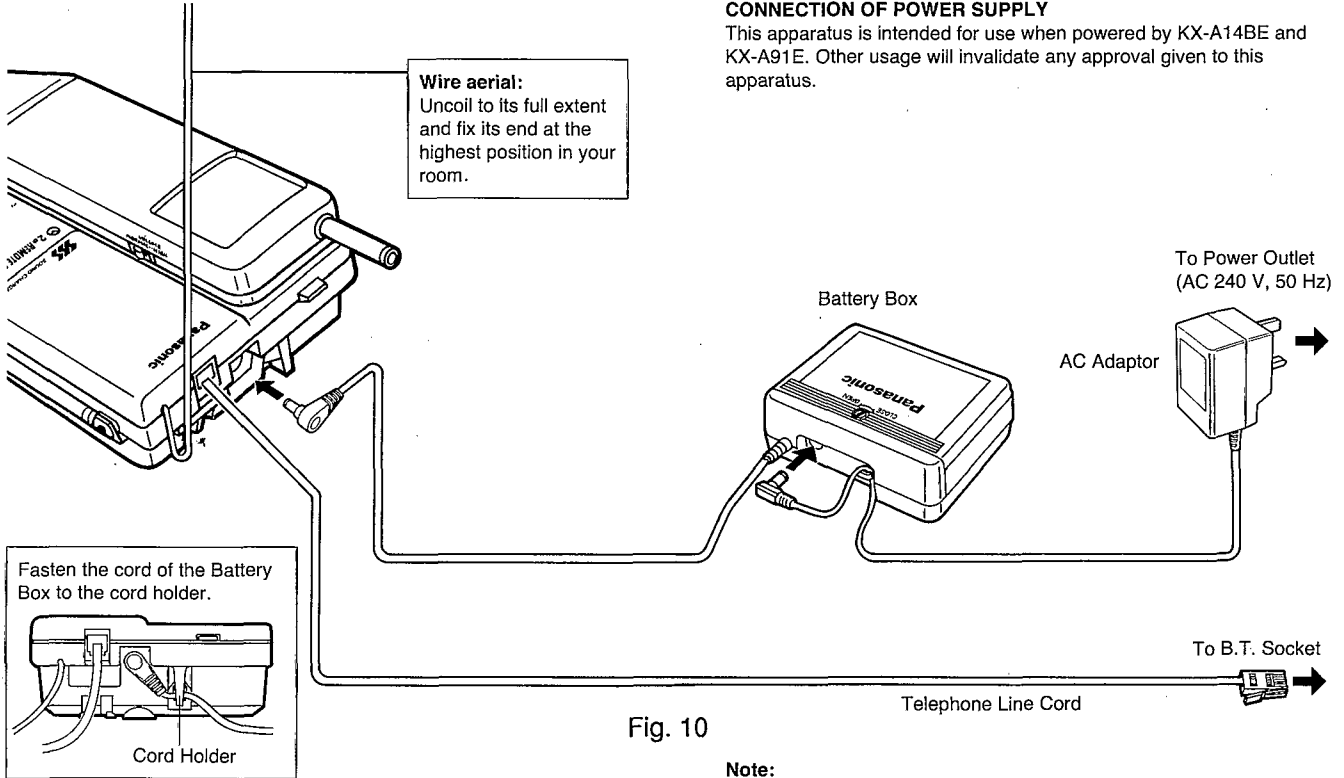


Fig. 10

Note:
—The AC adaptor and the Battery Box must remain connected at all times.

IMPORTANT NOTICE

Base Unit and Portable Handset cannot be used unless the crystal frequencies match. The frequency division labels are attached to the cabinet as shown right. The frequency of each label: Refer to pages 17, 30.

	Base Unit	Portable Handset
Frequency division labels	3,5	3,5
	4,6	4,6

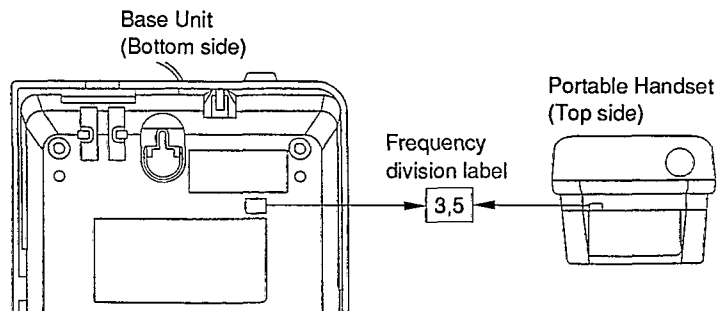


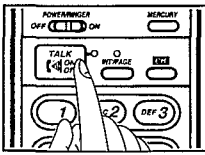
Fig. 11

OPERATIONS

NORMAL OPERATIONS

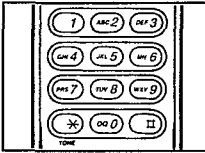
MAKING CALLS

- 1**

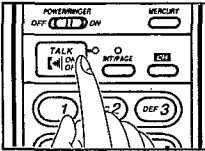


Press the TALK button to get dial tone.

 - The TALK indicator light is on.
- 2**



Dial a telephone number.
- 3**

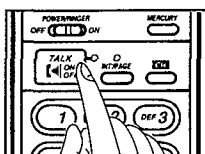


To hang up, press the TALK button place the portable handset on the base unit.

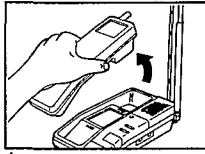
 - The TALK indicator light goes out.

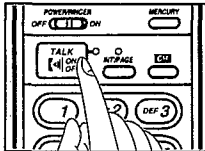
ANSWERING CALLS

- 1**



If the portable handset is off the base unit:
When the telephone rings, press the TALK button to answer the call.

 - The TALK indicator light is on.
- OR
- 
- If the portable handset is on the base unit:**
When the telephone rings, lift the portable handset to answer the call.
- 2**



To hang up, press the TALK button place the portable handset on the base unit.

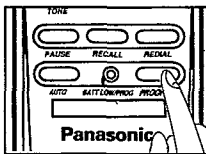
 - The TALK indicator light goes out

AUTOMATIC DIALING

Storing phone numbers in memory

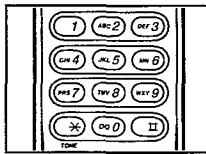
The dialling buttons (0 through 9) function as memory stations for automatic dialling. A 16-digit phone number can be stored in each station.

- 1**

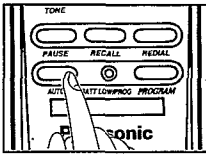


Press the PROGRAM button to switch the unit to the programming mode.

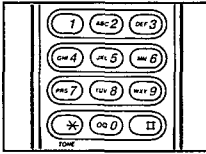
 - The BATT LOW/PROG indicator light is on.
- 2**



Enter a phone number up to 16 digits.
- 3**



Press the AUTO button.
- 4**

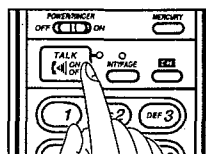


Press one of the dialling buttons (0 through 9) to select a memory station.

 - The BATT LOW/ PROG indicator light goes out.
 - The phone number is stored in that memory location.
 - To store other numbers, repeat steps 1 through 4.

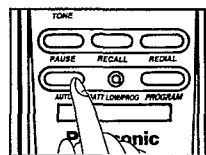
Dialling a stored number from memory

- 1**

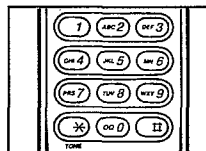


Press the TALK button to get dial tone.

 - The TALK indicator light is on.
- 2**



Press the AUTO button.
- 3**



Press the dialling button (0 through 9) where the phone number you want to dial is stored.

 - The stored number is dialled automatically.

CPU DATA (KX-T3716ER/KX-T3726ER)

IC100 PQVI006G629

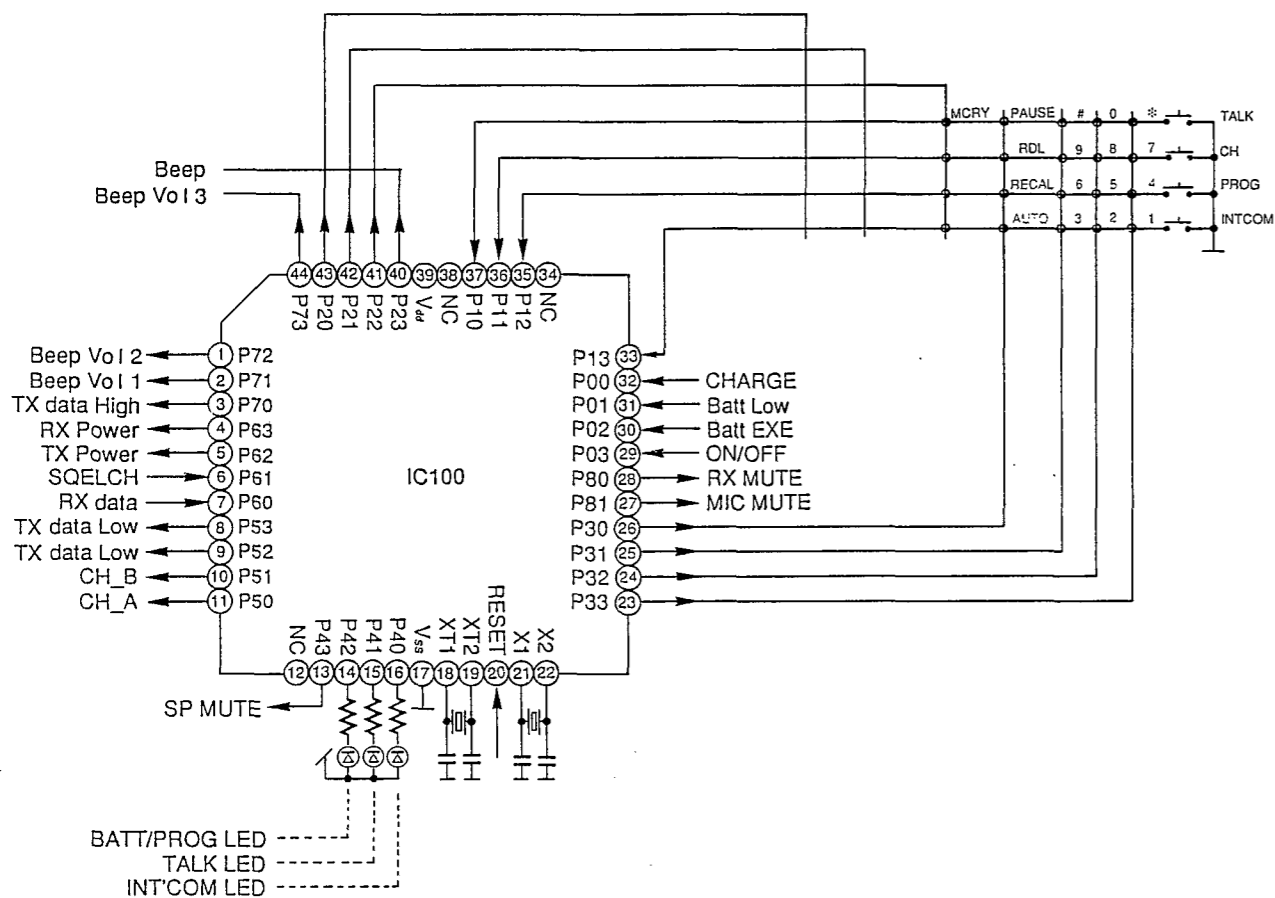


Fig. 13

■ PQVI006G629 (IC100) TERMINALS EXPLANATION

Pin No.	Symbol	I/O	Description
32	P00	I	4-bit input port (PORT0).
31	P01	I/O	P01-P03 are used for 3-bit input. The built-in pull-up resistance can be designated by 4 bits using software.
30	P02		
29	P03		
37	P10	I	4-bit input ports (PORT1). The built-in pull-up resistance can be designated by 4 bits using software.
36	P11		
35	P12		
33	P13	I/O	4-bit I/O ports (PORT2). The built-in pull-up resistance can be designated by software.
43	P20		
42	P21		
41	P22		
40	P23	I/O	Programmable 4-bit I/O ports (PORT3) used for input/output by bits. The built-in pull-up resistance can be designated by 4 bits using software.
26	P30		
25	P31		
24	P32		
23	P33	I/O	N-ch open drain 4-bit I/O ports (PORT4). The pull-up resistance can be built-in by bit. (Mask option) During open drain: 10 V withstand
13-16	P40-P43		
8-11	P50-P53		
7	P60		
6	P61	I/O	Programmable 4-bit I/O ports (PORT6) used for input/output by bit. The built-in pull-up resistance can be designated by 4 bits using software.
5	P62		
4	P63		
3	P70		
2	P71	I/O	4-bit I/O ports (PORT7). The built-in pull-up resistance can be designated by 4 bits using software.
1	P72		
44	P73		
28	P80	I/O	2-bit I/O ports (PORT8). The built-in pull-up resistance can be designated by 2-bits using software.
27	P81		

Pin No.	Signal Name	I/O	High	High-Z	Low	Pin No.	Signal Name	I/O	High	High-Z	Low
1	Beep Vol. 2	O	Small	—	Large	23	Key strobe	O	—	Normal	Active
2	Beep Vol. 1	O	Small	—	Large	24	Key strobe	O	—	Normal	Active
3	TX DATA (H)	O	1	—	0	25	Key strobe	O	—	Normal	Active
4	RX POWER	O	OFF	—	ON	26	Key strobe	O	—	Normal	Active
5	TX POWER	O	OFF	—	ON	27	MIC MUTE	O	Mute	—	Unmute
6	SQUELCH	I	Strong electric field	—	Weak electric field	28	RX MUTE/LIGHTED	O	Un/ON	—	Mute/OFF
7	RX DATA	I	1	—	0	29	ON/OFF	I	OFF	—	ON
8	TX DATA (L)	O	1	—	0	30	Batt Exist	I	Yes	—	No
9	TX DATA (L)	O	1	—	0	31	Batt Low	I	Normal	—	Batt Low
10	CH-A	O	1 OFF	0 CH-B	1 CH-A	32	Charge	I	Non	—	Charge
11	CH-B	O	1	1	0	33	Key in	I	Normal	—	Key in
12			—	—	—	34	Key in	I	Normal	—	Key in
13	SP MUTE	O	Unmute	—	Mute	35	Key in	I	Normal	—	Key in
14	LED BATT LOW	O	—	OFF	ON	36	Key in	I	Normal	—	Key in
15	LED TALK	O	—	OFF	ON	37	Key in	I	Normal	—	Key in
16	LED INT' COM	O	—	OFF	ON	38			—	—	—
17	GND		—	—	GND	39	Power Supply		—	—	—
18	Sub Clock	I	—	—	—	40	Beep Clock	O	Normal	—	Active
19	(32.768 kHz)	O	—	—	—	41	Key Strobe	O	—	Normal	Active
20	Reset	I	Normal	—	Reset	42	Option Strobe	O	—	Normal	Active
21	Main Clock	I	—	—	—	43	Option Strobe	O	—	Normal	Active
22	(1.2 MHz)	I	—	—	—	44	Beep Vol. 3	O	Small	—	Large

Pin No.	Symbol	I/O	Description	
33	TI0	I	External event pulse input terminal for the timer/event counter.	
43	PTO0	I/O	Timer/event counter output terminal.	
41	PCL	I/O	Clock output terminal.	
40	BUZ	I/O	Fixed frequency output terminal (for buzzer or trimming of the system clock).	
31	$\overline{\text{SCK}}$	I/O	Serial clock I/O terminal.	
30	SO/SB0	I/O	Serial data output terminal. Serial bus I/O terminal.	
29	SI/SB0	I/O	Serial data input terminal. Serial bus I/O terminal.	
32	INT4	I	Input terminal of edge detection vector interrupt. (Rise and fall edges can be detected.)	
37	INT0	I	Edge detection vector interrupt input terminal. (Detection edge can be selected.)	Clock synchronous system
36	INT1			Asynchronous system
35	INT2	I	Edge detection testable input terminal. (Rise edge is detected.)	Asynchronous system
4~7	KR0-KR3	I/O	Parallel fall edge detection testable input terminal.	
1~3, 44	KR4-KR7	I/O	Parallel fall edge detection testable input terminal.	
21, 22	X1, X2	I	Crystal/ceramic connection terminal for the main system clock oscillation. For external clock, signal is input to X1 and its reversed phase is input to X2.	
18	XT1	I	Crystal connection terminal for the sub-system clock oscillation. For external clock, signal is input to XT1. XT2 is open.	
19	XT2			
20	$\overline{\text{RESET}}$	I	System reset input terminal.	
12	NC		Not used	
39	V _{DD}		Positive power supply.	
17	V _{SS}		GND electric potential terminal.	

3. Ringing

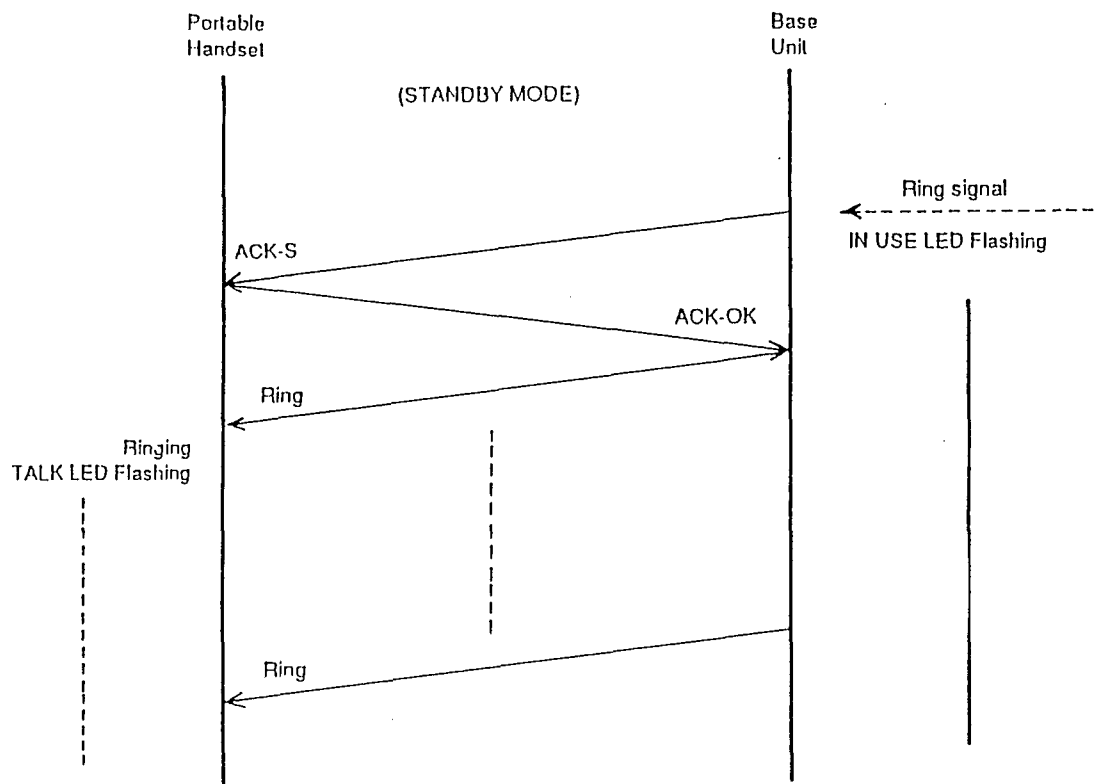


Fig. 16

After detecting the Ring signal from circuit, the Base Unit sends a LINK form requesting DATA (ACK-S) to the Portable Handset. When receiving this data, the Portable Handset returns a permitting DATA (ACK-OK) to the Base Unit. After receiving the returned DATA from the Portable Handset, the Base Unit sends a ring signal DATA (Ring), then the Portable Handset starts ringing.

4. Ports for transmitting and receiving of data

Portable Handset: transmitting...8 Pin receiving...7 Pin

Base Unit: transmitting...9 Pin receiving...35 Pin

5. Wave form of DATA used for cordless transmission and reception

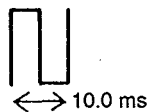
The DATA which is transmitted from the Portable Handset to the Base Unit is combination of DATA 0, DATA 1, DATA Delimit, Pre data and End data.

The DATA which is transmitted from the Base Unit to the Portable Handset is combination of DATA 0, DATA 1, DATA Delimit, Pre data and End data.

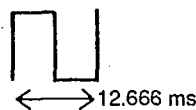
PORTABLE HANDSET

Transmittng DATA Format

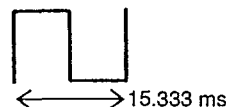
DATA 0



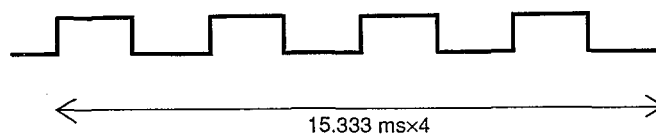
DATA 1



DATA Delimt



Pre data



END data

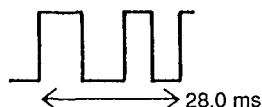
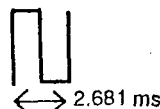


Fig. 17

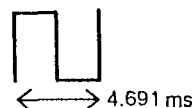
BASE UNIT

Transmittng DATA Format

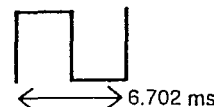
DATA 0



DATA 1



DATA Delimt



END data

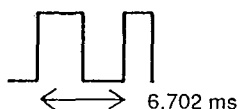


Fig. 18

6. When LINKing

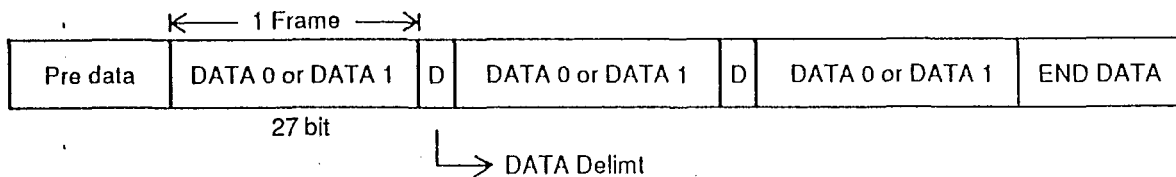


Fig. 19

When LINKing from the Portable Handset (when becoming STBY to TALK), DATA is transmitted in above format. The combined portion of DATA 0 and DATA 1 is transmitted in LINK requesting DATA format first. Then, when LINK OK (ACK-OK) DATA is returned from the Base Unit, it is sent as LINK form DATA after changing the combination of DATA 0 and DATA 1. And the DATA Delimt is between each Frame as a stop.

The contents of LINK requesting DATA and LINK form DATA are different depending on each operation.

7. Pulse Dial

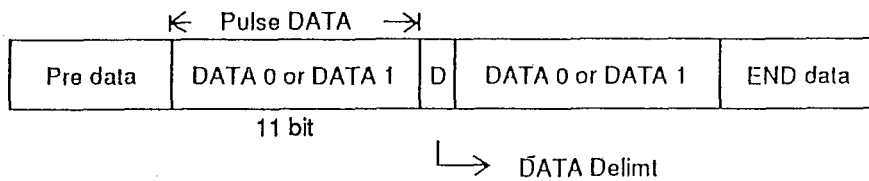


Fig. 20

When executing Pulse Dial, the Pulse Dial DATA is transmitted from the Portable Handset to the Base Unit in above format. The combination of DATA 0 and DATA 1 are changed by each Dial No. And the DATA Delimit is between each Frame as a stop. The number of Frame is 2.

8. Tone Dial

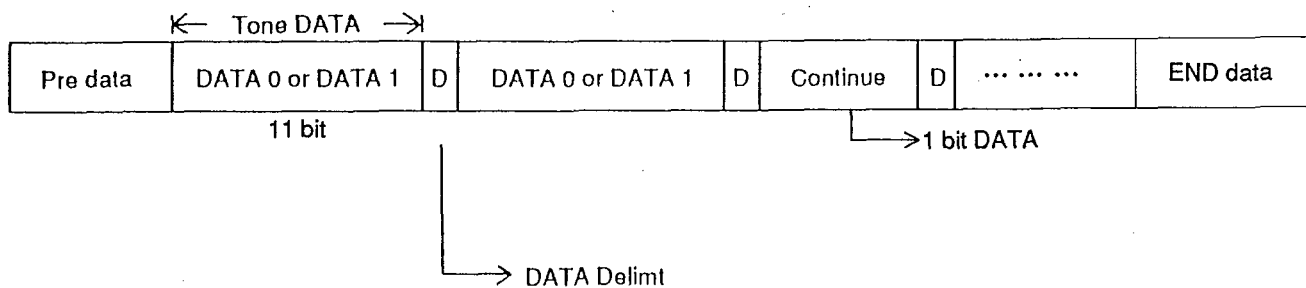


Fig. 21

When executing Tone Dial, Tone Dial DATA is transmitted from the Portable Handset to the Base Unit in above format. The DATA is changed by Dial No. as same as Pulse Dial. When Tone Dialing, DATA (Continue DATA) that the key is pressed continuously is sent to the Base Unit during the key is pressed. When depressing the key, the TONE Dial exterminating DATA (Tone end DATA) is sent, and the END data is sent finally.

NOTE

60,000 kinds of the security code are available for the model KX-T3716E/KX-T3726E. Each time the portable unit is set on the cradle of the base unit (for charging), the CPU automatically change the security code.

ADJUSTMENTS (KX-T3716EH/KX-T3726EH)

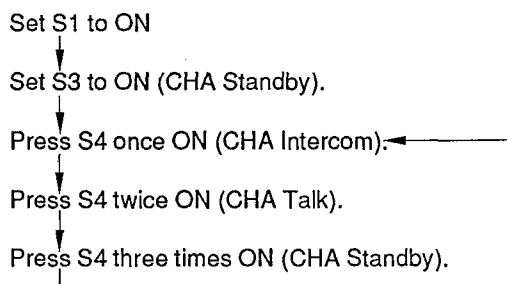
Purpose of Adjustment

Symptom	Remedy
The transmit output is low, and the arrival distance is shorted between base unit and portable handset.	Adjust the adjustment item (1).
The transmit frequency is slipped.	Adjust the adjustment item (2).
The sound volume of reception is low.	Adjust the adjustment item (3).
The sound volume of sending is low.	Adjust the adjustment item (4).
The reception sensitivity of base unit is wrong, the noise is occurred.	Adjust the adjustment item (5).

