

ORDER NO. KM49112915C1  
F1

# Service Manual

## and Technical Guide

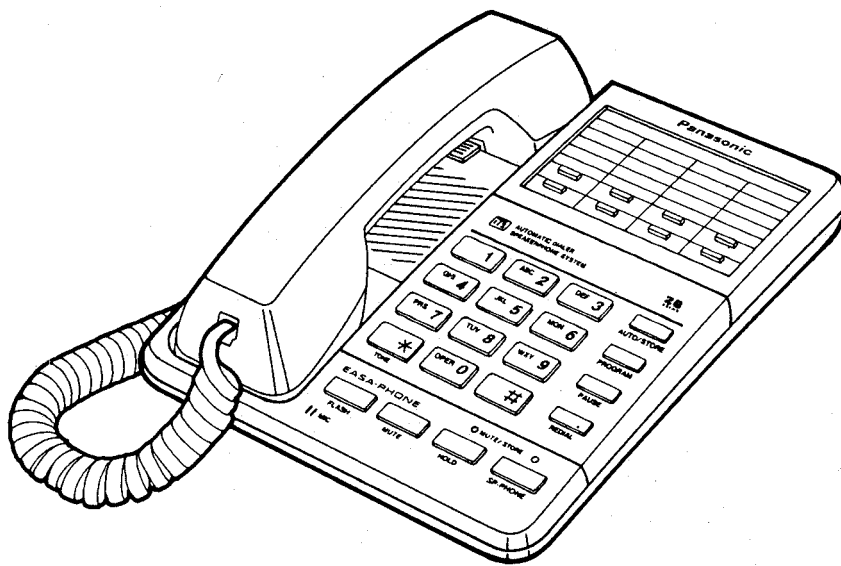
Telephone Equipment

# KX-T2315-1

EASA-PHONE®



Integrated  
Telephone System



**SPECIFICATIONS\ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ**

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**ACCESSORIES AND PACKING MATERIALS\ПРИНАДЛЕЖНОСТИ И УПАКОВОЧНЫЕ МАТЕРИАЛЫ**

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ЭЛЕКТРИЧЕСКИХ ЧАСТЕЙ**

**REPLACEMENT PARTS LIST\СПИСОК ЗАПАСНЫХ ЧАСТЕЙ**

# Panasonic

## ■ SPECIFICATIONS

Power Source:	Telephone line voltage
Memory Capacity:	28 telephone numbers, up to 16 digits for each station
Dial Speed:	Tone (DTMF)/Pulse (10 pps)
Redial:	Last dialed telephone number
Pause:	3.5sec
Speaker:	Handset; 3 cm (1 <sup>3</sup> / <sub>16</sub> " ) PM dynamic type receiver unit, 150Ω
Microphone:	Electret condenser microphone
Dimensions:	167 (W) × 70 (H) × 220 (D) mm (6 <sup>9</sup> / <sub>16</sub> "×2 <sup>3</sup> / <sub>4</sub> "×8 <sup>21</sup> / <sub>32</sub> " )
Weight:	910 g (2 lb 0.1 oz)

Design and specifications are subject to change without notice.

# CPU DATA

IC1: PQVI73722



Pin No.	Port	Function	High	Low
1~5	R1~R5	Key Input	Disable	Enable
6	Ex-Hook	Hold Cancel Signal Input	Enable	Disable
7	Restrict	Dial Control Input		Normal
8	Program	Memory Mode Input	Enable	Disable
9	On/Off Key	Speakerphone Key Input	Enable	Disable
10	SI/Key	Serial Input/Keyboard Scan	Serial Input	Keyboard Scan
11	Hook Switch	Hook Switch Input	On-Hook	Off-Hook
12	Pulse Speed	Pulse Speed 20pps/10pps	20pps	10pps
13	Pulse/Tone	Pulse/Tone Switch Input	Pulse	Tone
14	% Break	% Break 33%/39%	33%	39%
15	OSCI	Oscillator		
16	OSCO	Oscillator		
17	Stop	Stand-by Mode Input	Disable	Enable
18	-----	-----		
19	-----	-----		
20	SP/HS	Speakerphone/Handset	Speakerphone	Handset
21	DTMF	DTMF Output		
22	Backup	Backup Output	OFF	ON
23	SP-Mute	SP Mute Output	OFF	ON
24	ON LED	Speakerphone LED Output	Light on	Light Off
25	DP	Dial Pulse Output	Make	Break
26	Key Tone	Key Tone Output		Normal
27	TR	Hook Control Output	ON	OFF
28	Mute/Hold LED	Mute/Hold LED Output	Light on	Light Off
29	Mic Mute	Mic Mute Output	ON	OFF
30	Reset	Reset Input	Normal	Reset
31~34	C3~C6	Key Strobe Output		
35	C1	Key Strobe Output	Disable	Enable
36	C2	Key Strobe Output		

# ACCESSORIES & PACKING MATERIALS