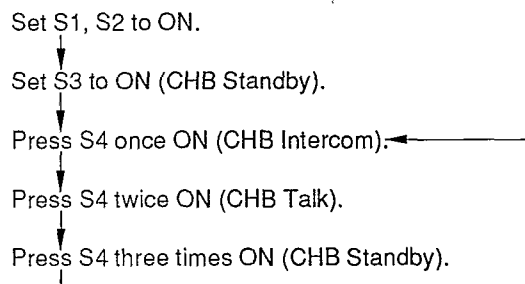
Unit Condition:

When doing these adjustments, remove the wire aerial of Base Unit. After adjusting, re-soldering the wire aerial.

Procedure for CHA Test mode:



Procedure for CHB Test mode:



When replacing these parts, adjust as shown below table.

Replace Parts	Adjustment Items	Test Mode	Adjustment Points	Procedure
(1) T4, L9, Q29	Transmit Output Adjustment	CHA Talk	T4, L9	<ul style="list-style-type: none"> ● Set S8, S12 to wire aerial side. ● Set the unit to CHA Talk test mode. ● Adjust T4→L9→T4→L9 (in that order) for maximum output on spectrum analyzer.
(2) L9, X4, X5, L4, L5	Frequency Adjustment	CHA Talk CHB Talk	L5 L4	<ul style="list-style-type: none"> ● Set S8 to wire aerial side. Set S12 to Frequency Counter side. Set S13 to ON. ● Set the unit to CHA Talk test mode. ● Adjust L5 so that the reading of the Frequency Counter is that of the CHA target frequency ± 200 Hz. (Target frequency...Refer to page 17) ● Set the unit to CHB Talk test mode. ● Set the unit to CHB Talk test mode. ● Adjust L4 so that the reading of the Frequency Counter is that of the CHB target frequency ± 200 Hz.

When replaing these parts, adjust as shown below table.

Replace Parts	Adjustment Items	Test Mode	Adjustment Points	Procedure
(3) VR2, VR3	Modulation Adjustment	CHA Talk	VR2 VR3	<ul style="list-style-type: none"> Set the unit to CHA Talk test mode. Set S8 to wire aerial side. Set S12 to FM Deviation Meter Side. Set S7, S14 to ON. Apply a signal (f=1 kHz, -18 dBm at 600Ω termination) by AF OSC. Adjust VR2 so that the reading of the FM Deviation Meter is 2.00 ±0.10 kHz. Set the unit to CHB Talk test mode. Apply a signal (f=1 kHz, -18 dBm at 600Ω termination) by AF OSC. Adjust VR3 so that the reading of the FM Deviation Meter is 2.00 ±0.10 kHz.
		CHB Talk		
(4) VR1, Q19	Tel Line Transmit Level Adjustment	CHA Talk	VR1	<ul style="list-style-type: none"> Set S6 to ON. Set the unit to CHA Talk test mode. Adjust VR1 so that the reading of the AF VTVM output is -2.0 dBm ±0.5 dBm.
(5) T1, T2, T3, L3	Receiver Sensitivity Adjustment	CHA Talk	T1, T2, T3	<ul style="list-style-type: none"> Set the unit to CHA Talk test mode. Set S5 to ON. Apply a 40 dBμV output from S.S.G. (modulation frequency 1 kHz, dev. 1.5 kHz 1 devi). Adjust T1→T2→T3 (in that order) so that output maximum at IC1 pin 5 (at RF VTVM). Set S6 to ON. Adjust L3 so that the Tel Line output is maximum (at AF VTVM).
			L3	

Frequency Combination

Frequency division label	CHA	CHB	CHB	CHA
	X1	X2	X4	X5
3,5	36.78125	36.80625	1.682	1.722
4,6	36.79375	36.81875	1.702	1.742

Frequency Table (MHz)

	Receive		Transmit
	Local Frequency	Target Frequency	Target Frequency
CH3	36.78125	47.48125	1.682
CH4	36.79375	47.49375	1.702
CH5	36.80625	47.50625	1.722
CH6	36.81875	47.51875	1.742

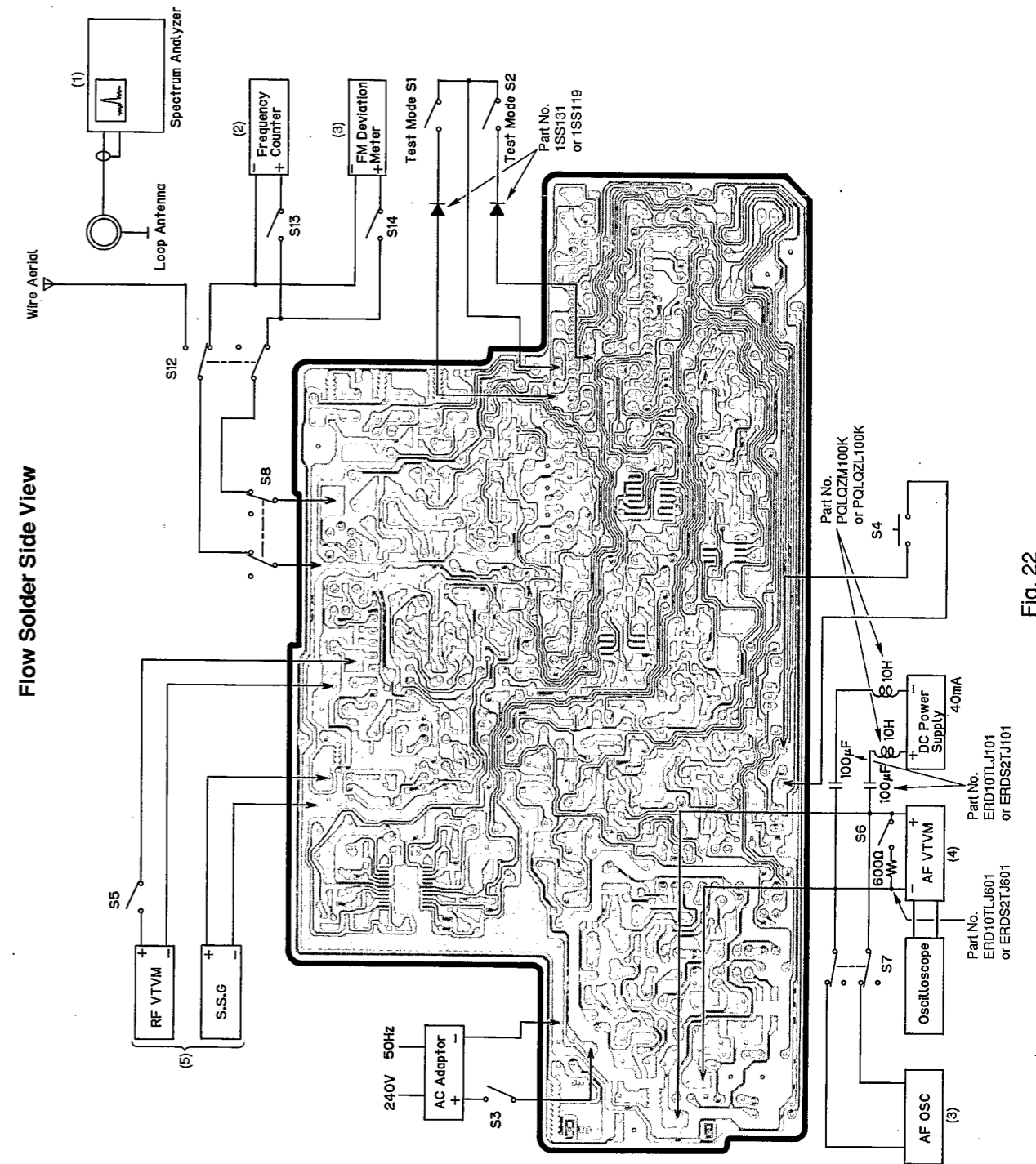
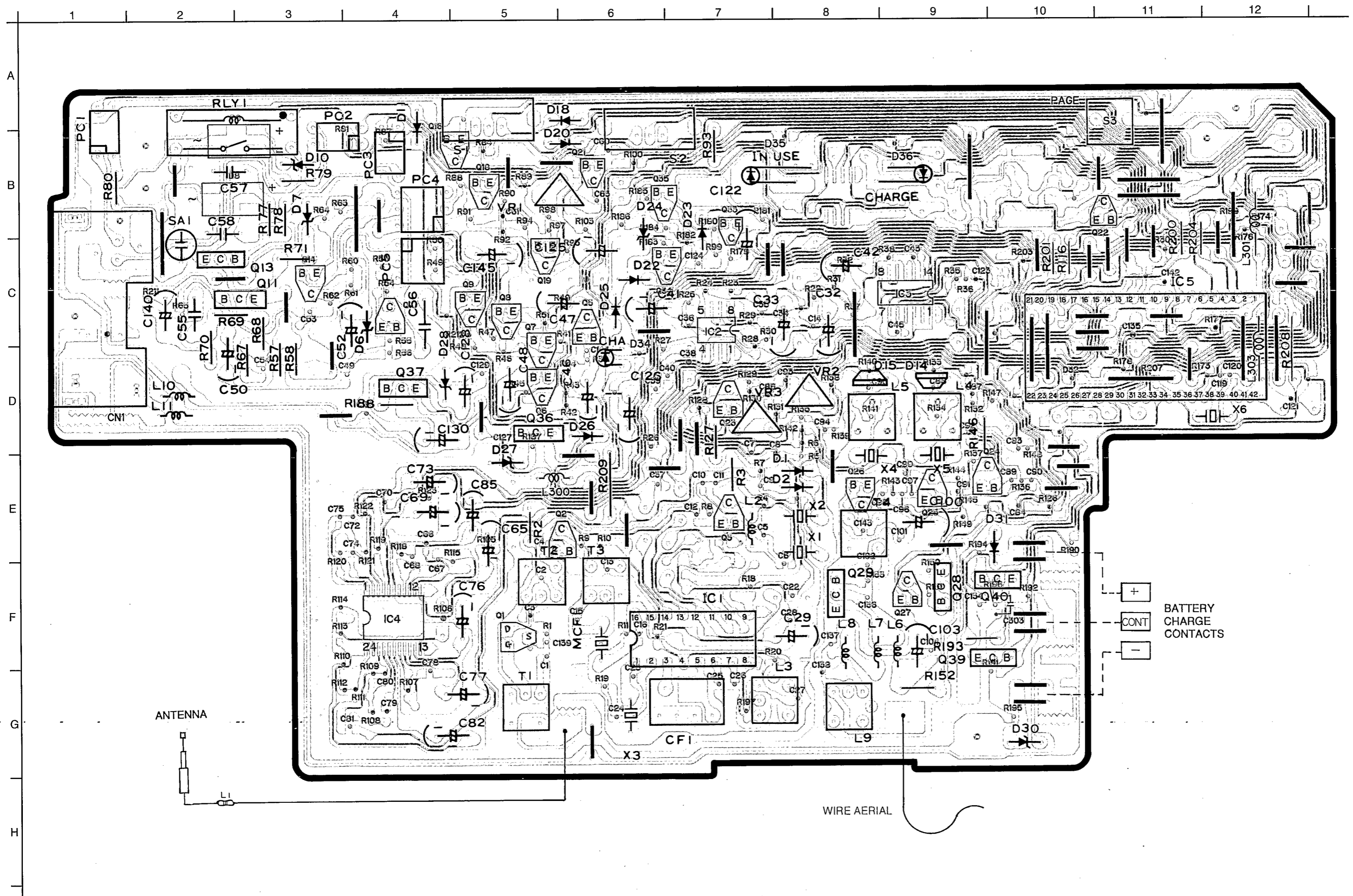
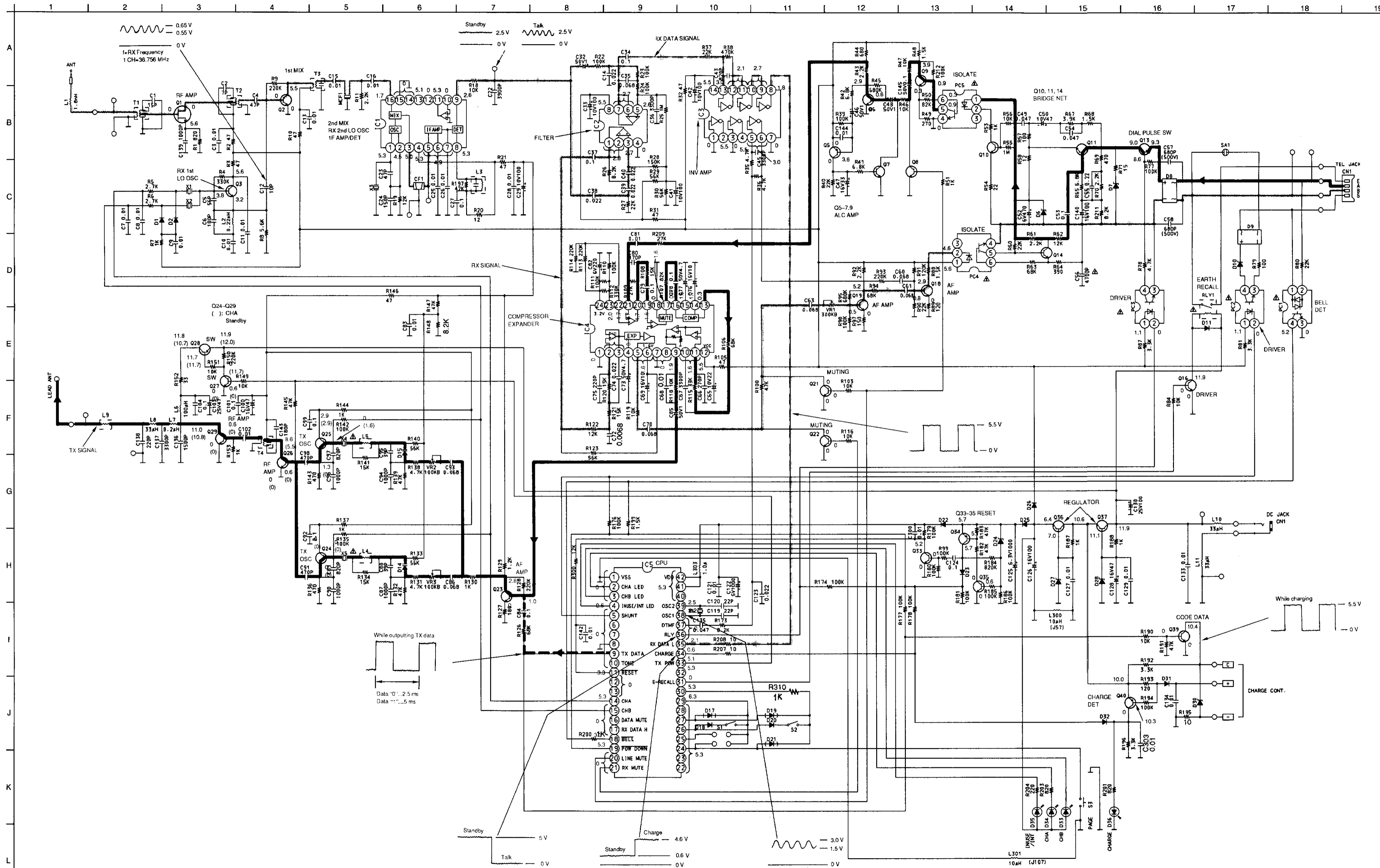


Fig. 22

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM (KX-T3716EH)



SCHEMATIC DIAGRAM (KX-T3716EH)



- Notes:**
- S1: Page Switch
 - S2: Recall Selector Switch
 - S3: Dialing Mode Selector Switch

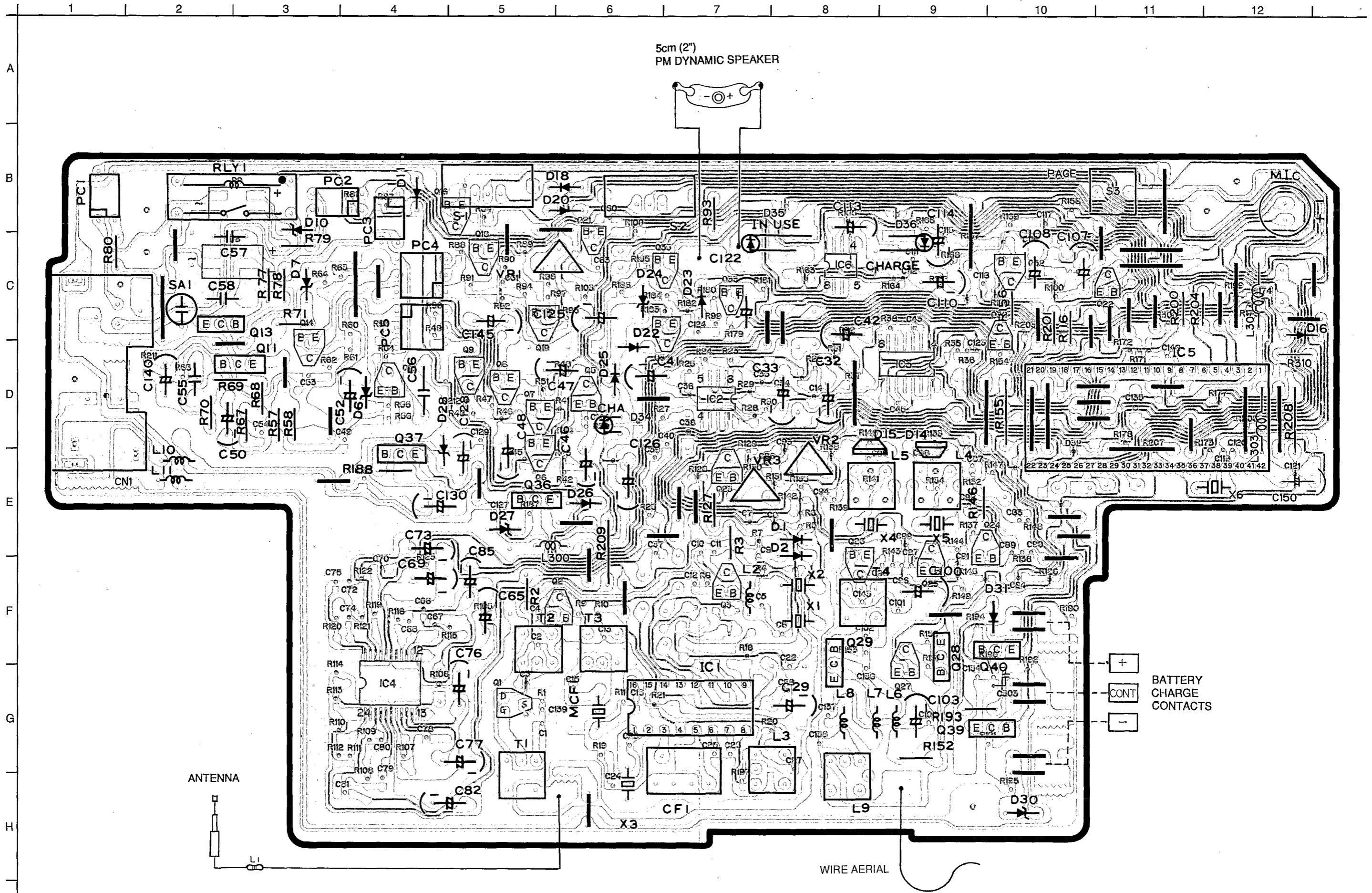
4. DC voltage measurements are taken with an electronic voltmeter from the negative voltage line.

Definition of 0 V:
 0 V that indicates in schematic diagram means 0 V-0.09 V measurement value.
 The values of voltage without mode indication are measured in Talk mode of CHA.

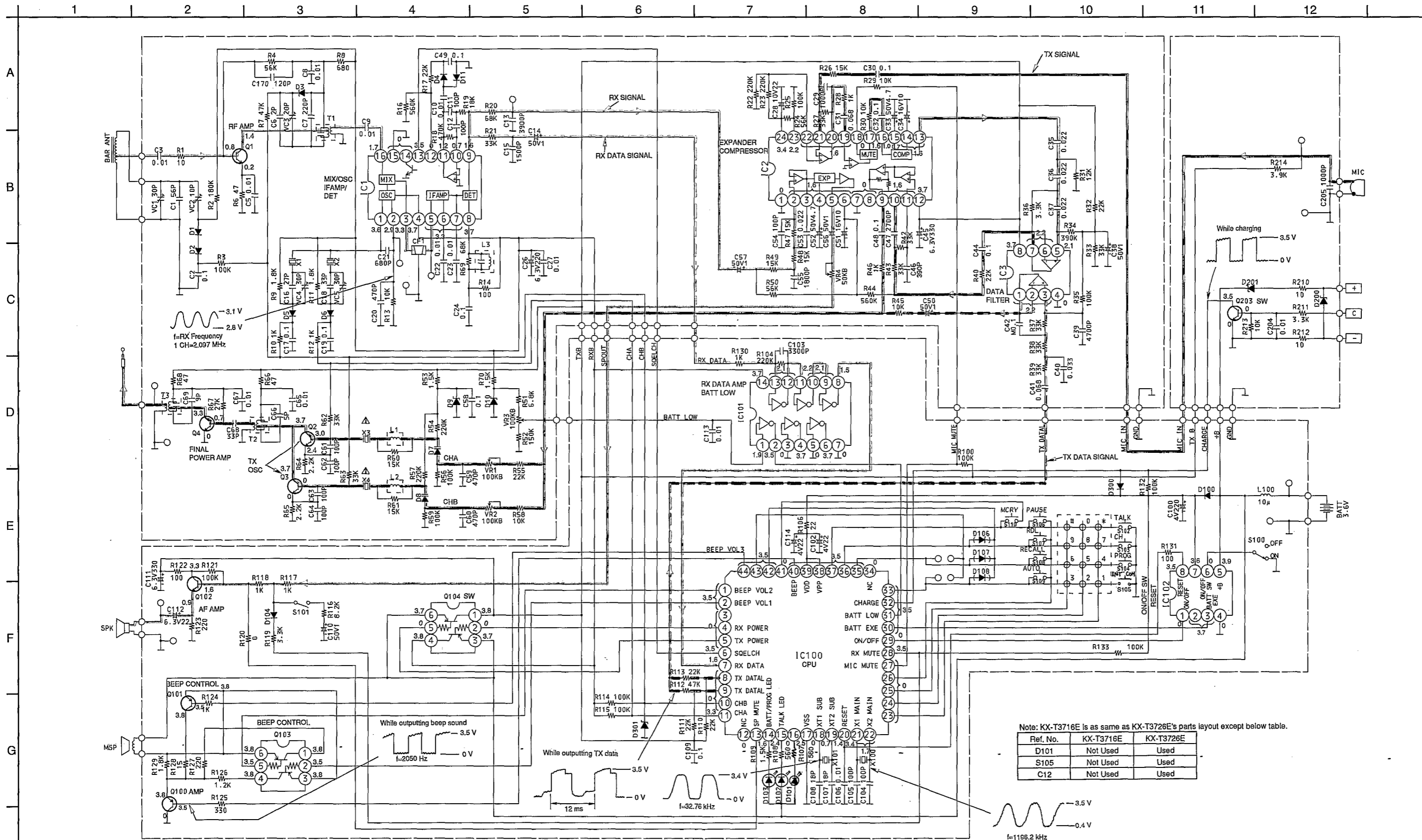
Important safety notice
 Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

This schematic diagram may be modified at any time with development of new technology.

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM (KX-T3726EH)



SCHEMATIC DIAGRAM (KX-T3716ER/KX-T3726ER)



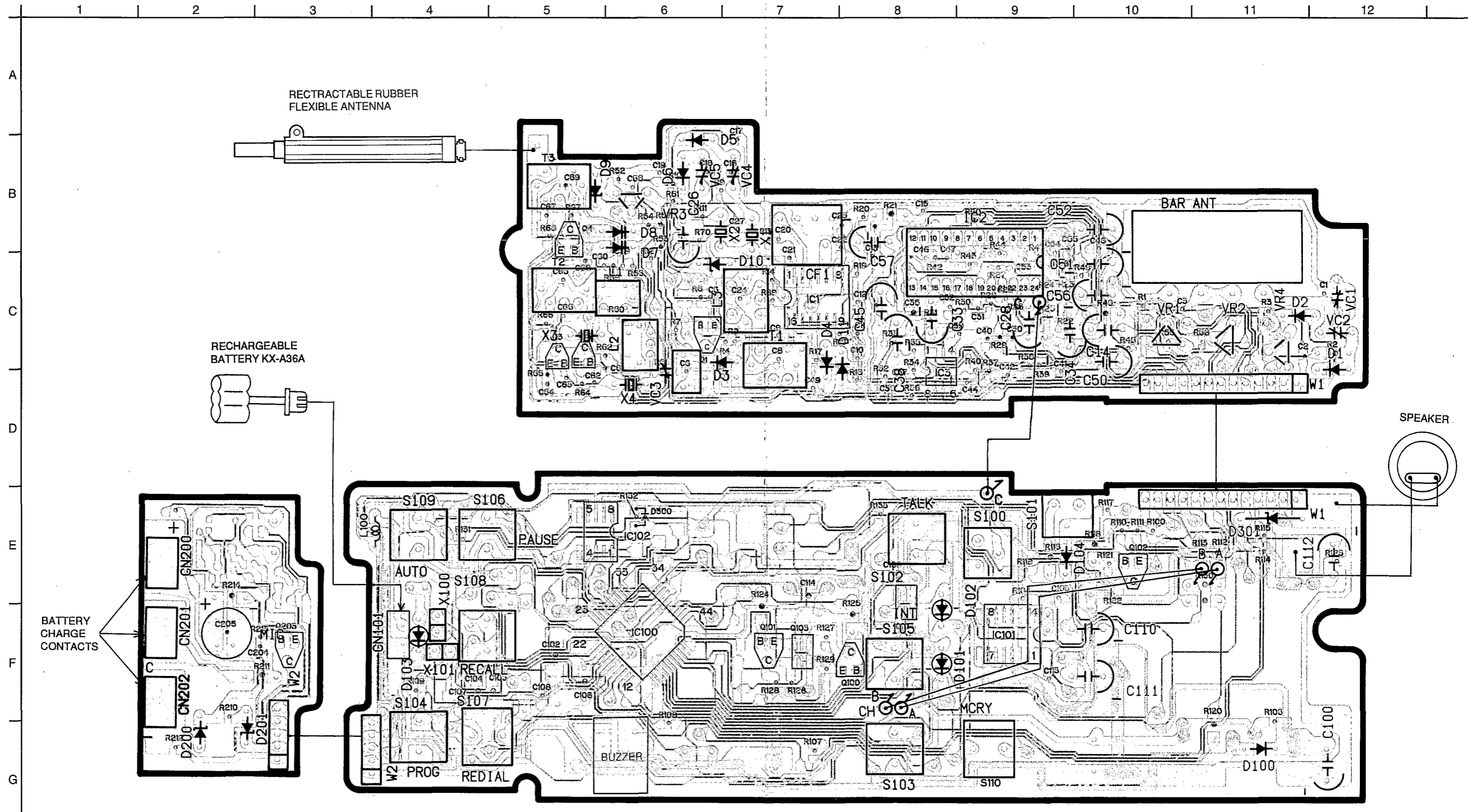
Note: KX-T3716E is as same as KX-T3726E's parts layout except below table.

Ref. No.	KX-T3716E	KX-T3726E
D101	Not Used	Used
S105	Not Used	Used
C12	Not Used	Used

- Notes:**
- 1. S100: Power/Ringer Switch
 - 2. S101: Volume Selector Switch
 - 3. S102: Talk Switch
 - 4. S103: Channel Switch
 - 5. S104: Program Switch
 - 6. S105: Intercom/Page Switch (KX-T3726E only)
 - 7. S106: Pause Switch
 - 8. S107: Redial Switch
 - 9. S108: Recall Switch
 - 10. S109: Auto Switch
 - 11. S110: Mercury Switch
 - 12. DC voltage measurements are taken with electronic voltmeter from negative voltage line.

Definition of 0 V:
 0 V that indicates in schematic diagram means 0 V-0.09 V measurement value.
 The values of voltage without mode indication are measured in Talk mode of CHA.

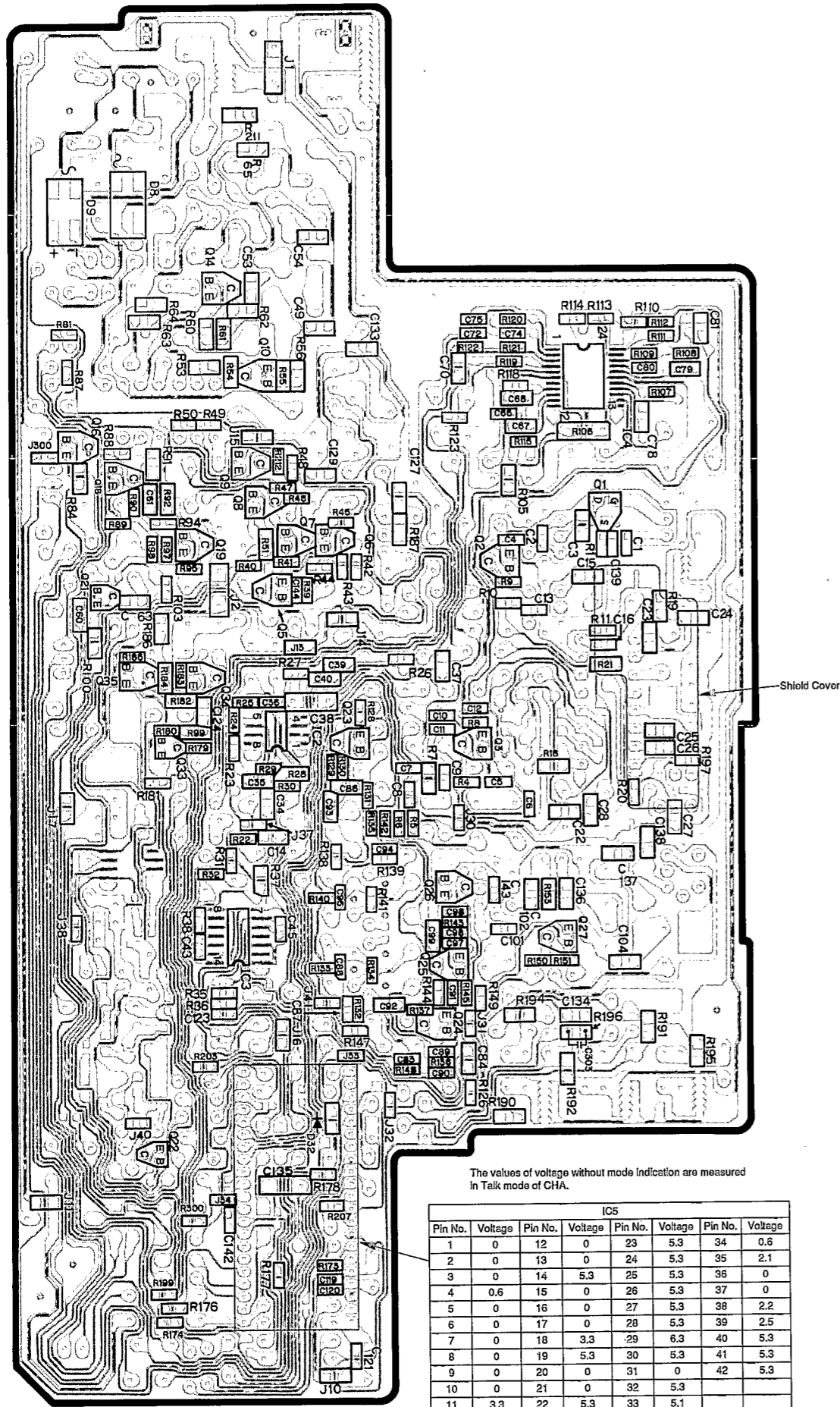
CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM (KX-T3716ER/KX-T3726ER)



Note: KX-T3716E is as same as KX-T3726E's parts layout except below table.

Ref. No.	KX-T3716E	KX-T3726E
D101	Not Used	Used
S105	Not Used	Used
C12	Not Used	Used

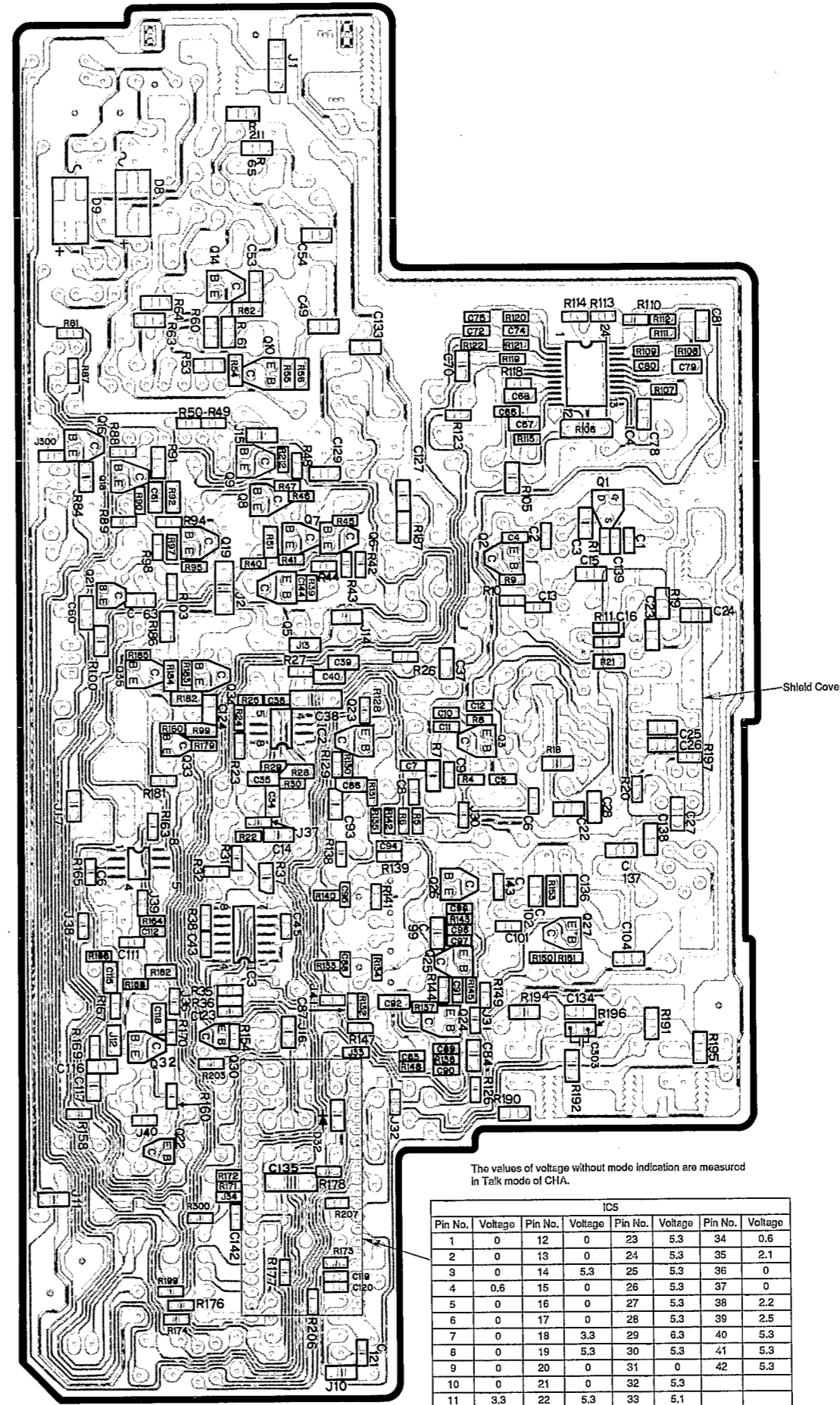
CIRCUIT BOARD (KX-T3716EH)



The values of voltage without mode indication are measured in Talk mode of CHA.

IC5							
Pin No.	Voltage	Pin No.	Voltage	Pin No.	Voltage	Pin No.	Voltage
1	0	12	0	23	5.3	34	0.6
2	0	13	0	24	5.3	35	2.1
3	0	14	5.3	25	5.3	36	0
4	0.6	15	0	26	5.3	37	0
5	0	16	0	27	5.3	38	2.2
6	0	17	0	28	5.3	39	2.5
7	0	18	3.3	29	6.3	40	5.3
8	0	19	5.3	30	5.3	41	5.3
9	0	20	0	31	0	42	5.3
10	0	21	0	32	5.3		
11	3.3	22	5.3	33	5.1		

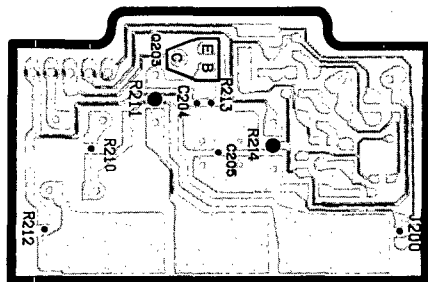
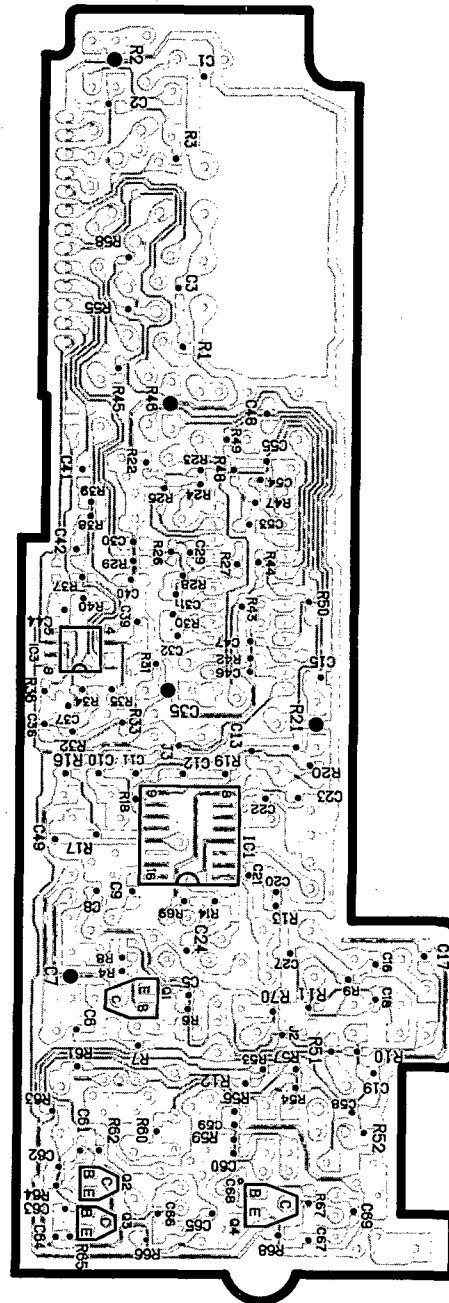
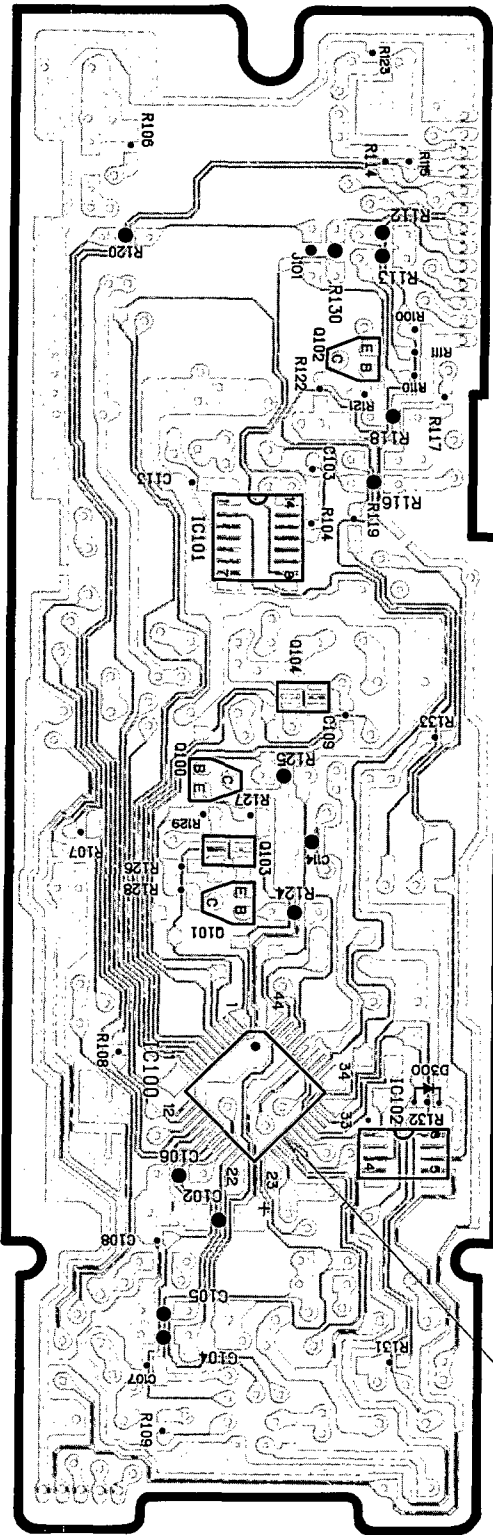
CIRCUIT BOARD (KX-T3726EH)



The values of voltage without mode indication are measured in Talk mode of CHA.

IC5							
Pin No.	Voltage	Pin No.	Voltage	Pin No.	Voltage	Pin No.	Voltage
1	0	12	0	23	5.3	34	0.6
2	0	13	0	24	5.3	35	2.1
3	0	14	5.3	25	5.3	36	0
4	0.6	15	0	26	5.3	37	0
5	0	16	0	27	5.3	38	2.2
6	0	17	0	28	5.3	39	2.5
7	0	18	3.3	29	6.3	40	5.3
8	0	19	5.3	30	5.3	41	5.3
9	0	20	0	31	0	42	5.3
10	0	21	0	32	5.3		
11	3.3	22	5.3	33	5.1		

CIRCUIT BOARD (KX-T3716ER/KX-T3726ER)



IC100							
Pin No.	Voltage	Pin No.	Voltage	Pin No.	Voltage	Pin No.	Voltage
1	3.5	12	0	23	0	34	0
2	3.5	13	1.6	24	0	35	3.5
3	0	14	2.4	25	0	36	3.5
4	0	15	0	26	0	37	3.5
5	0	16	2.5	27	0	38	3.5
6	3.5	17	0	28	3.5	39	3.5
7	1.6	18	0.7	29	0	40	3.5
8	0	19	1.4	30	3.5	41	0
9	0	20	3.4	31	3.5	42	3.5
10	0	21	1.7	32	3.5	43	3.5
11	3.3	22	1.7	33	3.5	44	3.5

ADJUSTMENTS (KX-T3716ER/KX-T3726ER)

Purpose of Adjustment

Symptom	Remedy
The movement of Battery Low Indicator is wrong.	Adjust the adjustment item (1).
The transmit output is low, and the arrival distance is shorted between base unit and portable handset.	Adjust the adjustment items (2), (5).
The reception sensitivity of base unit is wrong, the noise is occurred.	Adjust the adjustment item (3).
The sound of volume of base unit is low. The reception of data is wrong.	Adjust the adjustment item (4).
The transmit frequency is slipped.	Adjust the adjustment item (6).

Unit Condition: (Adjustment 2-6)

Power SupplyDC 3.9 V

SP LoadBuilt-in speaker 130Ω

Power Switch OFF

Volume Selector SwitchHIGH

When doing these adjustments, remove the wire aerial of portable handset. After adjusting, re-solder the wire aerial.

Procedure for CHA Test mode:

Set S1, S2 to ON

↓
Set power switch to ON (CHA Standby).

↓
Press the talk switch (CHA Talk).

Procedure for CHB Test mode:

Set S1, S2 to ON.

↓
Set power switch to ON (CHA Standby).

↓
Press the talk switch (CHA Talk).

↓
Press the CH switch (CHB Talk).

↓
Press the CH switch (CHA Talk).

When replacing these parts, adjust as shown below table.

Replace Parts	Adjustment Items	Test Mode	Adjustment Points	Procedure
(1) VR3	Battery Low Adjustment	CHA Talk	VR3	<ul style="list-style-type: none"> ●Set the DC power supply to 3.57 V. ●Set the unit to CHA Talk test mode. ●Adjust VR3 so that the reading of oscilloscope is 1.5 V±0.1 V.
(2) X1, X2, VC4	Receive Local Frequency Adjustment	CHA Talk CHB Talk	VC4	<ul style="list-style-type: none"> ●Set the unit to CHA Talk test mode. ●Adjust VC4 for the local frequency of X1 (f±200 Hz). ●Press CH switch. (The unit becomes CHB Talk.) ●Adjust VC5 for the local frequency of X2 (f±200 Hz). * Local frequency...Refer to page 29.

When replacing these parts, adjust as shown below table.

	Replace Parts	Adjustment Items	Test Mode	Adjustment Points	Procedure
(3)	VC1, T1, VC2, VC3, IC1	Receive Sensitivity Adjustment	CHB Talk CHA Talk	VC1, T1 VC2, VC3	<ul style="list-style-type: none"> ● Set the unit to CHB Talk test mode. ● Set S3 to ON. ● Set the S.S.G. to receiver frequency of CHB. ● Set the S.S.G. output level to 40 dBμ (modulation frequency 1 kHz, modulation factor 2.4 kHz/devi). ● Adjust VC1→T1→VC1 (in that order) for maximum output RF VTVM I at IC1 Pin 5. ● Press CH switch (The unit becomes CHA Talk). Set the S.S.G. to receiver frequency of CHA. ● Adjust VC2→VC3→VC2 (in that order) for maximum output RF VTVM II at IC1 Pin 5.
(4)	L3, L4	Speaker Output Adjustment	CHA Talk	L3 L4	<ul style="list-style-type: none"> ● Set the unit to CHA Talk test mode. ● Set S8 to ON. ● Set the S.S.G. to receiver frequency of CHA. ● Set the S.S.G. output level to 60 dBμ (modulation frequency 1 kHz, modulation factor 2.4 kHz/devi). ● Adjust L3 for maximum output on AF VTVM. ● Adjust L4 for maximum output on AF VTVM.
(5)	T2, T3	Transmit Output Adjustment	CHA Talk	T2, T3	<ul style="list-style-type: none"> ● Set the unit to CHA Talk test mode. ● Set S4 to ON. ● Adjust T2, T3 (in that order) for maximum output on RF VTVM II.
(6)	L1, L2	Transmit Frequency Adjustment	CHA Talk CHB Talk	L1 L2	<ul style="list-style-type: none"> ● Set the unit to CHA Talk test mode. ● Set S5 to ON. ● Adjust L1 so that the reading of the frequency counter is that of CHA frequency ± 200 Hz. ● Press CH switch (The unit becomes CHB talk). ● Adjust L2 so that the reading of the frequency counter is that of CHB frequency ± 200 Hz.

Fréquency Table (MHz)

CH	Transmit		Receive	
	Local Frequency	S.S.G. Frequency	S.S.G. Frequency	Local Frequency
3	15.82708	47.48125	1.682	2.137
4	15.83125	47.49375	1.702	2.157
5	15.83541	47.50625	1.722	2.177
6	15.83958	47.51875	1.742	2.197

Fréquency Combination

Fréquency division label	CHA	CHB	CHA	CHB
	X3	X4	X1	X2
3,5	17.82708	15.83541	2.137	2.177
4,6	15.83125	15.83958	2.157	2.197

Flow Solder Side View

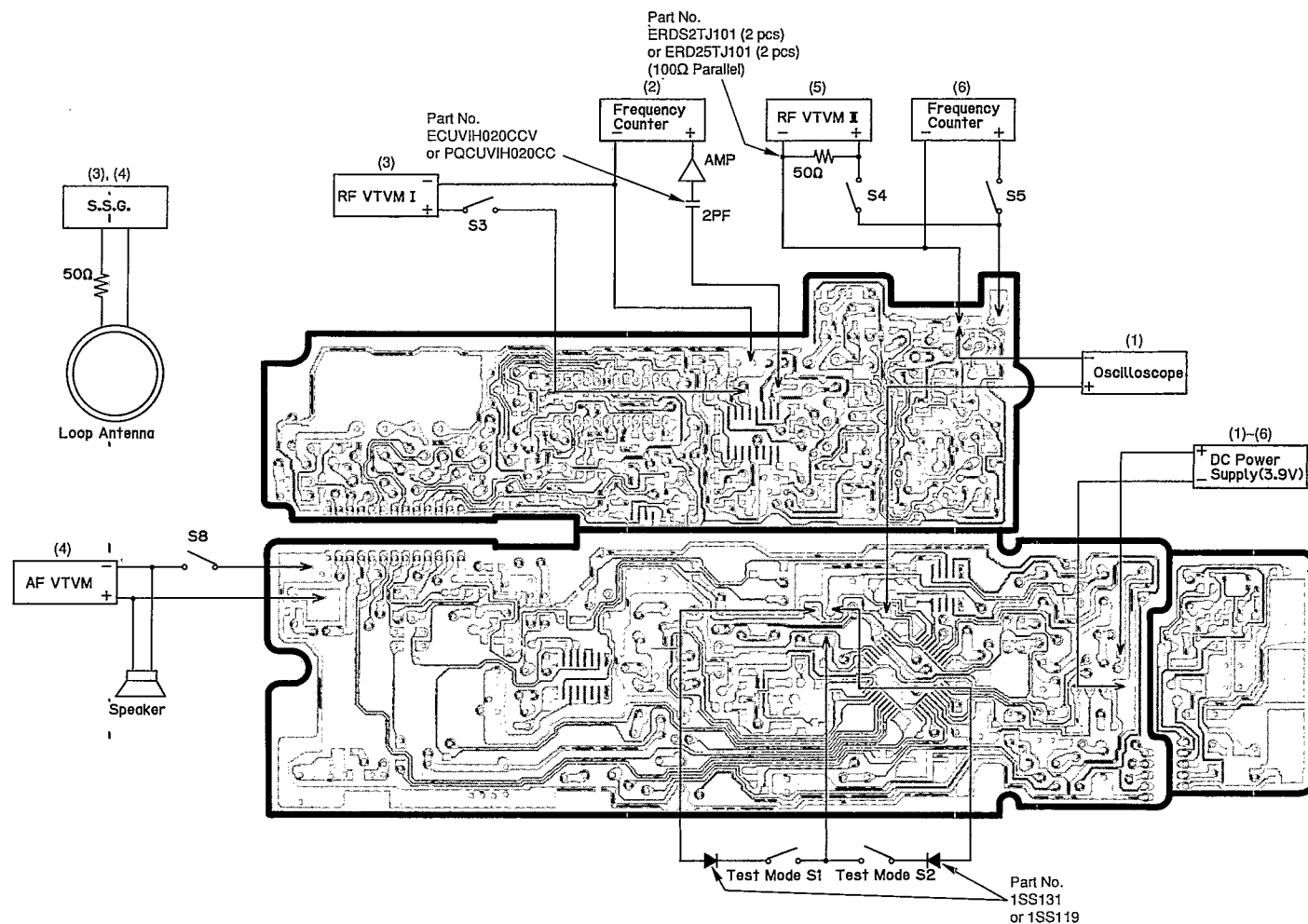


Fig. 23

BLOCK DIAGRAM (KX-T3716EH/KX-T3726EH)

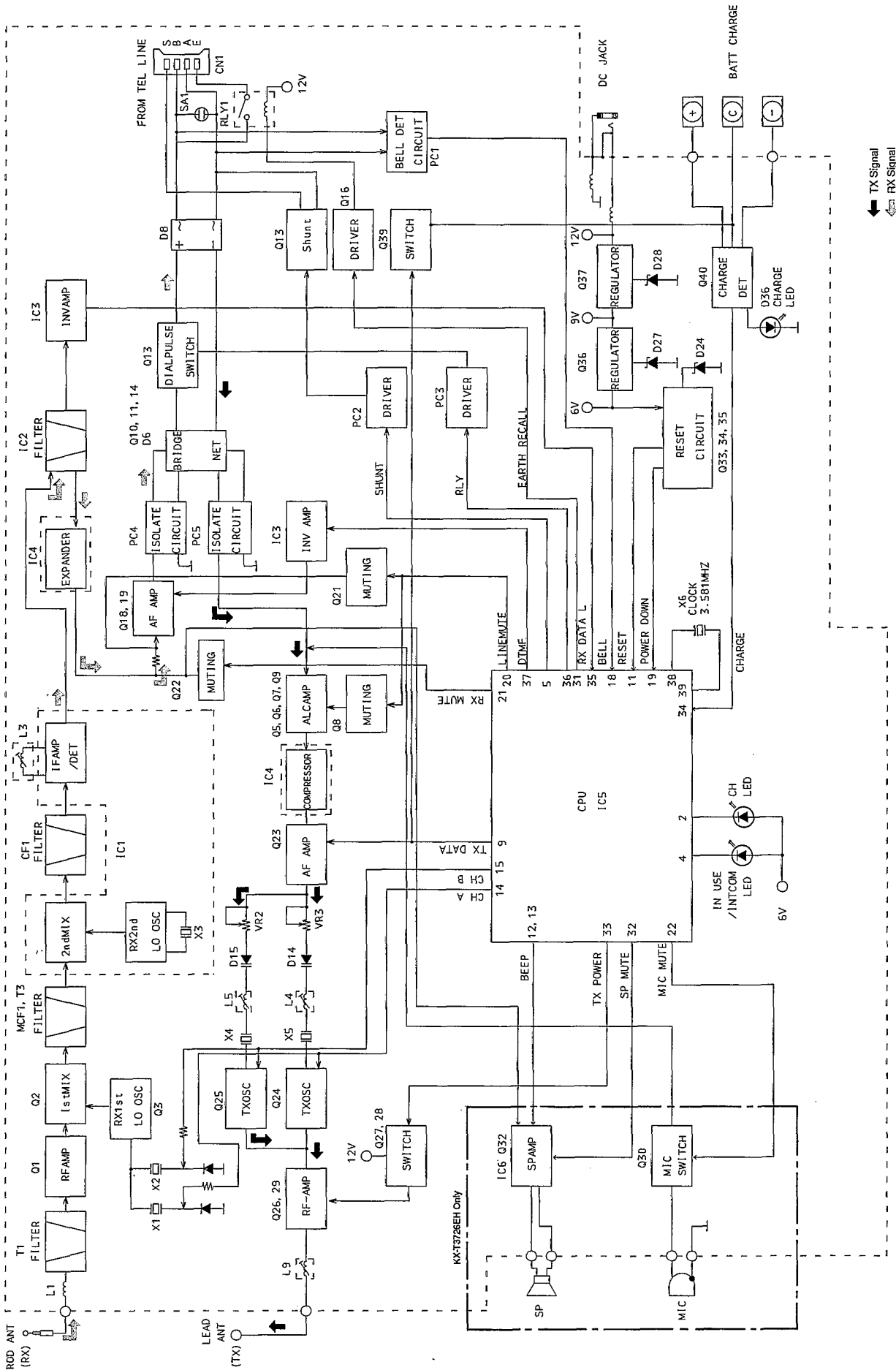


Fig. 24

CIRCUIT OPERATION (KX-T3716EH/KX-T3726EH)

■ TELEPHONE MODE OPERATION

When a ring signal enters from the Line

- 1) The ring detection circuit, i.e., the photocoupler PC1, begins to operate and its output is inputted to Pin 18 of IC5 (CPU).
- 2) To obtain a display synchronized with the ring signal, an IN USE signal is outputted from Pin 4 of IC5 and the IN USE LED (D35) flashes.
- 3) To show the arrival of the ring signal to the portable handset, Pin 33 of IC4 enters into the transmission mode thus becoming a High and the ring signal data having the code set by Pin 9 of IC5 is sent to portable handset as a modulated output signal.
- 4) Upon receiving the ring signal data, when the portable handset is switched from standby to the talk mode, the base unit receives a carrier modulated by the data indicating the switch from standby to talk. This data is then demodulated at the base unit. This signal is then inputted to Pin 35 of IC5, via Pin 36 of IC5 which causes the circuit relay to release the muting, and enables talk.

Circuit-making from the portable handset

- 1) When the operator of the portable handset switches from STANDBY to TALK, data enters into the base unit, this data is then demodulated by the base unit and passed through the data amp of IC2 and enters Pin 35 of IC5.
- 2) When the codes coincide, Pin 21 of IC5 becomes a "Low". At this time the transmission condition is reached and the muting is cancelled and the transistor relay Q13 is closed.
- 3) Further, an IN USE signal is sent out from Pin 4 of IC5, thus dimly lighting the IN USE LED (D35).

Circuit Diagram

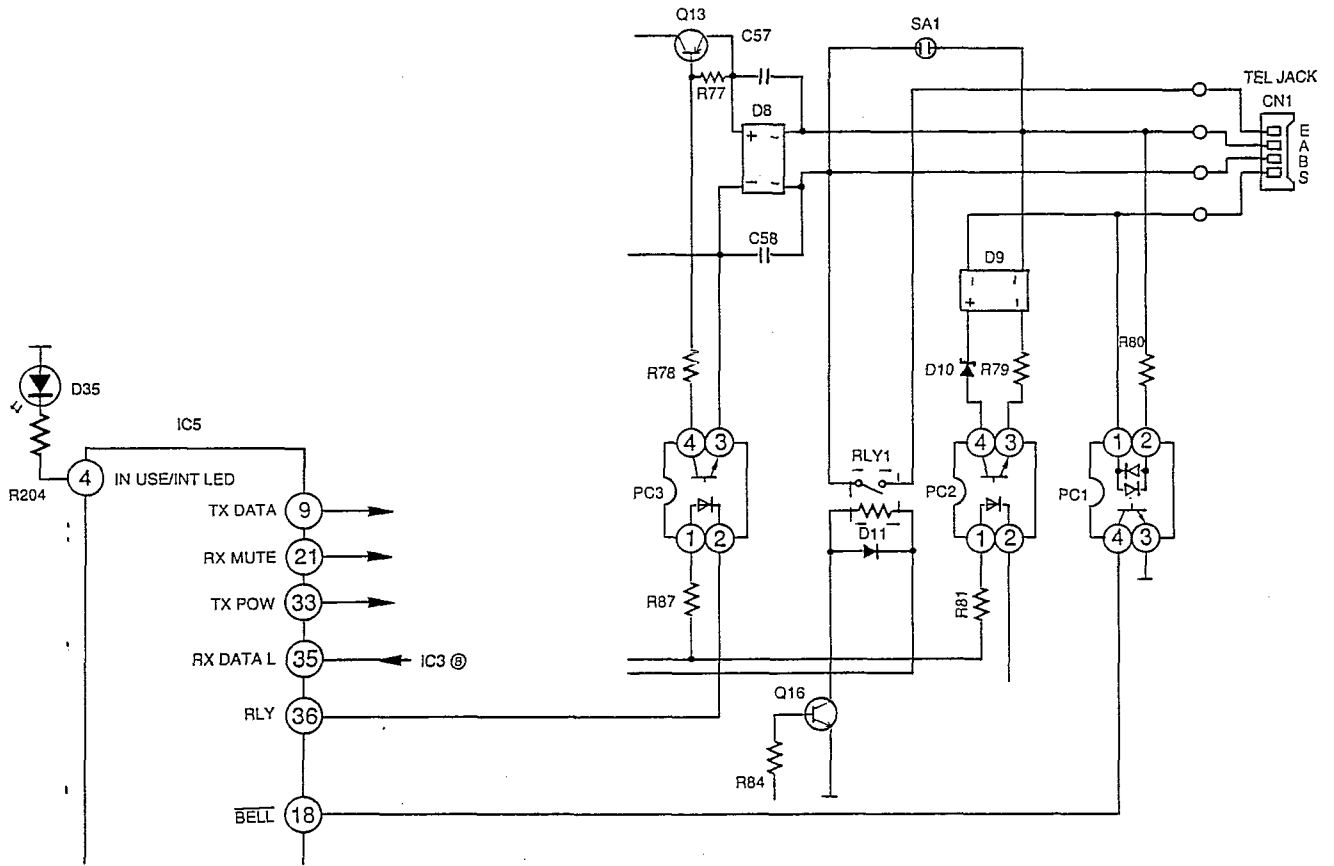


Fig. 25

■ INTERCOM MODE (KX-T3726EH ONLY)

1. When the base unit Page/Intercom button is pressed, a call monitor signal of [1.95 kHz] (intercom sound) is outputted from pin 12, 13 of IC5 (CPU). If the Page/Intercom button is turned off, this condition keeps until it is pressed again.
2. At the same time, pin 33 of IC5 goes High, transmission power is supplied, the transmission mode is entered, and modulation is effected by the all data output from Pin 9 of IC5. An INTERCOM LED signal is output from Pin 4 of IC5 and the INTERCOM LED flashes.
3. When the portable handset receives this electromagnetic wave in the standby mode, the magnetic speaker sounds off to indicate that a page signal has arrived from the base unit. When the base unit is in the standby mode (the call button is released), the electromagnetic wave from the portable handset is received by the reception unit and the modulated signal is passed through the data processing IC3, to the input of Pin 35 of IC5 (CPU). If the signal is recognized by the CPU IC5, a call signal is outputted from Pins 12, 13 of IC5 becomes a "High".
4. When the operator of the portable handset switches stand-by to the talk mode, data to that effect enters the base unit and is inputted to Pin 35 of IC5 following the same route as paragraph 3 above. Pin 21 of IC5 becomes the low level to release the muting of the base unit. The output of Pin 4 of IC5 becomes the Low level to keep the INTERCOM LED lighted up. Then unit becomes the Intercom transmission mode.
5. When a ring signal arrives from the line during dialogue in the intercom mode of the above paragraph 4, a ring monitor signal is outputted from Pin 12, 13 of IC5 and a monitor signal is heard from the speaker. But the ring signal isn't sent to the portable handset.

■ CHARGE MODE

1. When charging the portable handset on the base unit, current is supplied to the portable handset from the battery charge contacts via R193. During the charge mode the voltage of battery charge contacts (+) becomes approx. 5 V, and Q40 turned on. Then voltage of Q40 collector becomes 9.4 V, voltage is cut by D32, and Pin 34 of IC5 will become "High", and the CHARGE LED (D36) lights up.
2. The base unit stops the transmission and does not output even a base call. However, when a ring signal arrives from the line, the ring signal enters IC5 (Pin 18), in turn a ring signal monitor is generated from Pin 12, 13 of IC5 and is heard at the Speaker. But the base unit doesn't go into the transmission mode, and it doesn't output the ring data to the portable handset, and the magnetic speaker of the portable handset doesn't ring. However, the IN USE LED of the base unit lights up.

Circuit Diagram

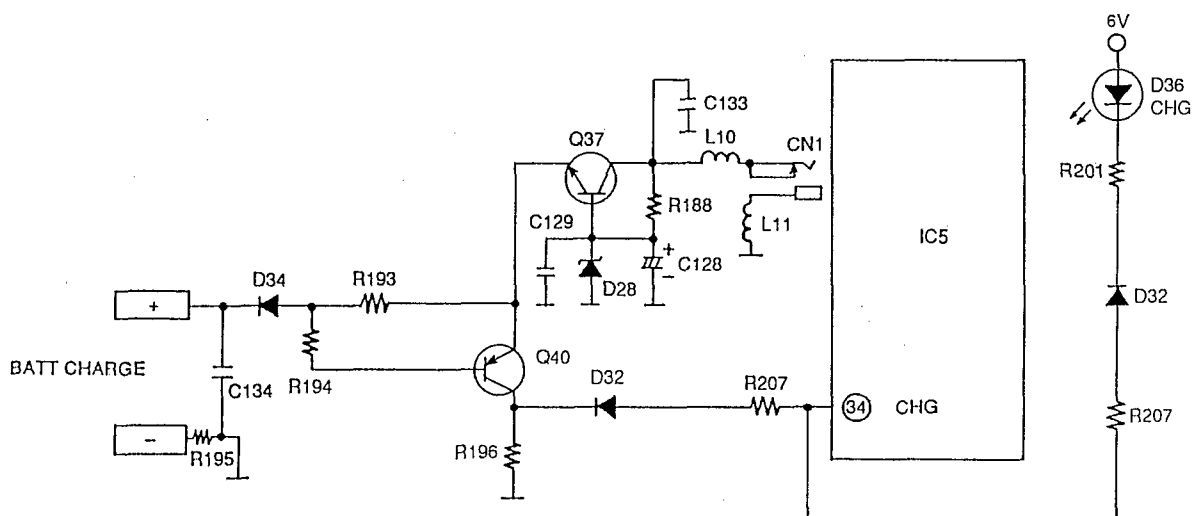


Fig. 26

■ CPU OPERATION

1. TIMING OF IC5 (CPU) OUTPUT PORT WITH THE BASE UNIT PAGE/INT' MODE.

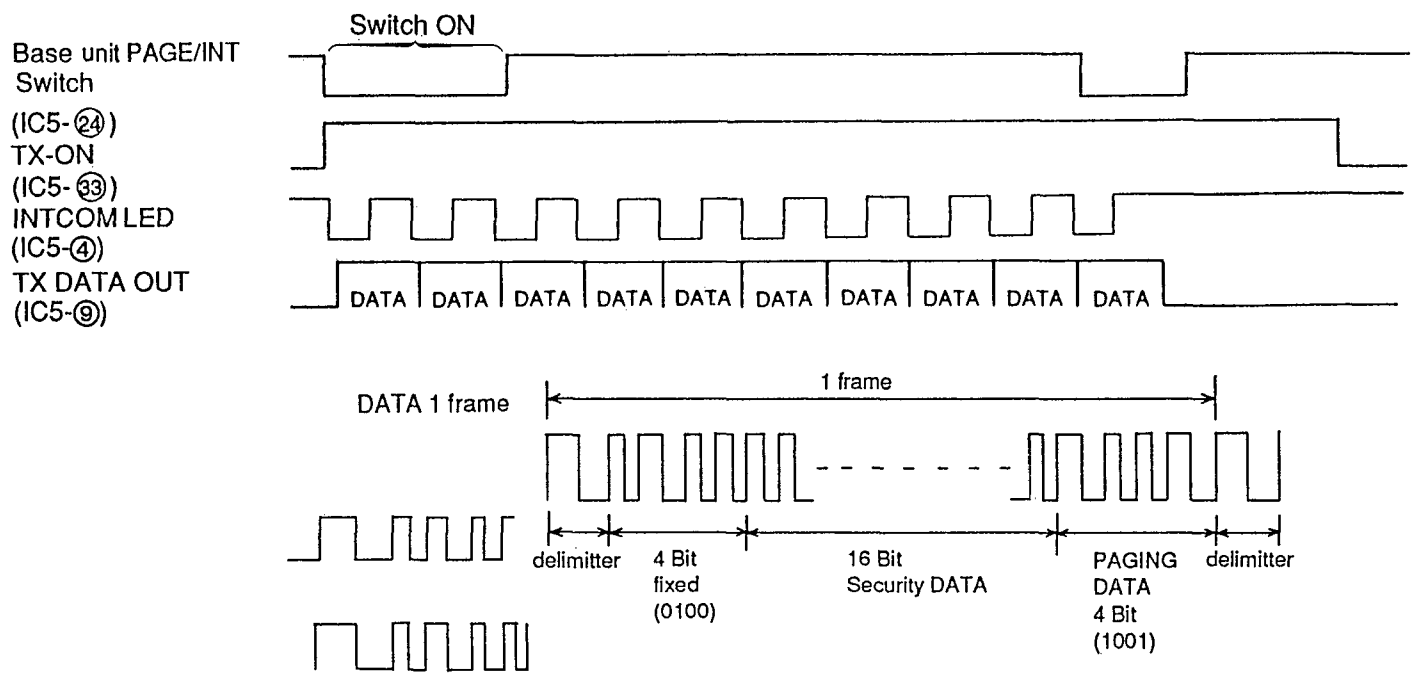


Fig. 27

2. WHEN CHANGING THE SETTING OF THE PORTABLE HANDSET FROM STANDBY TO TALK.

3. WHEN CHANGING THE SETTING OF THE PORTABLE HANDSET FROM TALK TO STANDBY.

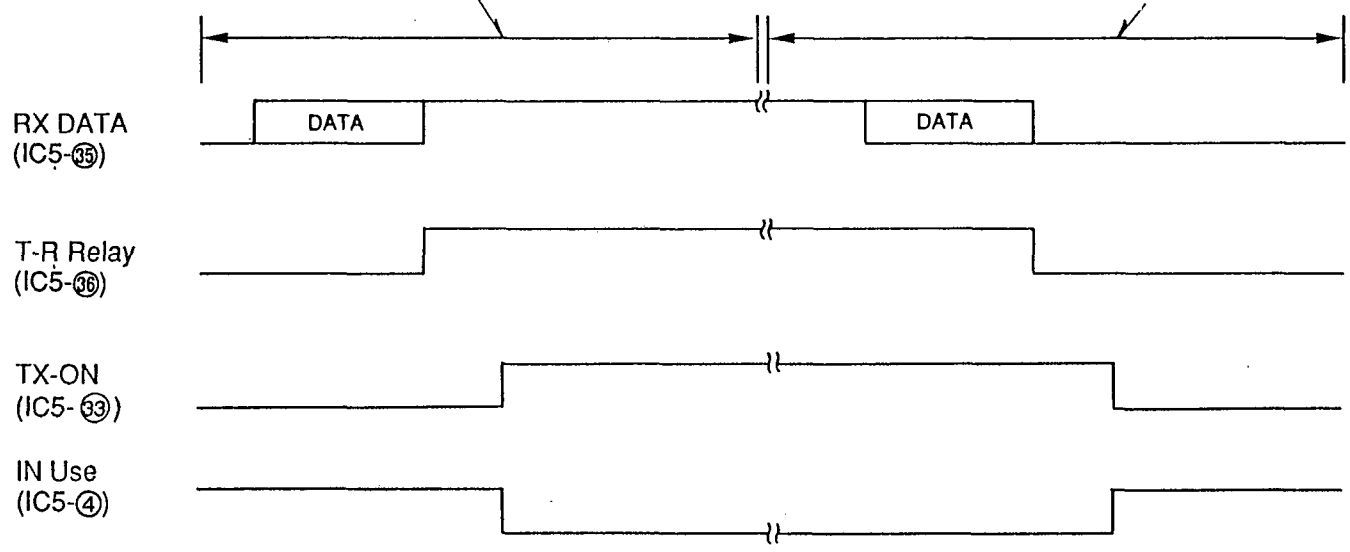


Fig. 28

4. RESONANCE PREVENTION CIRCUIT.

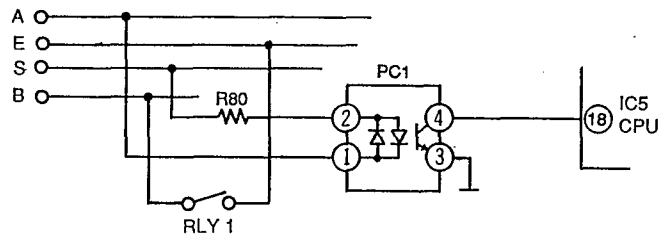


Fig. 29

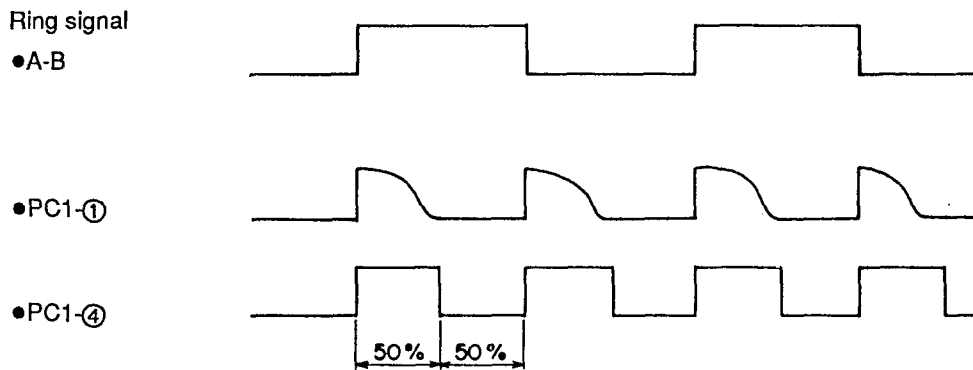


Fig. 30

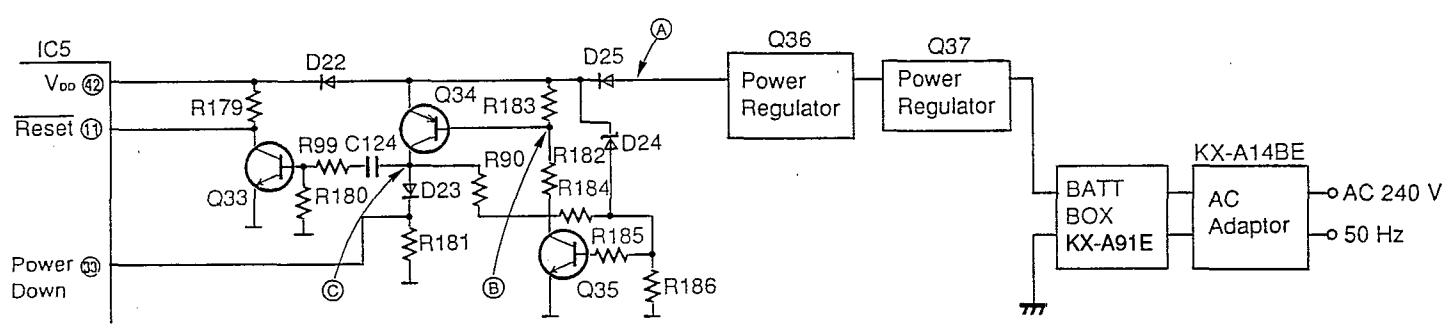
Make/break ratio when dialing with the Portable Handset: 40%: 60%

High/low ratio upon ring signal: 50%: 50%

Therefore, if the low/high ratio is greater than 45% at IC5-④② (CPU), it is judged as a ring signal. See Fig.30.

5. INSTANTANEOUS SERVICE INTERRUPTION PROTECTION CIRCUIT

Circuit Diagram



When supplying power source.

When removing power source.

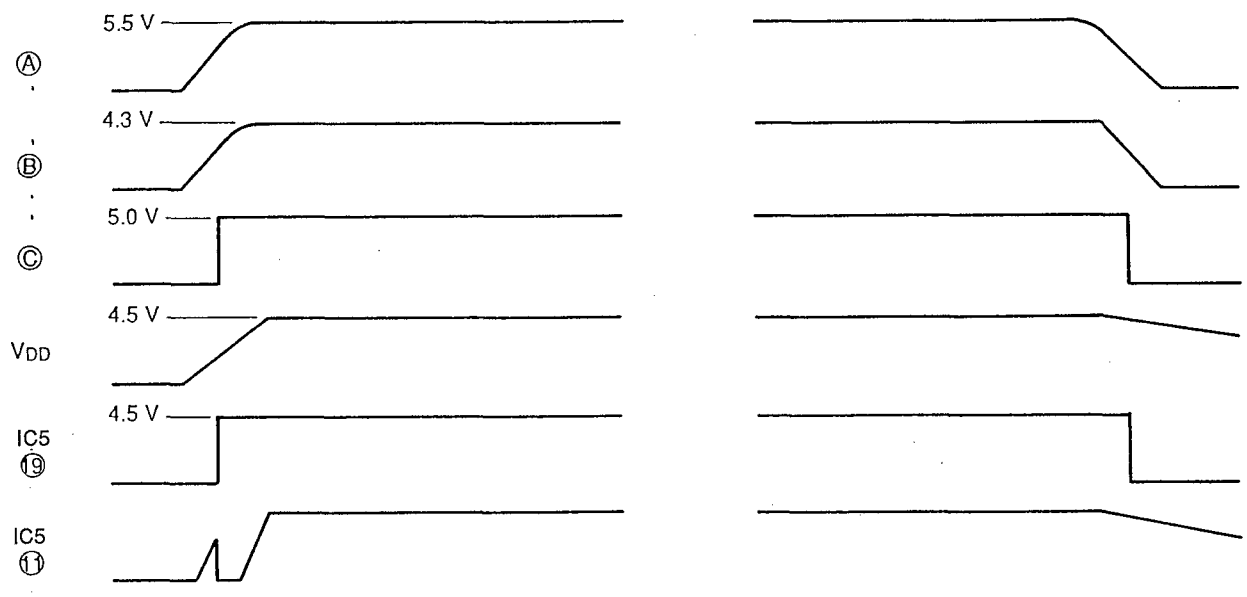


Fig. 31

BLOCK DIAGRAM (KX-T3716ER/KX-T3726ER)

CIRCUIT OPERATION (KX-T3716ER/KX-T3726ER)

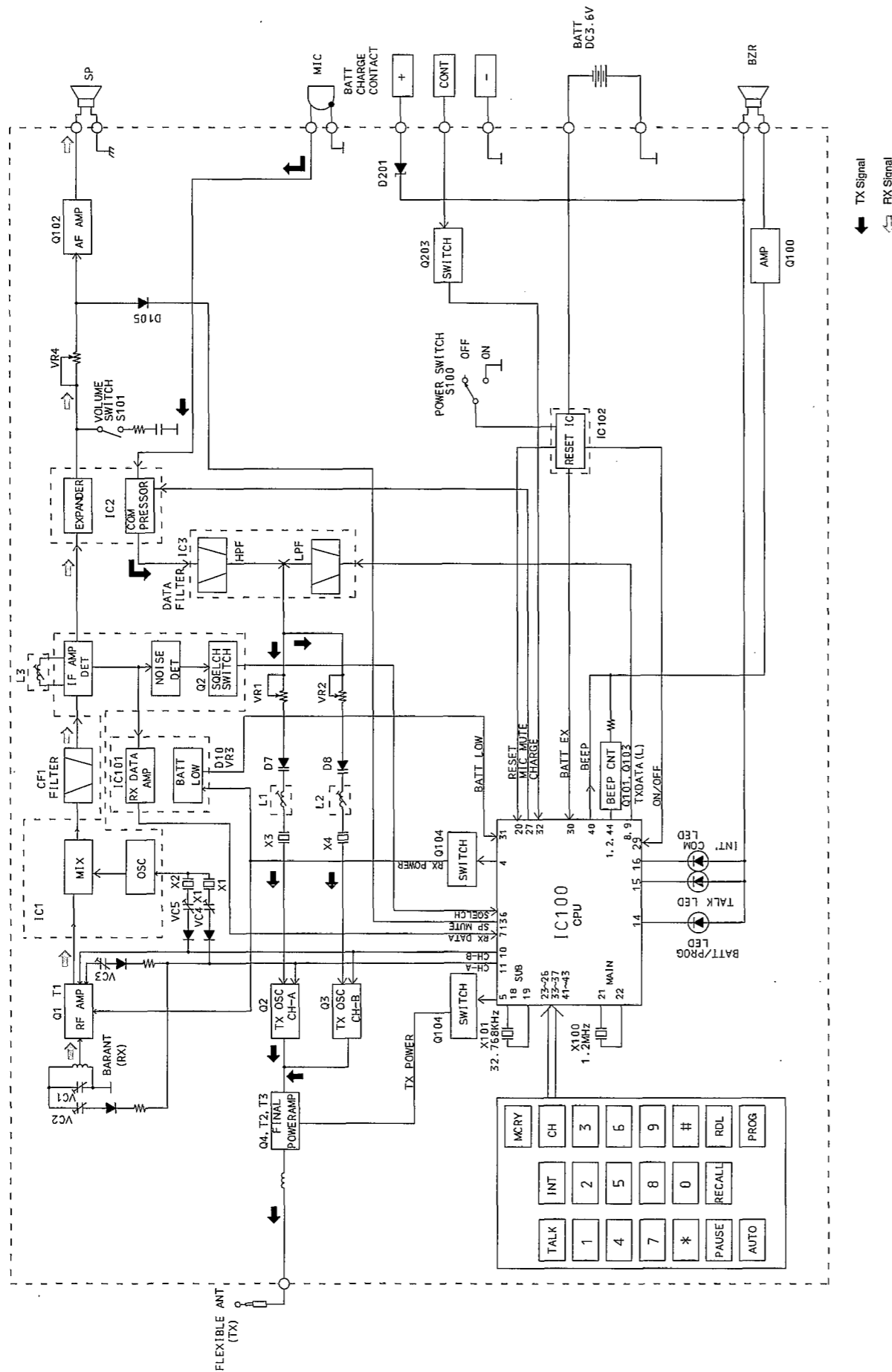


Fig. 32

■ OPERATION IN THE STANDBY MODE

1-1. Operation in the Standby position.

1. A call signal comes from the base unit.
2. A ring signal for incoming calls can be made from an outside caller.
3. A call signal can be sent to the base unit.

1-2. Reception Operation

- a) A signal is received by the BAR antenna, and is amplified by the RF AMP (Q1), and mixed by IC1 to generate 455 kHz of the IF. This IF signal is amplified by IC1 and detected by L3 then applied to a waveform correction circuit.
- b) The data component of this signal is sent to Pin 37 of the CPU (IC100), where it is determined whether or not it matches the code.
- c) When the data matches, a signal is emitted from the magnetic speaker via Q100 and Pin 40 of IC100. A call signal and a ring signal will differ in tone.
- d) In this case, the AF output is muted by Pin 13 of IC100, therefore no signal will be heard from the speaker.

1-3. Transmission Operation

Q104, controls the TX power supply, and is brought to the OFF condition by the CPU (IC100), in the OFF condition the TX part will not operate.

■ OPERATION IN THE TALK MODE

2-1. Reception Operation

- a) Same as 1-2 a).
- b) The signal detected by IC1 is outputted from IC1 Pin 11.
- c) The detected signal is amplified by the power amplifiers (IC2 and Q102), and is removed a noise.
- d) During the talk mode the muting function is released, therefore a signal is outputted to the speaker.
- e) Further, during talking the input of the waveform correction circuit becomes a high from the TX power supply.

2-2. Transmission Operation

- a) During the talk mode the CPU (IC100 Pin 5) becomes a low level, and Q104 turns on, thus the transmission stage enters into the operational state.
- b) The OSC circuit (Q3) oscillates at a frequency in the 39 MHz band. Power amplification is executed by the power amplifier Q4, and then transmission is made from the flexible antenna.
- c) During the talk mode, first the data code is outputted by the CPU (IC100 Pin 8, 9) and is then modulated, and is transmitted.
- d) During pulse dialing the dial pulse signal is outputted by the CPU (IC100 Pin 8, 9). This signal is modulated by the modulation unit and then transmitted.
- e) During pulse transmission, the talk indicator (green LED) will flash by the number dialed and outputted by the CPU (IC100 Pin 15).
- f) During tone dialing, the TONE DATA is outputted by the CPU (IC100 Pin 8, 9). This signal is modulated by the modulation unit and then transmitted. The base unit is received the tone data, and transmits from the tone generator of the CPU.

■ BATTERY LOW CIRCUIT

IC101 is a CMOS nand gate and has a stress volt level of approximately $1/2 V_{DD}$. A voltage of about 1.8 V is impressed to the gate input at Pin 1 by resistance splitting with R70 and VR3 from the Zener Diode D10 to form a constant stabilized voltage of about 2.1 V. When the power supply voltage is high (3.6 V or more), the gate input becomes $V_{DD}/2 > 1.8 V$ and the output at Pin 2 will become "High". This is given as an input to Pin 31 of the CPU (IC100), thus Pin 2 of the CPU (IC100) will become "High", and no current will flow to the LED (D103). When the battery voltage drops to about 3.6 V or less, $V_{DD}/2 < 1.8 V$ is obtained, the gate input at Pin 1 of IC101 will become "High", and the output at Pin 2 becomes "Low". This is given as an input to Pin 31 of the CPU (IC100), and Pin 14 of the CPU (IC100) will become "Low". This causes current flow to D103 and the LED will light. The semifixed resistor VR3 is adjusted for the lighting level of the LED (D103), and the threshold voltage of IC101.

NOT USED Circuit Diagram

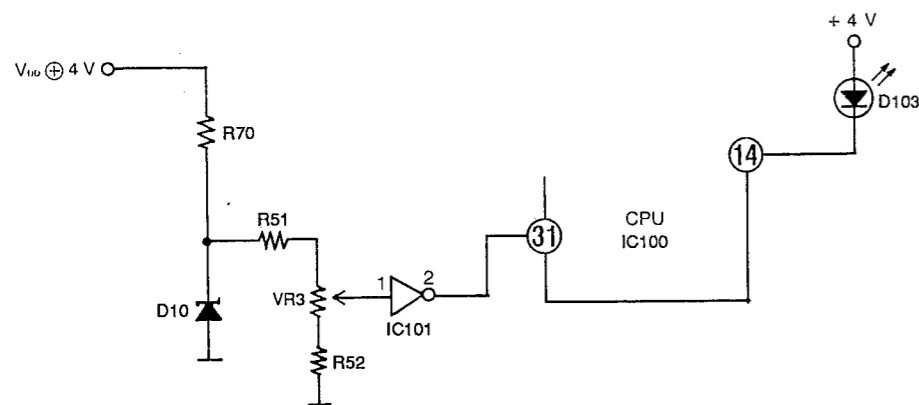


Fig. 33

■ INITIALIZING CIRCUIT

This circuit is for resetting the CPU (IC100) when the power of the unit is turned on. (Reset is necessary to prevent errors in the operation of the CPU.) When the power switch (SW100) is OFF, 8 Pin of IC102 is "High". When the power switch (SW100) is ON, 8 Pin of IC102 is "Low". Further 8 Pin of IC102 is "High", so 8 Pin of IC102 becomes the reset signal.

Circuit Diagram

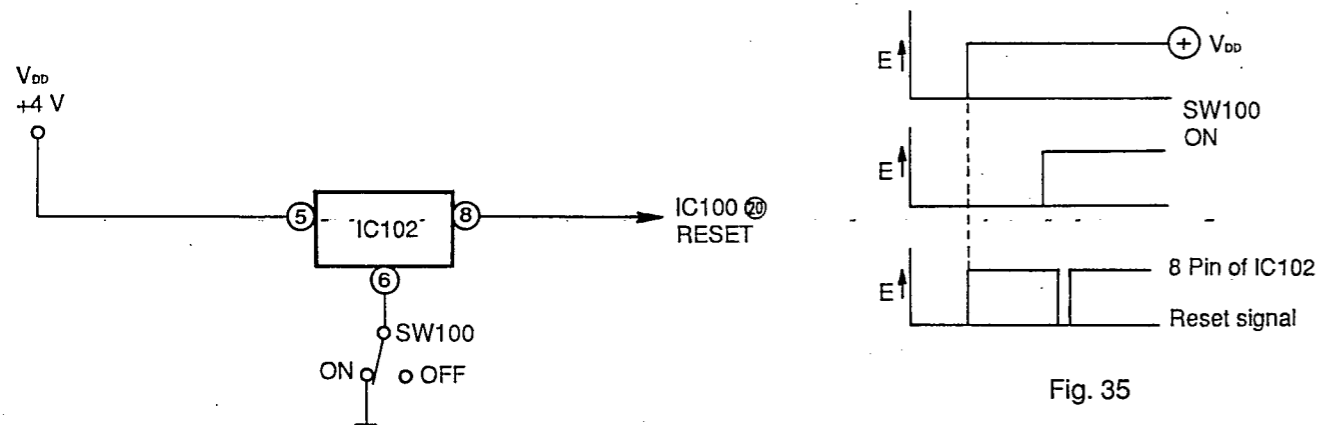
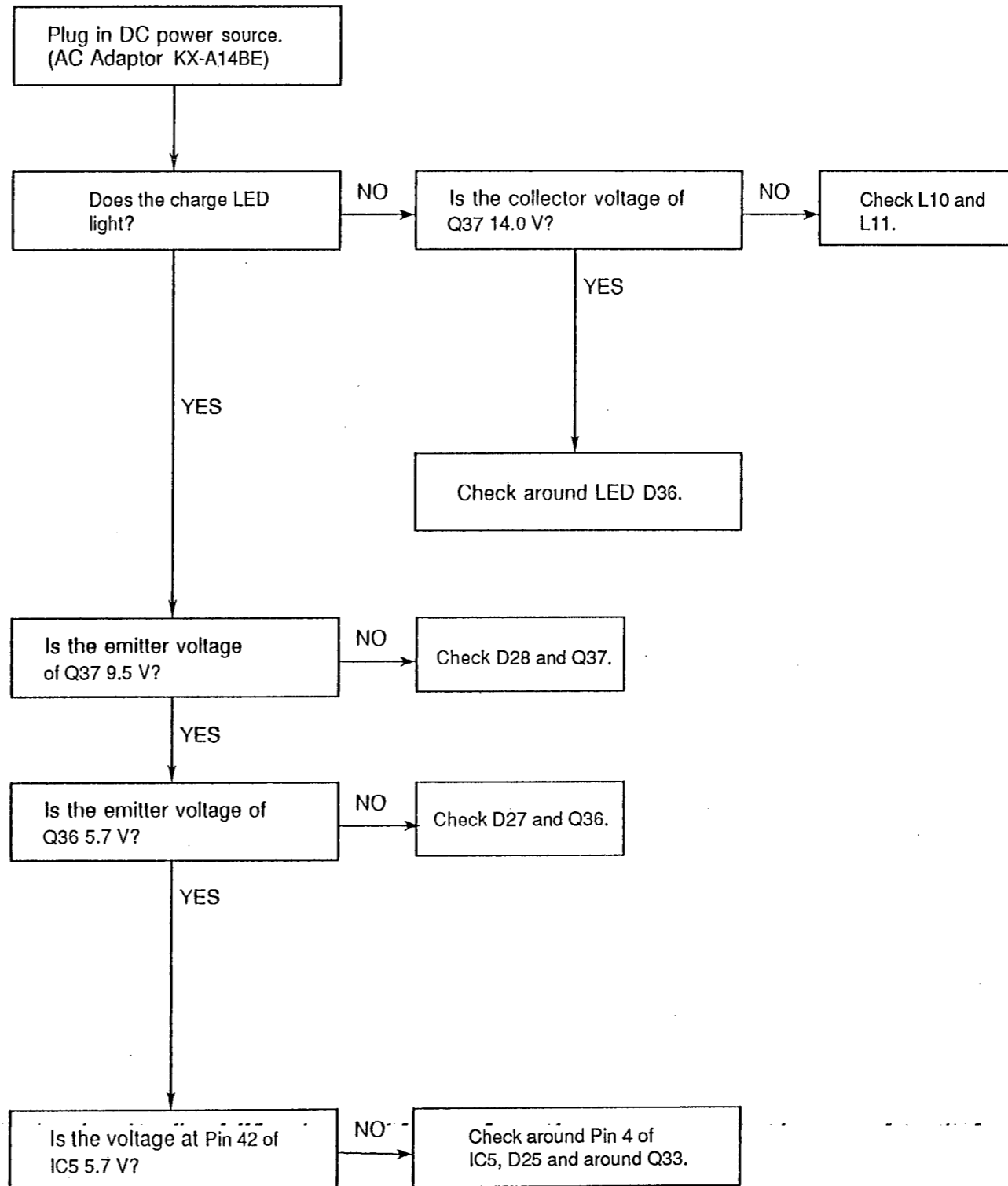


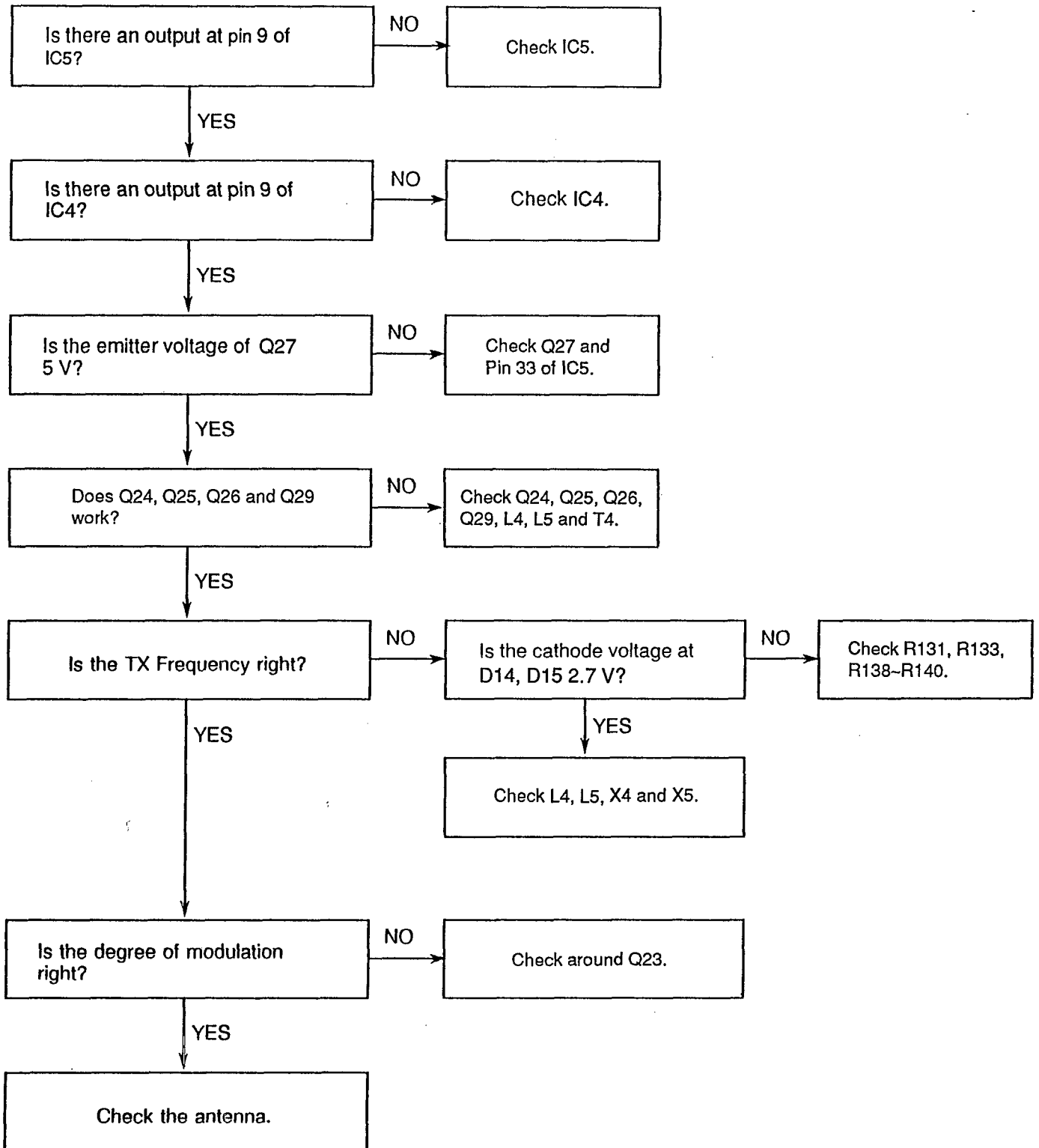
Fig. 34

■ TROUBLESHOOTING GUIDE (KX-T3716EH/KX-T3726EH)

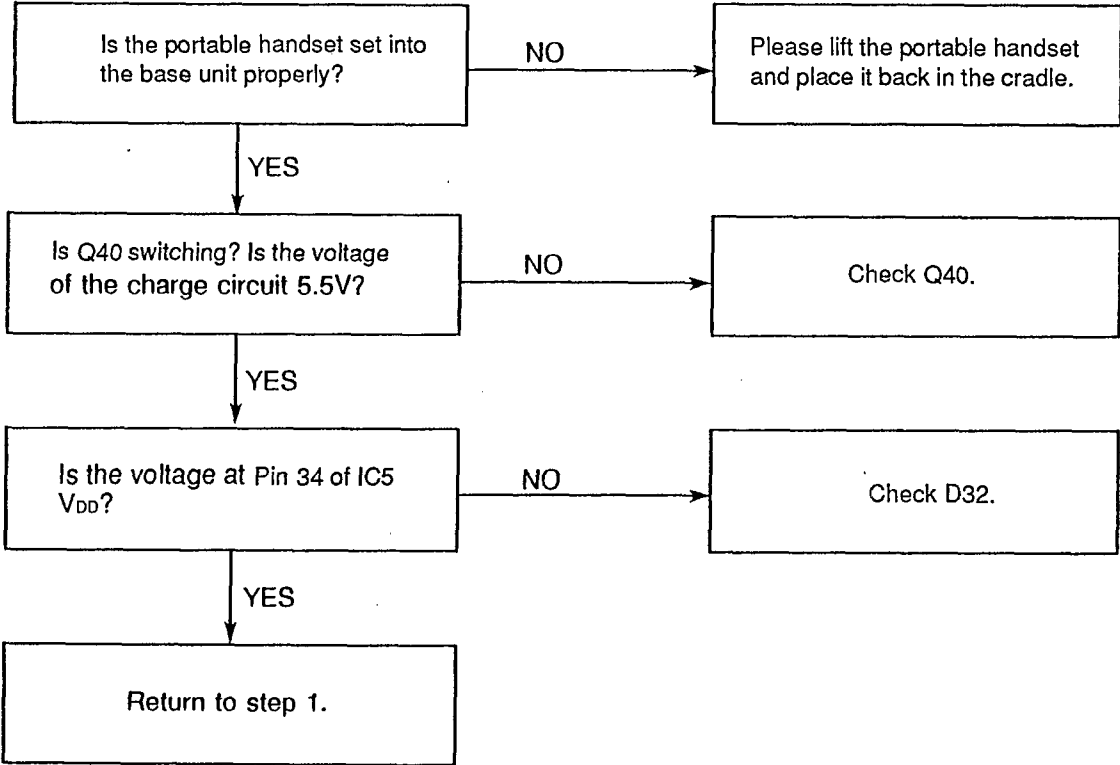
(1) NO FUNCTION OPERATE



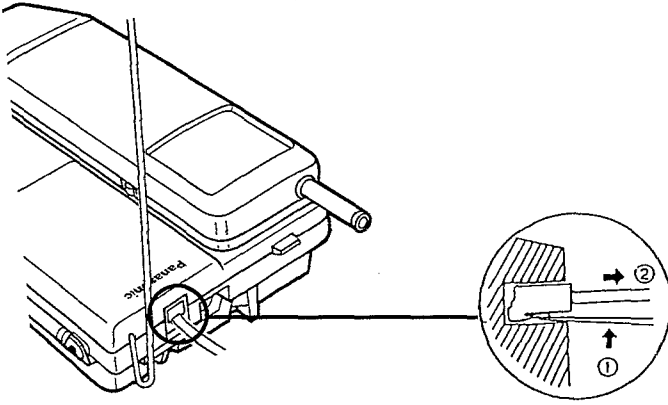
(2) PORTABLE HANDSET DOES NOT RECEIVE THE PAGE/INTERCOM SIGNAL



(3) WHEN THE PORTABLE HANDSET IS SET IN THE CRADLE OF THE BASE UNIT, THE PORTABLE HANDSET DOES NOT CHARGE.



REMOVAL OF THE TELEPHONE CORD

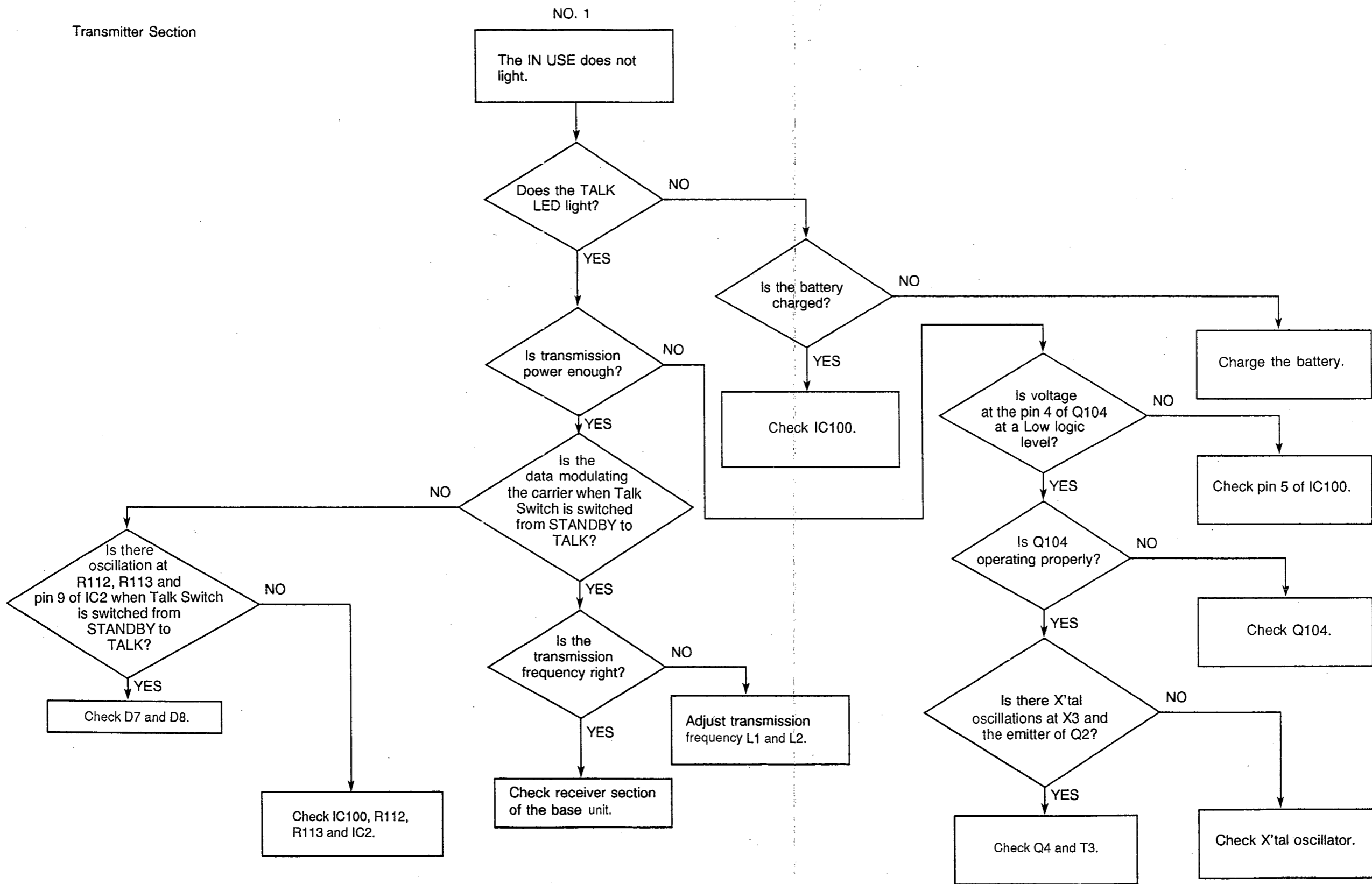


Remove the telephone cord from the unit in the same way.

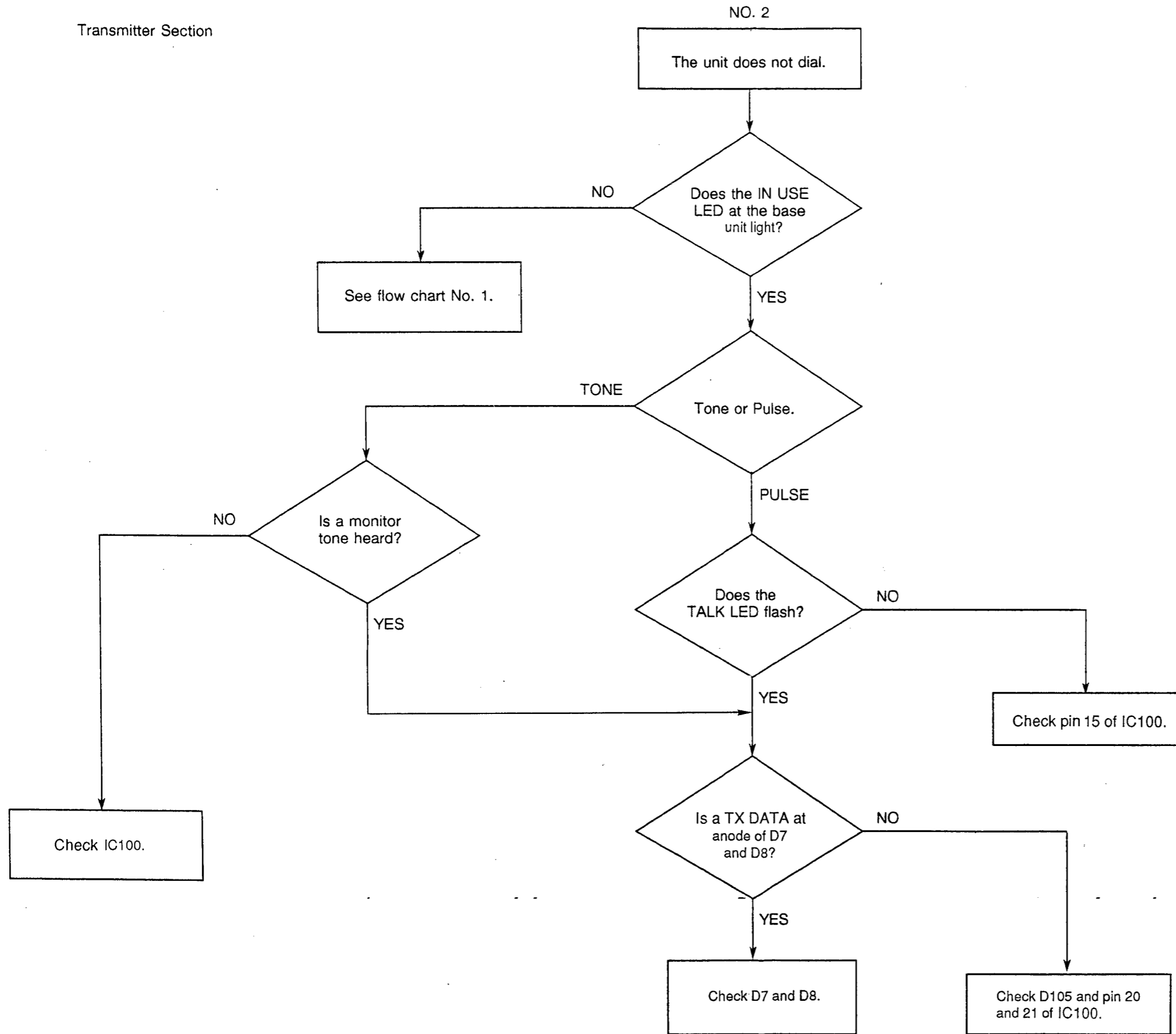
Fig. 36

■ TROUBLESHOOTING GUIDE (KX-T3716ER/KX-T3726ER)

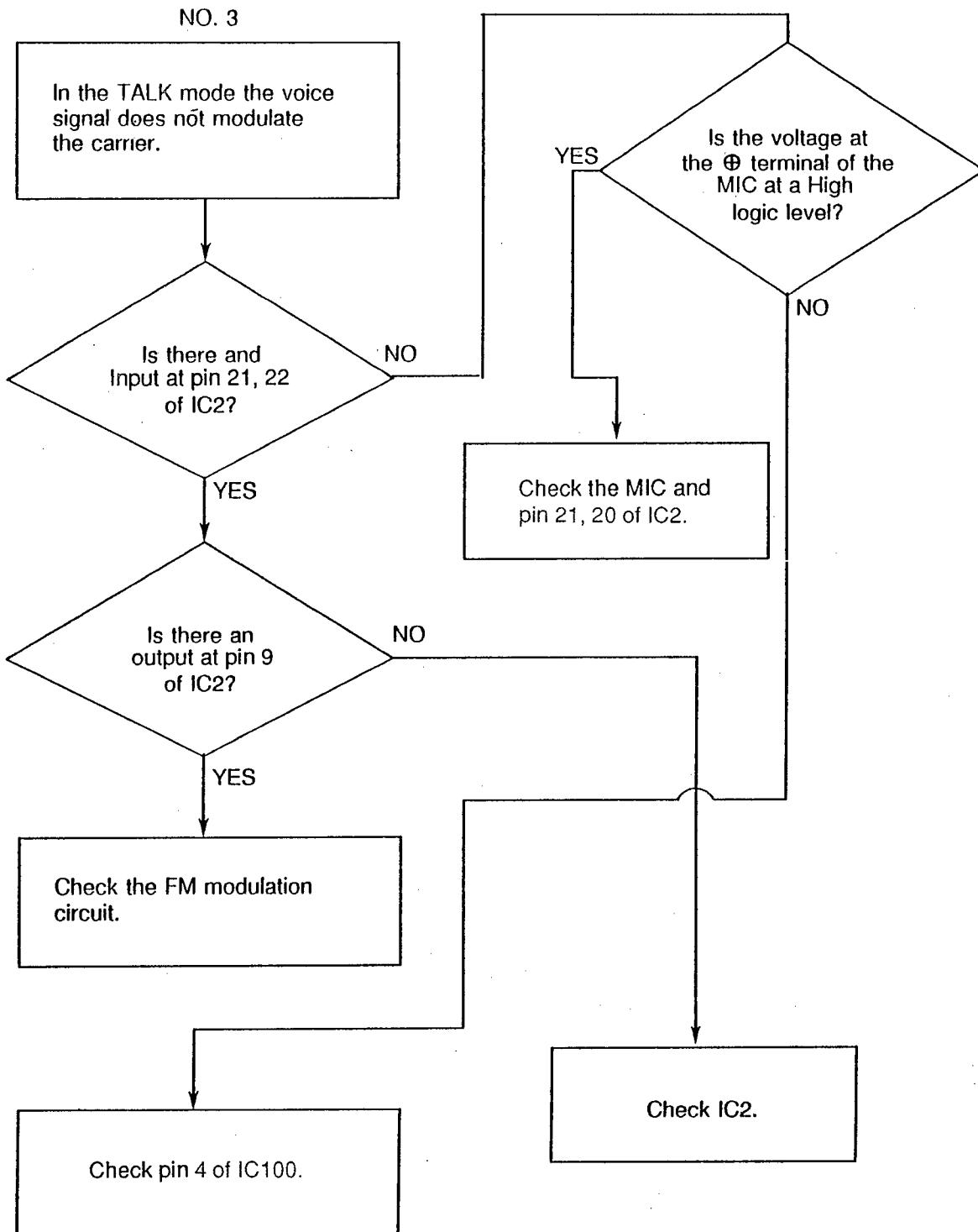
Transmitter Section



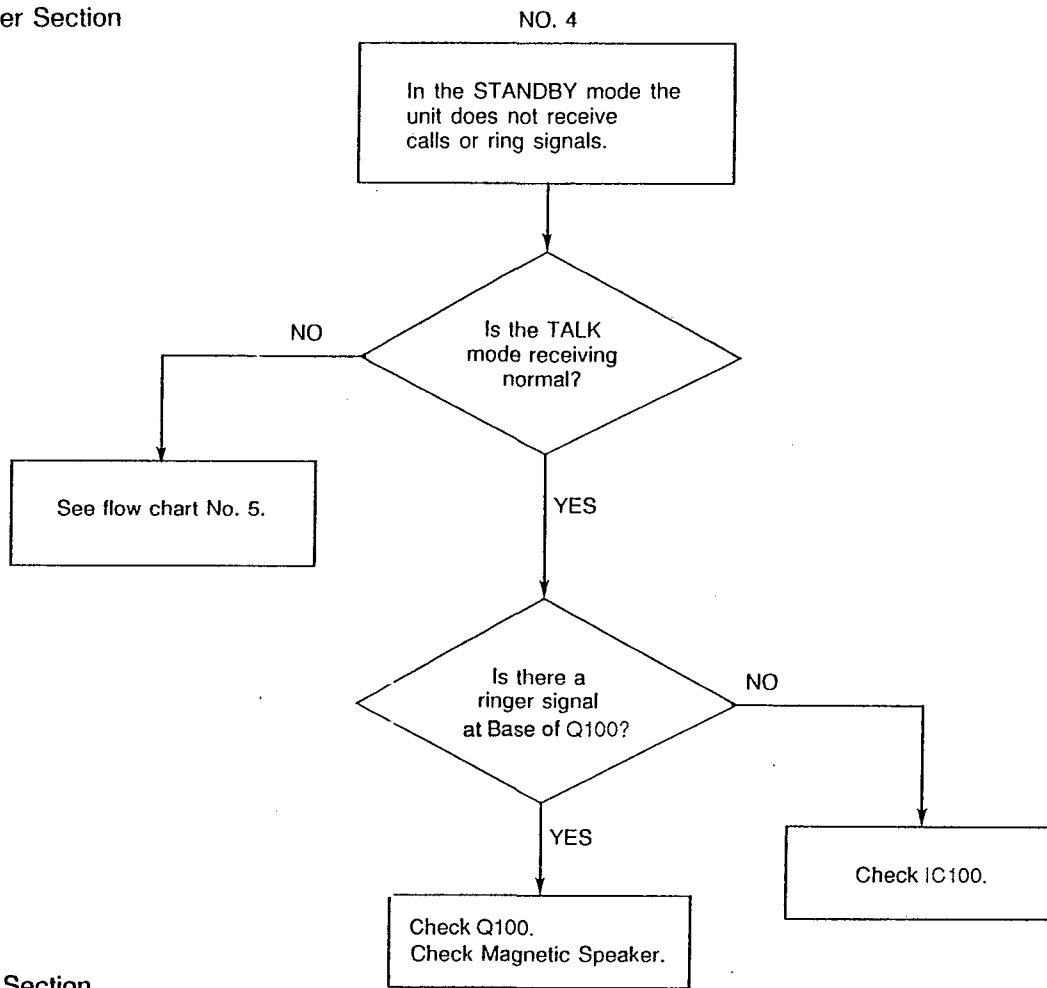
Transmitter Section



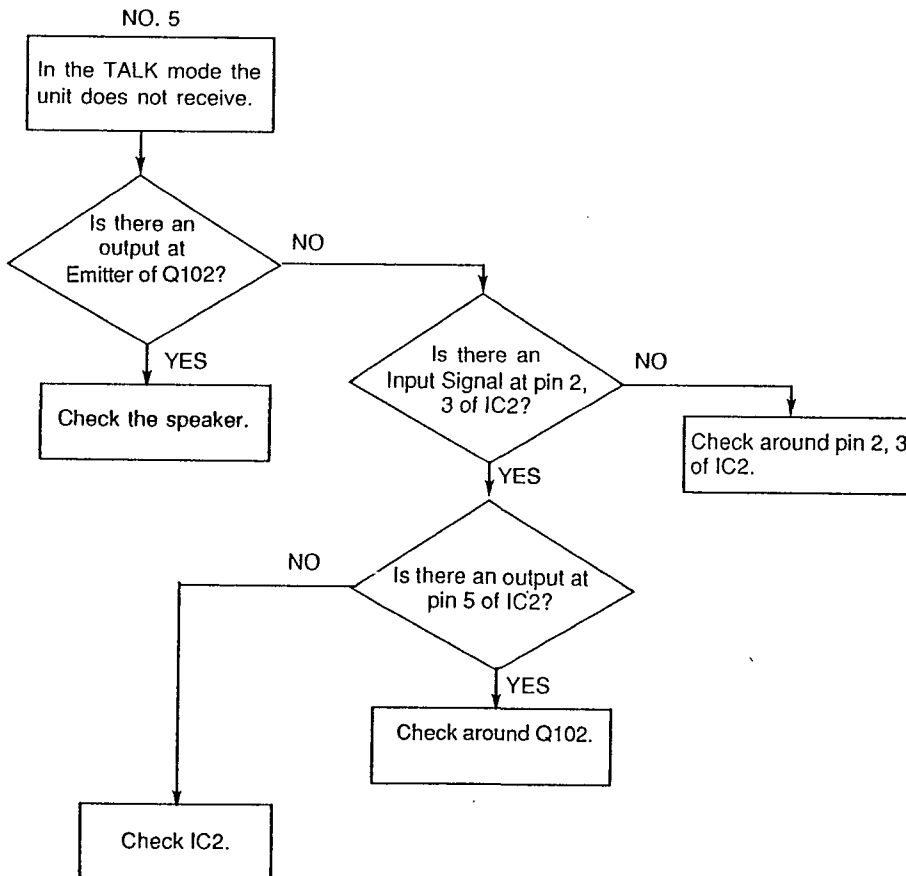
Transmitter Section



Transmitter Section



Receiver Section



CABINET AND ELECTRICAL PARTS LOCATION (KX-T3716EH)

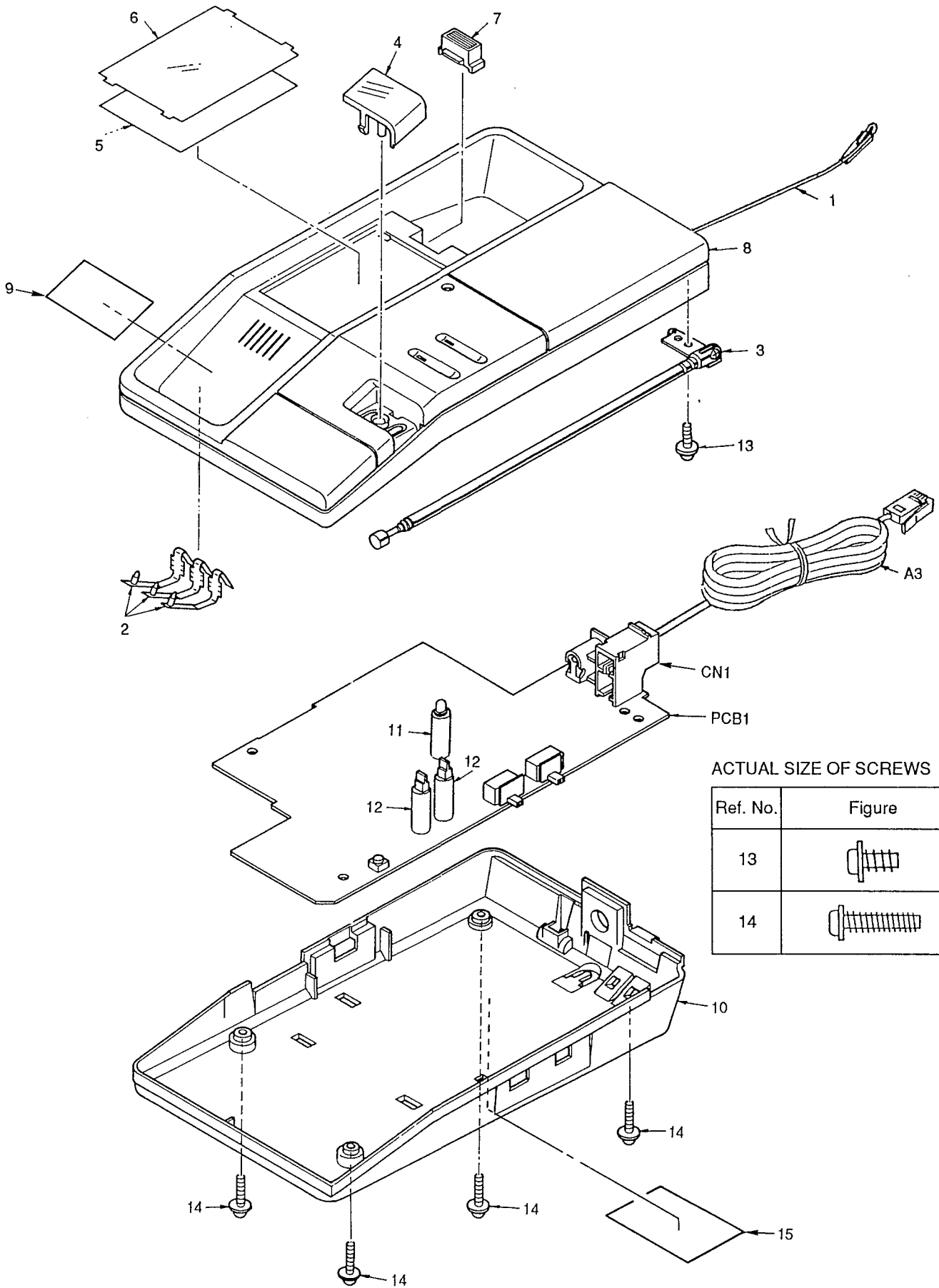


Fig. 37

CABINET AND ELECTRICAL PARTS LOCATION (KX-T3726EH)

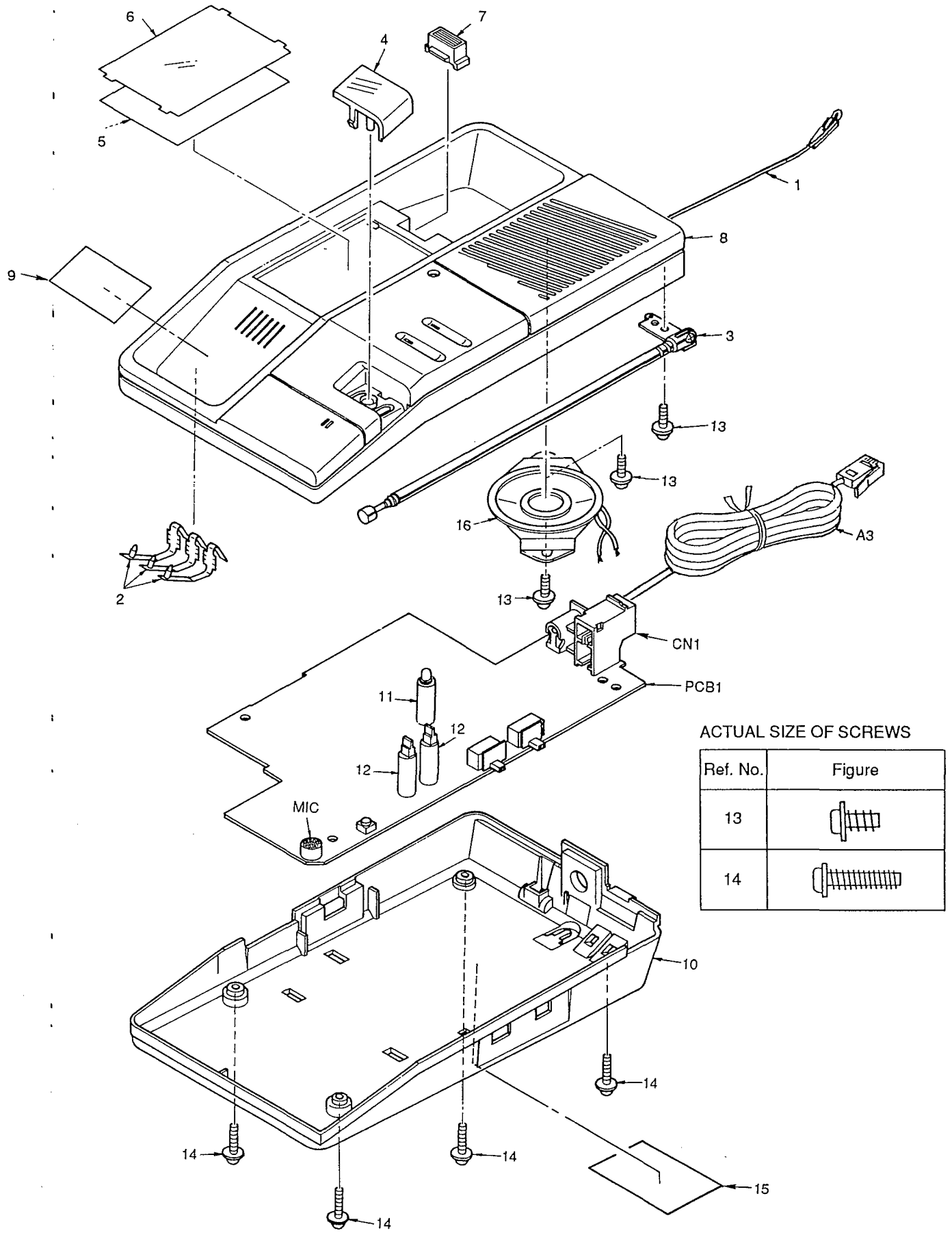
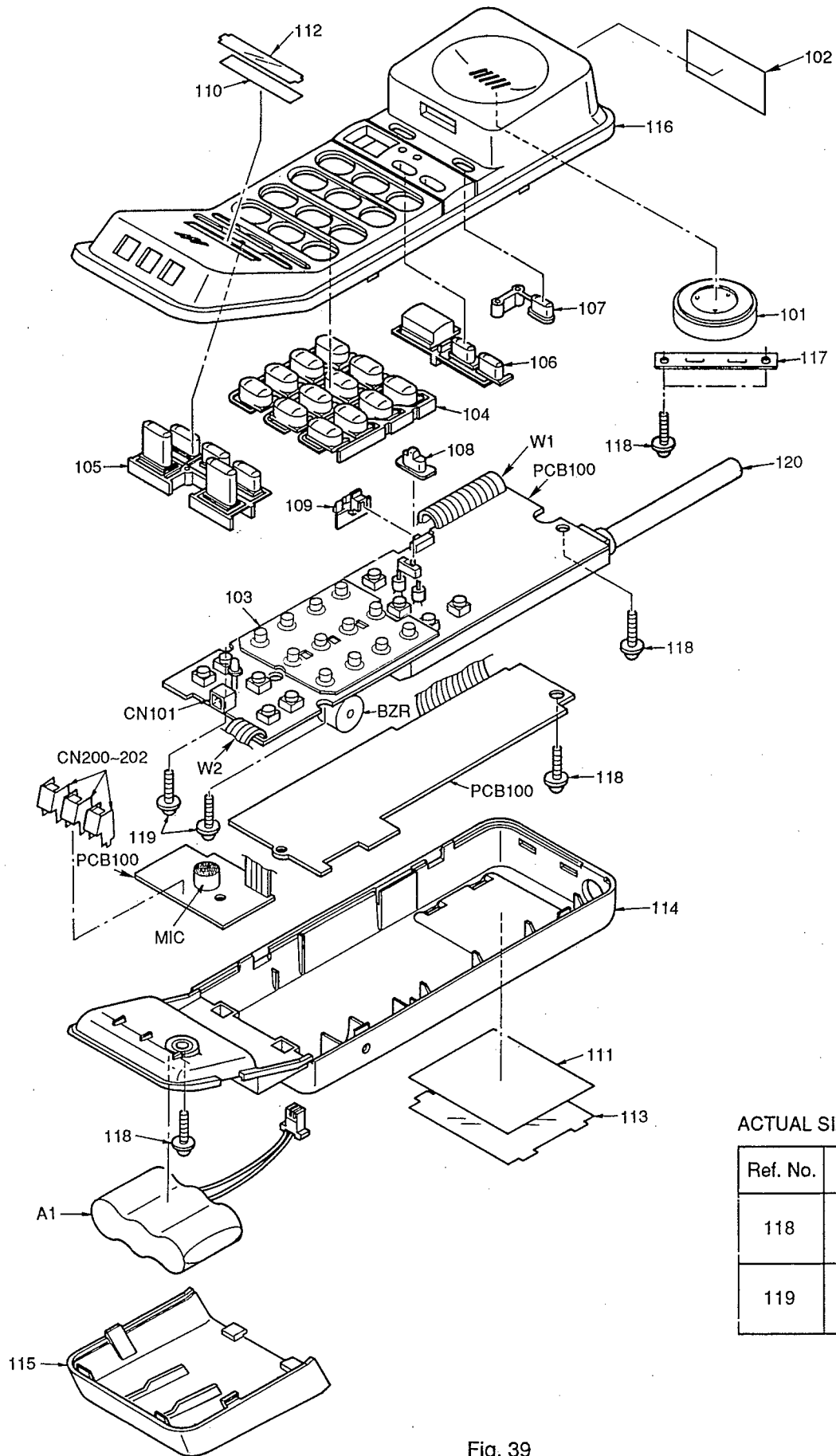


Fig. 38

CABINET AND ELECTRICAL PARTS LOCATION (KX-T3716ER/KX-T3726ER)



ACTUAL SIZE OF SCREWS

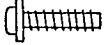

Ref. No.	Figure
118	
119	

Fig. 39

ACCESSORIES AND PACKING MATERIALS

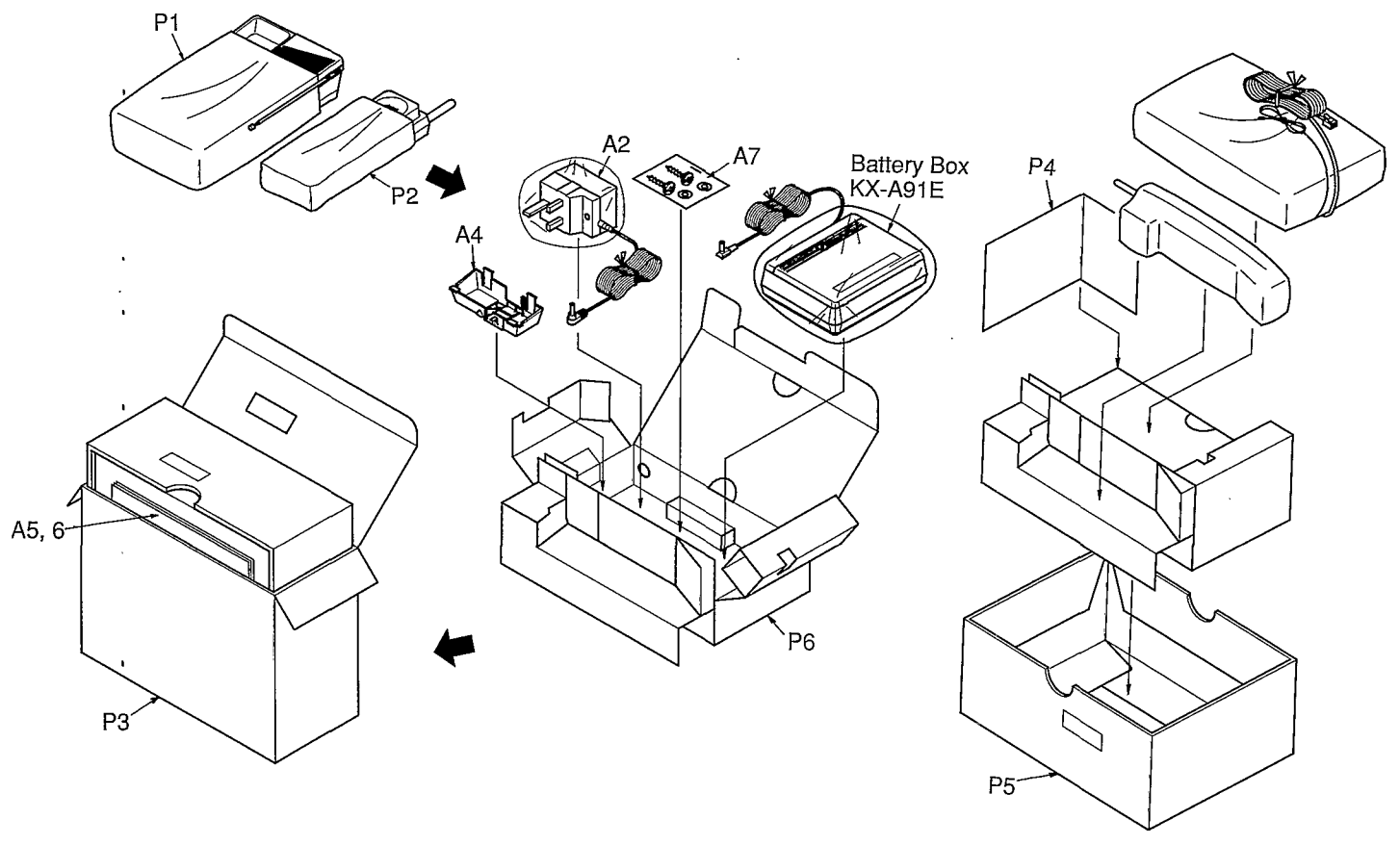


Fig. 48

This replacement parts list is for U.K. version only. Refer to the simplified manual (cover) for other areas.

REPLACEMENT PARTS LIST

Model KX-T3716EH/KX-T3726EH

Notes:

- RTL (Retention Time Limited)**
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 dependent 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.
- Important safety notice.**
Components identified by the Δ mark special characteristics Important for safety. When replacing any of these components, use only manufacturer's specified parts.
- The S mark indicates service standard parts and may differ from production parts.
- RESISTORS & CAPACITORS**
Unless otherwise specified.
All resistors are in ohms (Ω) k=1000 Ω , M=1000k Ω
All capacitors are in MICRO FARADS (μF) P= $\mu\mu F$
*Type & Wattage of Resistor

ERC:Solid	ERX:Metal Film	PQ4R:Carbon
ERD:Carbon	ERG:Metal Oxide	ERS:Fusible Resistor
PQRD:Carbon	ER0:Metal Film	ERF:Cement Resistor

Wattage

10,16:1/8W	14,25:1/4W	12:1/2W	1:1W	2:2W	3:3W
------------	------------	---------	------	------	------

*Type & Voltage of Capacitor

ECFD:Semi-Conductor	ECDD,ECKD,ECBT,PQCBC : Ceramic
ECQS:Styrol	ECQE,ECQV,ECQG : Polyester
PQCUV:Chlp	ECEA,ECSZ : Electrolytic
ECQMS:Mica	ECQP : Polypropylene

Voltage

ECQ Type	ECQG ECQV Type	ECSZ Type	Others		
1H: 50V	05: 50V	0F:3.15V	0J :6.3V	1V :35V	
2A:100V	1:100V	1A:10V	1A :10V	50,1H:50V	
2E:250V	2:200V	1V:35V	1C :16V	1J :63V	
2H:500V		0J:6.3V	1E,25:25V	2A :100V	

Ref. No.	Part No.	Part Name & Description	Pcs
CABINET & ELECTRICAL PARTS			
1	PQJA215Z	CORD	1
2	PQJT980Y	CHARGE TERMINAL	3
3	XEAPQK170BA	ANTENNA	1
4	PQBC267Z	BUTTON	1
5	PQHP5089S	TEL CARD	1
6	PQHR5335Z	TRANSPARENT PLATE	1
7	PQKE49Z	HANGER	1
8	PQKM192V8	CABINET BODY	3716E Only 1
8	PQKM192U8	CABINET BODY	3726E Only 1
9	PQQT10177Z	INDICATION LABEL	1
10	PQYF1048H7	CABINET PLATE	1
11	PQHR494Z	LED SPACER	1
12	PQHR495Z	LED SPACER	2
13	XTW3+S10P	SCREW	3
14	XTW3+S14P	SCREW	4
15	PQGT10575Z	NAME PLATE	3716E Only 1
15	PQGT10577Z	NAME PLATE	3726E Only 1
16	PQAS5P05Y	SPEAKER	3726E Only 1

Ref. No.	Part No.	Part Name & Description	Pcs
MAIN P. C. BOARD PARTS			
PCB1	PQWPT3716EH	P. C. B. (RTL) ASS'Y	3716E Only 1
PCB1	PQWPT3726EH	P. C. B. (RTL) ASS'Y	3726E Only 1
(ICS)			
IC1	PQVIMC3361P	IC	1
IC2	PQVINJM4558M	IC	1
IC3	PQVITC4069UBF	IC	1
IC4	AN6165SB	IC	1
IC5	MN158413AKYB	IC	1
IC6	PQVIMC34119M	IC	3726E Only 1
(TRANSISTORS)			
Q1	2SK543	TRANSISTOR(SI)	1
Q2	2SC2295	TRANSISTOR(SI)	1
Q3	2SC2295	TRANSISTOR(SI)	1
Q5	2SB709A	TRANSISTOR(SI)	1
Q6	2SD601R	TRANSISTOR(SI) [or 2SC2412K]	1
Q7	2SD601R	TRANSISTOR(SI) [or 2SC2412K]	1
Q8	2SD601R	TRANSISTOR(SI) [or 2SC2412K]	1
Q9	2SD601R	TRANSISTOR(SI) [or 2SC2412K]	1
Q10	2SD601R	TRANSISTOR(SI)	1
Q11	PQVTKSD261CY	TRANSISTOR(SI) [or 2SC2120]	1
Q13	2SA1627	TRANSISTOR(SI)	1
Q14	2SD601R	TRANSISTOR(SI) [or 2SC2412K]	1
Q16	2SD601R	TRANSISTOR(SI) [or 2SC2412K]	1
Q18	2SD601R	TRANSISTOR(SI) [or 2SC2412K]	1
Q19	2SD601R	TRANSISTOR(SI) [or 2SC2412K]	1
Q21	2SD1819A	TRANSISTOR(SI) [or 2SC4116]	1
Q22	2SD1819A	TRANSISTOR(SI) [or 2SC4116]	1
Q23	2SD601R	TRANSISTOR(SI) [or 2SC2412K]	1
Q24	2SC2295	TRANSISTOR(SI)	1
Q25	2SC2295	TRANSISTOR(SI)	1
Q26	2SC2295	TRANSISTOR(SI)	1
Q27	2SD601R	TRANSISTOR(SI) [or 2SC2412K]	1
Q28	2SB1322	TRANSISTOR(SI)	1
Q29	2SC34210	TRANSISTOR(SI)	1
Q30	2SB1218A	TRANSISTOR(SI)	3726E Only [or 2SA1603R] 1
Q32	2SD601R	TRANSISTOR(SI)	3726E Only [or 2SC2412K] 1
Q33	2SD1819A	TRANSISTOR(SI) [or 2SC4116]	1
Q34	2SB709A	TRANSISTOR(SI)	1
Q35	2SD601R	TRANSISTOR(SI) [or 2SC2412K]	1
Q36	2SD1994A	TRANSISTOR(SI)	1
Q37	2SD2136	TRANSISTOR(SI)	1
Q39	2SC3631	TRANSISTOR(SI)	1
Q40	2SA1625	TRANSISTOR(SI)	1
(DIODES)			
D1	1SS238	DIODE(SI)	1
D2	1SS238	DIODE(SI)	1
D6	MA4030	DIODE(SI)	1
D7	MA4270	DIODE(SI)	1
D8	PQVDS1ZB40F1	DIODE(SI)	1
D9	PQVDS1ZB40F1	DIODE(SI)	1
D10	MA4033	DIODE(SI)	1
D11	1SS131	DIODE(SI) [or 1SS119] [or 1SS133]	1
		[or 1SS120] [or MA165]	
D14	PQVD1SV149	DIODE(SI)	1
D15	PQVD1SV149	DIODE(SI)	1
D16	1SS131	DIODE(SI)	3726E Only 1
D18	1SS131	DIODE(SI) [or 1SS119] [or 1SS133]	1
		[or 1SS120] [or MA165]	
D20	1SS131	DIODE(SI) [or 1SS119] [or 1SS133]	1
		[or 1SS120] [or MA165]	
D22	MA700A	DIODE(SI)	1

This replacement parts list is for U.K. version only. Refer to the simplified manual (cover) for other areas.

Ref. No.	Part No.	Part Name and Description	Pcs	Ref. No.	Part No.	Part Name, Description and Value	Pcs
D23	1SS131	DIODE(SI) [or 1SS119] [or 1SS133] [or 1SS120] [or MA165]	1	VR1	EVNDXAA03B35	VARIABLE RESISTOR 3726E Only	1
D24	MA4056	DIODE(SI) [or PQVDMZJ5.6A]	1	VR2	EVNDXAA03B15	VARIABLE RESISTOR	1
D25	1SS131	DIODE(SI) [or 1SS119] [or 1SS133] [or 1SS120] [or MA165]	1	VR3	EVNDXAA03B15	VARIABLE RESISTOR	1
D26	1SS131	DIODE(SI) [or 1SS119] [or 1SS133] [or 1SS120] [or MA165]	1	MCF1	PQVCM107M7.5	CRYSTAL OSCILLATOR	1
D27	MA4068	DIODE(SI)	1	J1	PQ4R18XJ000	CHIP JUMPER	1
D28	MA4110	DIODE(SI)	1	J2	PQ4R18XJ000	CHIP JUMPER	1
D30	MA4110	DIODE(SI)	1	J10	PQ4R10XJ000	CHIP JUMPER	1
D31	1SS131	DIODE(SI) [or 1SS119] [or 1SS133] [or 1SS120] [or MA165]	1	J11	PQ4R10XJ000	CHIP JUMPER	1
D32	MA110	DIODE(SI)	1	J12	PQ4R10XJ000	CHIP JUMPER	3726E Only
D34	LN28RPL	LED	1	J13	PQ4R10XJ000	CHIP JUMPER	1
D35	LN324GP	LED	1	J14	PQ4R10XJ000	CHIP JUMPER	1
D36	LN224RP	LED	1	J15	PQ4R10XJ000	CHIP JUMPER	1
		(SWITCHES)		J16	PQ4R10XJ000	CHIP JUMPER	1
S1	PQSS2A27W	SWITCH	1	J17	PQ4R10XJ000	CHIP JUMPER	1
S2	PQSS2A27W	SWITCH	1	J30	ERJ3GEY0R00	CHIP JUMPER	1
S3	EVQ21005G	SWITCH	1	J31	ERJ3GEY0R00	CHIP JUMPER	1
RLY1	PQSL107Z	RELAY (COILS)	1	J32	ERJ3GEY0R00	CHIP JUMPER	1
T1	PQLA7A17	COIL	1	J33	ERJ3GEY0R00	CHIP JUMPER	1
T2	PQLA7A7	COIL	1	J34	ERJ3GEY0R00	CHIP JUMPER	1
T3	PQLI4B901	I.F. TRANSFORMER	1	J36	ERJ3GEY0R00	CHIP JUMPER	1
T4	PQLA2B7	COIL	1	J37	ERJ3GEY0R00	CHIP JUMPER	1
L1	PQLQZK1R8M	COIL	1	J38	ERJ3GEY0R00	CHIP JUMPER	1
L2	PQLQZMR22K	COIL	1	J39	ERJ3GEY0R00	CHIP JUMPER	3726E Only
L3	PQLI2B201	I.F. TRANSFORMER	1	J40	ERJ3GEY0R00	CHIP JUMPER	1
L4	PQLA2B5	COIL	1	J41	ERJ3GEY0R00	CHIP JUMPER	1
L5	PQLA2B5	COIL	1			(RESISTORS)	
L6	PQLQZK101K	COIL	1	R1	ERJ3GEYJ821	820	1
L7	PQLQZK8R2K	COIL	1	R2	ERDS2TJ470	47	1
L8	PQLQZK330K	COIL	1	R3	ERDS2TJ470	47	1
L9	PQLA2B6	COIL	1	R4	ERJ3GEYJ334	330K	1
L10	ELEPK330KA	COIL	1	R5	ERJ3GEYJ272	2.7K	1
L11	ELEPK330KA	COIL	1	R6	ERJ3GEYJ272	2.7K	1
L300	PQLQZM100K	COIL	1	R7	PQ4R10XJ102	1K	1
L301	PQLQZM100K	COIL	1	R8	ERJ3GEYJ562	5.6K	1
L303	PQLQZM1R0K	COIL	1	R9	ERJ3GEYJ224	220K	1
		(PHOTO COUPLERS)		R10	ERJ3GEYJ470	47	1
PC1	PQVIPC814Y	PHOTO ELECTRIC TRANSDUCER	1	R11	ERJ3GEYJ222	2.2K	1
PC2	PQVIPC817CD	PHOTO ELECTRIC TRANSDUCER	1	R18	PQ4R10XJ103	10K	1
PC3	PQVITLP627	PHOTO ELECTRIC TRANSDUCER	1	R19	PQ4R10XJ123	12K	1
PC4	PQVITLP631K	PHOTO ELECTRIC TRANSDUCER	1				
PC5	PQVITLP631K	PHOTO ELECTRIC TRANSDUCER	1	R20	ERJ3GEYJ120	12	1
		(CERAMIC FILTER)		R21	PQ4R10XJ470	47	1
CF1	PQVFCFW455G1	CERAMIC FILTER	1	R22	ERJ3GEYJ104	100K	1
		(CRYSTALS)		R23	ERJ3GEYJ104	100K	1
X1	PQVCJ3678N9	CRYSTAL OSCILLATOR	1	R24	ERJ3GEYJ104	100K	1
X1	PQVCJ3679N9	CRYSTAL OSCILLATOR	1	R25	ERJ3GEYJ105	1M	1
X2	PQVCJ3680N9	CRYSTAL OSCILLATOR	1	R26	ERJ3GEYJ822	8.2K	1
X2	PQVCJ3681N9	CRYSTAL OSCILLATOR	1	R27	ERJ3GEYJ223	22K	1
X3	PQVCJ10245N9	CRYSTAL OSCILLATOR	1	R28	PQ4R10XJ154	150K	1
X4	PQVBA1.682K1	CRYSTAL OSCILLATOR	1	R29	ERJ3GEYJ563	56K	1
X4	PQVBA1.702K1	CRYSTAL OSCILLATOR	1	R30	ERJ3GEYJ563	56K	1
X5	PQVBA1.722K1	CRYSTAL OSCILLATOR	1	R31	ERJ3GEYJ470	47	1
X5	PQVBA1.742K1	CRYSTAL OSCILLATOR	1	R32	ERJ3GEYJ470	47	1
X6	PQVCJ3581N9Z	CRYSTAL OSCILLATOR	1	R35	ERJ3GEYJ472	4.7K	1
		(OTHERS)		R36	ERJ3GEYJ472	4.7K	1
MIC	RJM142Z	MICROPHONE	1	R37	PQ4R10XJ223	22K	1
SA1	PQVDRA311PT2	VARIATOR	1	R38	ERJ3GEYJ474	470K	1
CN1	PQJJ2HB2Z	JACK/TEL DC IN	1	R39	ERJ3GEYJ104	100K	1
				R40	ERJ3GEYJ223	22K	1
				R41	ERJ3GEYJ682	6.8K	1

This replacement parts list is for U.K. version only. Refer to the simplified manual (cover) for other areas.

Ref. No.	Part No.	Value	Pcs	Ref. No.	Part No.	Value	Pcs
R42	ERJ3GEYJ682	6.8K	1	R121	ERJ3GEYJ153	15K	1
R43	ERJ3GEYJ222	2.2K	1	R122	ERJ3GEYJ123	12K	1
R44	ERJ3GEYJ681	680	1	R123	ERJ3GEYJ563	56K	1
R45	ERJ3GEYJ684	680K	1	R126	ERJ3GEYJ683	68K	1
R46	ERJ3GEYJ103	10K	1	R127	ERDS2TJ181	180	1
R47	ERJ3GEYJ103	10K	1	R128	ERJ3GEYJ224	220K	1
R48	ERJ3GEYJ152	1.5K	1	R129	ERJ3GEYJ122	1.2K	1
R49	ERJ3GEYJ271	270	1				
				R130	ERJ3GEYJ102	1K	1
R50	ERJ3GEYJ823	82K	1	R131	ERJ3GEYJ472	4.7K	1
R51	PQ4R10XJ102	1K	1	R132	ERJ3GEYJ473	47K	1
R53	PQ4R10XJ102	1K	1	R133	ERJ3GEYJ563	56K	1
R54	PQ4R10XJ220	22	1	R134	ERJ3GEYJ153	15K	1
R55	PQ4R10XJ105	1M	1	R135	ERJ3GEYJ104	100K	1
R56	PQ4R10XJ103	10K	1	R136	ERJ3GEYJ471	470	1
R57	ERDS2TJ101	100	1	R137	ERJ3GEYJ102	1K	1
R58	ERDS2TJ120	12	1	R138	ERJ3GEYJ472	4.7K	1
				R139	ERJ3GEYJ473	47K	1
R60	PQ4R10XJ223	22K	1				
R61	PQ4R10XJ222	2.2K	1	R140	ERJ3GEYJ563	56K	1
R62	PQ4R10XJ123	12K	1	R141	ERJ3GEYJ153	15K	1
R63	PQ4R10XJ683	68K	1	R142	ERJ3GEYJ104	100K	1
R64	PQ4R10XJ391	390	1	R143	ERJ3GEYJ471	470	1
R65	PQ4R10XJ682	6.8K	1	R144	ERJ3GEYJ102	1K	1
R67	ERDS2TJ392	3.9K	1	R145	ERJ3GEYJ473	47K	1
R68	ERDS2TJ152	1.5K	1	R146	ERDS2TJ470	47	1
R69	ERDS2TJ471	470	1	R147	ERJ3GEYJ473	47K	1
				R148	ERJ3GEYJ823	82K	1
R70	ERDS2TJ222	2.2K	1	R149	ERJ3GEYJ103	10K	1
R71	ERDS2TJ150	15	1				
R77	ERDS2TJ104	100K	1	R150	ERJ3GEYJ224	220K	1
R78	ERDS2TJ472	4.7K	1	R151	ERJ3GEYJ103	10K	1
R79	ERDS2TJ101	100	1	R152	ERDS1TJ330	33	1
				R153	PQ4R10XJ102	1K	1
R80	ERDS2TJ223	22K	1	R154	ERJ3GEYJ473	47K	3726E Only
R81	ERJ3GEYJ332	3.3K	1	R155	ERD25TJ473	47K	3726E Only
R84	PQ4R10XJ103	10K	1	R156	ERDS2TJ332	3.3K	3726E Only
R87	ERJ3GEYJ332	3.3K	1	R158	ERJ3GEYJ822	8.2K	3726E Only
R88	ERJ3GEYJ152	1.5K	1				
R89	ERJ3GEYJ121	120	1	R160	ERJ3GEYJ332	3.3K	3726E Only
				R162	PQ4R10XJ100	10	3726E Only
R90	ERJ3GEYJ223	22K	1	R163	ERJ3GEYJ104	100K	3726E Only
R91	PQ4R10XJ124	120K	1	R164	ERJ3GEYJ473	47K	3726E Only
R92	PQ4R10XJ222	2.2K	1	R165	ERJ3GEYJ104	100K	3726E Only
R93	ERDS2TJ224	220K	1	R166	ERJ3GEYJ104	100K	3726E Only
R94	ERJ3GEYJ683	68K	1	R167	ERJ3GEYJ682	6.8K	3726E Only
R95	ERJ3GEYJ684	680K	1	R168	ERJ3GEYJ102	1K	3726E Only
R97	ERJ3GEYJ151	150	1	R169	ERJ3GEYJ683	68K	3726E Only
R98	ERJ3GEYJ104	100K	1				
R99	PQ4R10XJ104	100K	1	R170	ERJ3GEYJ274	270K	3726E Only
				R171	ERJ3GEYJ333	33K	3726E Only
R100	PQ4R10XJ473	47K	1	R172	ERJ3GEYJ392	3.9K	3726E Only
R103	ERJ3GEYJ103	10K	1	R173	ERJ3GEYJ822	8.2K	1
R105	PQ4R10XJ470	47	1	R174	ERJ3GEYJ104	100K	1
R106	PQ4R10XJ683	68K	1	R176	ERJ3GEYJ104	100K	1
R107	ERJ3GEYJ823	82K	1	R177	ERJ3GEYJ104	100K	1
R108	ERJ3GEYJ153	15K	1	R178	ERJ3GEYJ104	100K	1
R109	ERJ3GEYJ273	27K	1	R179	ERJ3GEYJ104	100K	1
R110	ERJ3GEYJ104	100K	1	R180	ERJ3GEYJ104	100K	1
R111	ERJ3GEYJ104	100K	1	R181	ERJ3GEYJ104	100K	1
R112	ERJ3GEYJ334	330K	1	R182	PQ4R10XJ473	47K	1
R113	ERJ3GEYJ224	220K	1	R183	ERJ3GEYJ473	47K	1
R114	ERJ3GEYJ224	220K	1	R184	PQ4R10XJ824	820K	1
R115	ERJ3GEYJ333	33K	1	R185	ERJ3GEYJ104	100K	1
R116	ERDS2TJ103	10K	1	R186	PQ4R10XJ104	100K	1
R118	ERJ3GEYJ103	10K	1	R187	PQ4R10XJ102	1K	1
R119	ERJ3GEYJ103	10K	1	R188	ERDS2TJ102	1K	1
R120	ERJ3GEYJ153	15K	1	R190	PQ4R10XJ103	10K	1

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Ref. No.	Part No.	Value	Pcs	Ref. No.	Part No.	Value	Pcs
R191	PQ4R10XJ473	47K	1	C41	ECEA1CK101	100	1
R192	PQ4R10XJ332	3.3K	1	C42	ECEA1CK101	100	1
R193	ERDS2TJ121	120	1	C43	ECUV1H821KBV	820P	1
R194	PQ4R10XJ104	100K	1	C45	ECUV1H332KBV	0.0033	1
R195	PQ4R10XJ100	10	1	C46	ECEA1HKS010	1	3726E Only
R196	ERJ3GEYJ332	3.3K	1	C47	ECEA1EKS330	33	1
R197	ERJ3GEYJ473	47K	1	C48	ECEA1HKS010	1	3726E Only
R199	ERJ3GEYJ152	1.5K	1	C49	PQCUV1E473MD	0.047	1
R200	ERDS2TJ102	1K	1	C50	ECEA1EK470	47	1
R201	ERDS2TJ821	820	1	C52	ECEA0JU471	470	1
R203	ERJ3GEYJ821	820	1	C53	PQCUV1E104MD	0.1	1
R204	ERDS2TJ221	220	1	C54	PQCUV1E473MD	0.047	1
R206	ERJ3GEYJ100	10	1	C55	ECQV1H224JZ	0.22	1
R207	ERJ3GEYJ100	10	1	C56	ECKDKC472KB	0.0047	1
R208	ERD25TJ100	10	1	C57	ECKD2H681KB	680P	1
R209	ERD25TJ273	27K	1	C58	ECKD2H681KB	680P	1
R211	PQ4R10XJ822	8.2K	1	C60	PQCUV1C683MD	0.068	1
R212	ERJ3GEYJ104	100K	1	C61	PQCUV1C683MD	0.068	1
R300	ERJ3GEYJ123	12K	1	C63	PQCUV1C683MD	0.068	1
R310	ERDS2TJ102	1K	1	C65	ECEA1CKS220	22	1
				C66	ECUV1H271JCV	270P	1
				C67	PQCUV1H332KB	0.0033	1
				C68	PQCUV1H103KB	0.01	1
				C69	ECEA1CKS100	10	1
				C70	PQCUV1C683MD	0.068	1
				C72	ECUV1H682KBV	0.0068	1
				C73	ECEA1HKS4R7	4.7	1
				C74	ECUV1H223KBV	0.022	1
				C75	ECUV1H221JCV	220P	1
				C76	ECEA1CKS100	10	1
				C77	ECEA1HKS4R7	4.7	1
				C78	PQCUV1E104MD	0.1	1
				C79	PQCUV1E104MD	0.1	1
				C80	ECUV1H471JCV	470P	1
				C81	PQCUV1H103KB	0.01	1
				C82	ECEA0JK221	220	1
				C83	ECUV1H103KBV	0.01	1
				C84	PQCUV1E104MD	0.1	1
				C85	ECEA1HKS010	1	3726E Only
				C86	PQCUV1C683MD	0.068	1
				C87	ECUV1H102KBV	0.001	1
				C88	ECUV1H390JCV	39P	1
				C89	ECUV1H821KBV	820P	1
				C90	ECUV1H102KBV	0.001	1
				C91	ECUV1H471JCV	470P	1
				C92	PQCUV1E104MD	0.1	1
				C93	PQCUV1C683MD	0.068	1
				C94	ECUV1H102KBV	0.001	1
				C95	ECUV1H390JCV	39P	1
				C96	ECUV1H102KBV	0.001	1
				C97	ECUV1H821KBV	820P	1
				C98	ECUV1H471JCV	470P	1
				C99	PQCUV1E104MD	0.1	1
				C100	ECEA1EK470	47	1
				C101	ECUV1H104ZFV	0.1	1
				C102	PQCUV1H103KB	0.01	1
				C103	ECEA1EK470	47	1
				C104	PQCUV1E104MD	0.1	1
				C107	ECEA1HKS010	1	3726E Only
				C108	ECEA1HKS010	1	3726E Only
				C110	ECEA1AU221	220	3726E Only
				C111	ECUV1H103KBV	0.01	3726E Only
				C112	ECUV1H471JCV	470P	3726E Only
C1	ECUV1H150JCV	15P	1				
C2	ECUV1H070DCV	7P	1				
C3	PQCUV1H103KB	0.01	1				
C4	ECUV1H470JCV	47P	1				
C5	ECUV1H560JCV	56P	1				
C6	ECUV1H101JCV	100P	1				
C7	ECUV1H103KBV	0.01	1				
C8	ECUV1H103KBV	0.01	1				
C9	ECUV1H103KBV	0.01	1				
C10	ECUV1H103KBV	0.01	1				
C11	ECUV1H103KBV	0.01	1				
C12	ECUV1H100DCV	10P	1				
C13	ECUV1H103KBV	0.01	1				
C14	PQCUV1H223KB	0.022	1				
C15	PQCUV1H103KB	0.01	1				
C16	ECUV1H103KBV	0.01	1				
C22	PQCUV1H392KB	0.0039	1				
C23	PQCUV1H470JC	47P	1				
C24	PQCUV1H151JC	150P	1				
C25	PQCUV1H103KB	0.01	1				
C26	PQCUV1H103KB	0.01	1				
C27	PQCUV1E104MD	0.1	1				
C28	PQCUV1H103KB	0.01	1				
C29	ECEA1CK101	100	1				
C32	ECEA1HKS010	1	1			3726E Only	
C33	ECEA1CK101	100	1				
C34	PQCUV1E104MD	0.1	1				
C35	PQCUV1C683MD	0.068	1				
C36	ECUV1H332KBV	0.0033	1				
C37	PQCUV1E104MD	0.1	1				
C38	ECUV1H223MD	0.022	1				
C39	PQCUV1H223KB	0.022	1				
C40	PQCUV1H223KB	0.022	1				

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Ref. No.	Part No.	Value		Pcs
C113	ECEA1EU4R7	4.7	3726E Only	1
C114	ECEA1HU010	1	3726E Only	1
C115	PQCUV1C224ZF	0.22	3726E Only	1
C116	PQCUV1H223KB	0.022	3726E Only	1
C117	PQCUV1E473MD	0.047	3726E Only	1
C118	PQCUV1E104MD	0.1	3726E Only	1
C119	ECUV1H220JCV	22P		1
C120	ECUV1H220JCV	22P		1
C121	ECUV1H103KBV	0.01		1
C122	ECEA0JU102	1000		1
C123	ECUV1H223KBV	0.022		1
C124	PQCUV1E104MD	0.1		1
C125	ECEA0JU102	1000		1
C126	ECEA1CK101	100		1
C127	PQCUV1H103KB	0.01		1
C128	ECEA1EK470	47		1
C129	PQCUV1H103KB	0.01		1
C130	ECEA1EU101	100		1
C133	PQCUV1H103KB	0.01		1
C134	PQCUV1H103KB	0.01		1
C135	ECUV1H473MD	0.047		1
C136	PQCUV1H152KB	0.0015		1
C137	PQCUV1H332KB	0.0033		1
C138	PQCUV1H221JC	220P		1
C139	ECUV1H102KBV	0.001		1
C140	ECEA1CK101	100		1
C142	ECUV1H103KBV	0.01		1
C143	ECUV1H181JCV	180P		1
C144	ECUV1H103KBV	0.01		1
C145	ECEA1HKS0R1	0.1		1
C150	ECEA0JK221	220	3726E Only	1
C300	ECUV1H103KBV	0.01		1
C303	ECUV1H103KBV	0.01		1

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REPLACEMENT PARTS LIST

Model KX-T3716ER/KX-T3726ER

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 dependent 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 special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

3. The S mark indicates service standard parts and may differ from production parts.

4. RESISTORS & CAPACITORS

Unless otherwise specified.

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

All capacitors are in MICRO FARADS (μF) P= μF

*Type & Wattage of Resistor

Type

ERC:Solid	ERX: Metal Film	PQ4R: Carbon
ERD: Carbon	ERG: Metal Oxide	ERS: Fusible Resistor
PQRD: Carbon	ER0: Metal Film	ERF: Cement Resistor

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	ECCD, ECKD, ECBT, PQCBC : Ceramic
ECQS: Styrol	ECQE, ECQV, ECQG : Polyester
PQCUV: Chip	ECEA, ECSZ : Electrolytic
ECQMS: Mica	ECQP : Polypropylene

Voltage

ECQ Type	ECQG ECQV Type	ECSZ Type	Others	
1H: 50V	05: 50V	0F: 3.15V	0J :6.3V	1V :35V
2A: 100V	1: 100V	1A: 10V	1A :10V	50, 1H: 50V
2E: 250V	2: 200V	1V: 35V	1C :16V	1J :63V
2H: 500V		0J: 6.3V	1E, 25: 25V	2A :100V

Ref. No.	Part No.	Part Name & Description	Pcs/Set
CABINET & ELECTRICAL PARTS			
101	PQAX3P12Z	SPEAKER	1
102	PQGT10574Z	NAME PLATE 3716E Only	1
102	PQGT10576Z	NAME PLATE 3726E Only	1
103	PQSX10010Z	KEYBOARD SWITCH	1
104	PQBCX173X	BUTTON	1
105	PQBCX174Z	BUTTON	1
106	PQBCX175V	BUTTON 3716E Only	1
106	PQBCX175W	BUTTON 3726E Only	1
107	PQBC252Z	BUTTON	1
108	PQBD148Z	KNOB	1
109	PQBD149Z	KNOB	1
110	PQHP5065Z	TEL CARD	1
111	PQHP5066Q	TEL CARD	1
112	PQHR5290Z	TRANSPARENT PLATE	1
113	PQHR5291Z	TRANSPARENT PLATE	1
114	PQKF171U8	CABINET PLATE	1
115	PQKK55S8	BATTERY COVER	1
116	PQKM189E7	CABINET BODY 3716E Only	1
116	PQKM189F7	CABINET BODY 3726E Only	1
117	PQUL58Y	BRACKET	1
118	XTW26+10E	SCREW	5
119	XTW26+8F	SCREW	2
120	PQSA10018X	ANTENNA	1

Ref. No.	Part No.	Part Name & Description	Pcs/Set
PRINTED CIRCUIT BOARD PARTS			
PCB100	PQWPT3716ER	P. C. B. ASSY (RTL) 3716E Only	1
PCB100	PQWPT3726ER	P. C. B. ASSY (RTL) 3726E Only	1
(ICs)			
IC1	PQVIMC3361D	IC	1
IC2	AN6165K	IC	1
IC3	PQVINJM4558M	IC	1
IC100	PQVI006G629	IC	1
IC101	PQVIPD4069G	IC	1
IC102	PQVISC78184D	IC	1
(TRANSISTORS)			
Q1	2SD601A	TRANSISTOR(SI)	1
Q2	2SC4098QT106	TRANSISTOR(SI)	1
Q3	2SC4098QT106	TRANSISTOR(SI)	1
Q4	2SC2295	TRANSISTOR(SI)	1
Q100	2SB709A	TRANSISTOR(SI) [or 2SA1162] [or 2SA1037K]	1
Q101	2SB709A	TRANSISTOR(SI) [or 2SA1162] [or 2SA1037K]	1
Q102	2SD601A	TRANSISTOR(SI)	1
Q103	XN4116	TRANSISTOR(SI)	1
Q104	XN4116	TRANSISTOR(SI)	1
Q203	2SD601R	TRANSISTOR(SI)	1
(DIODES)			
D1	1SS238	DIODE(SI)	1
D2	1SS238	DIODE(SI)	1
D3	1SS238	DIODE(SI)	1
D4	1SS131	DIODE(SI) [or MA165] [or 1SS119] [or 1SS120] [or 1SS133]	1
D5	1SS238	DIODE(SI)	1
D6	1SS238	DIODE(SI)	1
D7	PQVD1SV145	DIODE(SI)	1
D8	PQVD1SV145	DIODE(SI)	1
D9	MA4030	DIODE(SI)	1
D10	MA4030	DIODE(SI)	1
D11	1SS131	DIODE(SI) [or MA165] [or 1SS119] [or 1SS120] [or 1SS133]	1
D100	MA700A	DIODE(SI)	1
D101	PQVDSLZ244A1	LED 3726E Only	1
D102	PQVDSLZ244A1	LED	1
D103	PQVDSLZ135B2	DIODE(SI)	1
D104	1SS131	DIODE(SI) [or MA165] [or 1SS119] [or 1SS120] [or 1SS133]	1
D200	MA4068	DIODE(SI)	1
D201	MA4068	DIODE(SI)	1
D300	MA110	DIODE(SI)	1
D301	PQVDHZ3BLL	DIODE(SI)	1
(CONNECTORS)			
CN101	PQJP2D59Z	CONNECTOR	1
CN200	PQJT3119X	METAL PARTS	1
CN201	PQJT3119X	METAL PARTS	1
CN202	PQJT3119X	METAL PARTS	1
(SWITCHES)			
S100	ESD11V120	SWITCH	1
S101	ESD11H120	SWITCH	1
S102	PQSH1A57Z	SWITCH	1
S103	EVQ21005G	SWITCH	1
S104	EVQ21005G	SWITCH	1
S105	EVQ21005G	SWITCH 3726E Only	1
S106	EVQ21005G	SWITCH	1
S107	EVQ21005G	SWITCH	1

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Ref. No.	Part No.	Part Name & Description	Pcs/Set	Ref. No.	Part No.	Value	Pcs/Set
S108	EVQ21005G	SWITCH	1			(RESISTORS)	
S109	EVQ21005G	SWITCH	1	R1	PQ4R10XJ100	10	1
S110	EVQ21005G	SWITCH	1	R2	PQ4R18XJ184	180K	1
				R3	ERJ3GEYJ104	100K	1
				R4	ERJ3GEYJ563	56K	1
				R6	ERJ3GEYJ470	47	1
				R7	ERJ3GEYJ473	47K	1
				R8	ERJ3GEYJ681	680	1
				R9	ERJ3GEYJ182	1.8K	1
		(CRYSTALS)		R10	ERJ3GEYJ102	1K	1
X1	PQVBA2.137G1	CRYSTAL OSCILLATOR	1	R11	ERJ3GEYJ182	1.8K	1
X1	PQVBA2.157G1	CRYSTAL OSCILLATOR	1	R12	ERJ3GEYJ102	1K	1
X2	PQVBA2.177G1	CRYSTAL OSCILLATOR	1	R13	ERJ3GEYJ103	10K	1
X2	PQVBA2.197G1	CRYSTAL OSCILLATOR	1	R14	ERJ3GEYJ101	100	1
X3	PQVCJ15.827N	CRYSTAL OSCILLATOR	1	R16	ERJ3GEYJ564	560K	1
X3	PQVCJ15.827N	CRYSTAL OSCILLATOR 3716E Only	1	R17	ERJ3GEYJ223	22K	1
				R18	ERJ3GEYJ474	470K	1
X4	PQVCJ15.835N	CRYSTAL OSCILLATOR	1	R19	ERJ3GEYJ183	18K	1
X4	PQVCJ15.839N	CRYSTAL OSCILLATOR	1	R20	ERJ3GEYJ683	68K	1
X100	PQVBB1216J	CRYSTAL OSCILLATOR	1	R21	PQ4R18XJ333	33K	1
X101	PQVCL3276N9Z	CRYSTAL OSCILLATOR	1	R22	ERJ3GEYJ224	220K	1
				R23	ERJ3GEYJ224	220K	1
		(COILS)		R24	ERJ3GEYJ563	56K	1
T1	EIR7QF022A	TRANSFORMER	1	R25	ERJ3GEYJ104	100K	1
T2	PQLA7A7	COIL	1	R26	ERJ3GEYJ153	15K	1
T3	PQLA7A7	COIL	1	R27	ERJ3GEYJ333	33K	1
L1	PQL07A3	COIL	1	R28	ERJ3GEYJ102	1K	1
L2	PQL07A3	COIL	1	R29	PQ4R18XJ103	10K	1
L3	PQLI2B201	I.F. TRANSFORMER	1	R29	PQ4R10XJ103	10K	3716E Only 3726E Only
L100	PQLQZM100K	COIL	1	R30	ERJ3GEYJ103	10K	1
				R31	ERJ3GEYJ123	12K	1
		(VARIABLE RESISTORS)		R32	ERJ3GEYJ223	22K	1
VR1	EVNDXAA03B15	VARIABLE RESISTOR	1	R33	ERJ3GEYJ333	33K	1
VR2	EVNDXAA03B15	VARIABLE RESISTOR	1	R34	ERJ3GEYJ394	390K	1
VR3	EVNDXAA03B15	VARIABLE RESISTOR	1	R35	ERJ3GEYJ104	100K	1
VR4	EVNDXAA03B54	VARIABLE RESISTOR	1	R36	ERJ3GEYJ332	3.3K	1
				R37	ERJ3GEYJ333	33K	1
		(WIRES)		R38	ERJ3GEYJ333	33K	1
W1	WBX13SH-4SS	LEAD WIRE	1	R39	ERJ3GEYJ333	33K	1
W2	WBX5SH-5SS	LEAD WIRE	1				
				R40	ERJ3GEYJ223	22K	1
		(CERAMIC FILTERS)		R42	ERJ3GEYJ333	33K	1
CF1	PQVFCFW455F1	CERAMIC FILTER	1	R43	ERJ3GEYJ333	33K	1
				R44	ERJ3GEYJ564	560K	1
		(OTHERS)		R45	ERJ3GEYJ103	10K	1
VC1	ECRLA030E53	TRIMMER CAPACITOR	1	R46	PQ4R18XJ102	1K	1
VC2	PQCVTZ10R	TRIMMER CAPACITOR	1	R47	ERJ3GEYJ153	15K	1
VC3	ECRLA020E53	TRIMMER CAPACITOR	1	R48	ERJ3GEYJ153	15K	1
VC4	ECRLA030E53	TRIMMER CAPACITOR	1	R49	ERJ3GEYJ153	15K	1
VC5	ECRLA030E53	TRIMMER CAPACITOR	1				
J2	ERJ3GEY0R00	CHIP JUMPER	1	R50	ERJ3GEYJ563	56K	1
J101	PQ4R18XJ000	CHIP JUMPER	1	R51	PQ4R10XJ682	6.8K	1
J200	PQ4R10XJ000	CHIP JUMPER	1	R52	ERJ3GEYJ154	150K	1
MIC	PQJM124Z	MICROPHONE	1	R53	ERJ3GEYJ152	1.5K	1
BZR	PQEFBQM111G1	BUZZER	1	R54	ERJ3GEYJ224	220K	1
BAR ANT	PQLF215	FERRITE ANTENNA COIL	1	R55	ERJ3GEYJ223	22K	1
				R56	ERJ3GEYJ104	100K	1
				R57	ERJ3GEYJ224	220K	1
				R58	ERJ3GEYJ103	10K	1
				R59	ERJ3GEYJ104	100K	1
				R60	ERJ3GEYJ153	15K	1
				R61	ERJ3GEYJ153	15K	1
				R62	ERJ3GEYJ333	33K	1
				R63	ERJ3GEYJ333	33K	1
				R64	ERJ3GEYJ222	2.2K	1
				R65	ERJ3GEYJ222	2.2K	1
				R66	PQ4R10XJ470	47	1

This replacement parts list is for U.K. version only. Refer to the simplified manual (cover) for other areas.

Ref. No.	Part No.	Value	Pcs/Set	Ref. No.	Part No.	Value	Pcs/Set
R67	PQ4R10XJ273	27K	1	C18	ECUV1H330JCV	33P	1
R68	PQ4R10XJ470	47	1	C19	PQCUV1E104MD	0.1	1
R69	ERJ3GEYJ683	68K	1	C20	ECUV1H471JCV	470P	1
R70	PQ4R10XJ152	1.5K	1	C21	ECUV1H681JCV	680P	1
R100	PQ4R10XJ104	100K	1	C22	ECUV1H103KBV	0.01	1
R104	PQ4R10XJ224	220K	1	C23	ECUV1H103KBV	0.01	1
R106	PQ4R10XJ220	22	1	C24	PQCUV1E104MD	0.1	1
R107	PQ4R10XJ561	560	1	C26	ECEA0JK221	220	1
R108	PQ4R10XJ561	560	1	C27	PQCUV1H103KB	0.01	1
R109	PQ4R10XJ152	1.5K	1	C28	ECEA1CK220	22	1
R110	PQ4R10XJ223	22K	1	C29	ECUV1H102KBV	0.001	1
R111	PQ4R10XJ223	22K	1	C30	ECUV1H104MD	0.1	3716E Only
R112	PQ4R18XJ473	47K	1	C30	PQCUV1E104MD	0.1	3726E Only
R113	PQ4R18XJ223	22K	1	C31	PQCUV1C683MD	0.068	1
R114	PQ4R10XJ104	100K	1	C32	PQCUV1E104MD	0.1	1
R115	PQ4R10XJ104	100K	1	C33	ECEA1HKS4R7	4.7	1
R116	PQ4R18XJ822	8.2K	1	C34	ECEA1CK100	10	1
R117	PQ4R10XJ102	1K	1	C35	ECUV1H223MD	0.022	1
R118	PQ4R18XJ102	1K	1	C36	PQCUV1H223KB	0.022	1
R119	PQ4R10XJ332	3.3K	1	C37	PQCUV1H223KB	0.022	1
R120	PQ4R18XJ000	0	1	C38	ECEA1HKS010	1	1
R121	PQ4R10XJ104	100K	1	C39	ECUV1H472KBV	0.0047	1
R122	PQ4R10XJ101	100	1	C40	PQCUV1E333MD	0.033	1
R123	PQ4R10XJ221	220	1	C41	PQCUV1C683MD	0.068	1
R124	PQ4R18XJ102	1K	1	C42	PQCUV1E104MD	0.1	1
R125	PQ4R18XJ331	330	1	C44	PQCUV1E104MD	0.1	1
R126	PQ4R10XJ122	1.2K	1	C45	ECEA0JK331	330	1
R127	PQ4R10XJ221	220	1	C46	ECUV1H391JCV	390P	1
R128	PQ4R10XJ150	15	1	C47	ECUV1H272KBV	0.0027	1
R129	PQ4R10XJ182	1.8K	1	C48	PQCUV1E104MD	0.1	1
R130	PQ4R18XJ102	1K	1	C49	PQCUV1E104MD	0.1	1
R131	PQ4R10XJ101	100	1	C50	ECEA1HKS010	1	1
R132	PQ4R10XJ104	100K	1	C51	ECEA1CK100	10	1
R133	PQ4R10XJ104	100K	1	C52	ECEA1HKS4R7	4.7	1
R210	PQ4R10XJ100	10	1	C53	PQCUV1H223KB	0.022	1
R211	PQ4R18XJ332	3.3K	1	C54	ECUV1H101JCV	100P	1
R212	PQ4R10XJ100	10	1	C55	ECUV1H182KBV	0.0018	1
R213	ERJ3GEYJ103	10K	1	C56	ECEA1HKS010	1	1
R214	PQ4R18XJ392	3.9K	1	C57	ECEA1HKS010	1	1
C1	PQCUV1H560JC	56P	1	C58	PQCUV1E104MD	0.1	1
C2	PQCUV1E104MD	0.1	1	C59	ECUV1H471JCV	470P	1
C3	ECUV1H103KBV	0.01	1	C60	ECUV1H471JCV	470P	1
C5	ECUV1H103KBV	0.01	1	C61	ECUV1H101JCV	100P	1
C6	ECUV1H020CCV	2P	1	C62	ECUV1H101JCV	100P	1
C7	ECUV1H221JC	220P	1	C63	ECUV1H101JCV	100P	1
C8	ECUV1H103KBV	0.01	1	C64	ECUV1H101JCV	100P	1
C9	PQCUV1H103KB	0.01	1	C65	ECUV1H103KBV	0.01	1
C10	ECUV1H103KBV	0.01	1	C66	PQCUV1H050DC	5P	1
C11	ECUV1H101JCV	100P	1	C67	PQCUV1H103KB	0.01	1
C12	ECUV1H101JCV	100P	1	C68	ECUV1H330JCV	33P	1
C13	PQCUV1H392KB	0.0039	1	C69	ECUV1H090DCV	9P	1
C14	ECEA1HKS010	1	1	C100	ECEA0GKS221	220	1
C15	PQCUV1H152KB	0.0015	1	C102	ECST0GX226	22	1
C16	ECUV1H270JCV	27P	1	C103	PQCUV1H332KB	0.0033	1
C17	PQCUV1E104MD	0.1	1	C104	ECUV1H101JC	100P	1
		(CAPACITORS)		C105	ECUV1H101JC	100P	1
				C106	ECUV1H103KB	0.01	1
				C107	PQCUV1H180JC	18P	1
		3726E Only		C108	PQCUV1H180JC	18P	1
				C109	PQCUV1E104MD	0.1	1
				C110	ECEA1HKS010	1	1
				C111	ECEA0JK331	330	1
				C112	ECEA0JKS220	22	1

This replacement parts list is for U.K. version only. Refer to the simplified manual (cover) for other areas.

Ref. No.	Part No.	Value	Pcs/Set
C113	PQCUV1H103KB	0.01	1
C114	ECST0GX226	22	1
C170	ECUV1H121JCV	120P	1
C204	ECUV1H103KBV	0.01	1
C205	ECUV1H102KBV	0.001	1

KX-T3716E/KX-T3726E			
Ref. No.	Part No.	Part Name & Description	Pcs/Set
ACCESSORIES			
A1	KX-A36A	RECHARGEABLE BATTERY	1
A2	KX-A14BEXE	AC ADAPTOR	1
A3	PQJA87T	TELEPHONE CORD	1
A4	PQKL24Z7	WALL MOUNT BRACKET	1
A5	PQXX10557Z	INSTRUCTION BOOK 3716E Only	1
A5	PQXX10558Z	INSTRUCTION BOOK 3726E Only	1
A6	PQQW10503Z	QUICK REFERENCE GUIDE 3716E Only	1
A6	PQQW10504Z	QUICK REFERENCE GUIDE 3726E Only	1
A7	PQZXXT2330M	WALL MOUNT KIT	1
PACKING MATERIALS			
P1	XZB20X35A01	PROTECTION COVER (for Base Unit)	1
P2	PQPP94X	PROTECTION COVER (for Portable Unit)	1
P3	PQPK10493Z	GIFT BOX 3716E Only	1
P3	PQPK10494Z	GIFT BOX 3726E Only	1
P4	PQPD10216Z	PAD	1
P5	PQPN10225Z	PAD	1
P6	PQPN10226Z	ACCESSORY BOX	1

Notes: Ref. No. A1: Refer to page 49.
Ref. No. A3: Refer to pages 47, 48.

HOW TO REPLACE FLAT PACKAGE IC

■ PREPARATION

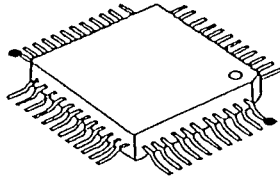
- SOLDER Sparkle Solder 115A-1, 115B-1
OR
Almit Solder KR-19, KR-19RMA
- Soldering iron Recommended power consumption will be between 30 W to 40 W.
Temperature of Copper Rod 662 ±50° F (350 ±10° C)

(An expert may handle 60-80 W iron, but a beginner might damage the foil by **overheating**.)
- Flux HI115 Specific gravity 0.863

(Original flux will be replaced daily.)

■ PROCEDURE

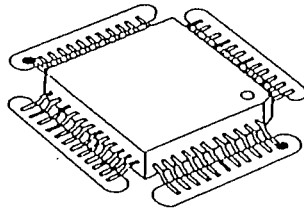
1. Temporary fix for FLAT PACKAGE IC by Soldering on the marked 2 pins.



●Temporary soldering point.

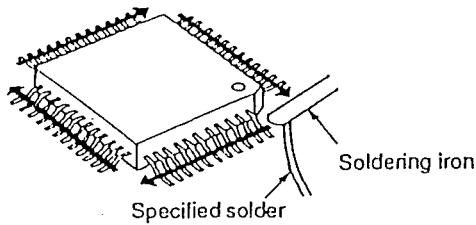
*A most important matter is the accurate setting of IC to the corresponding soldering foil.

2. Apply flux for all pins of FLAT PACKAGE IC.



○Flux

3. Employ the soldering iron as shown by the arrows in the figure below.



■ MODIFICATION PROCEDURE OF BRIDGE

1. Re-solder slightly on bridging portion.
2. Remove remained solder along pins employing soldering iron as shown in below Figure.

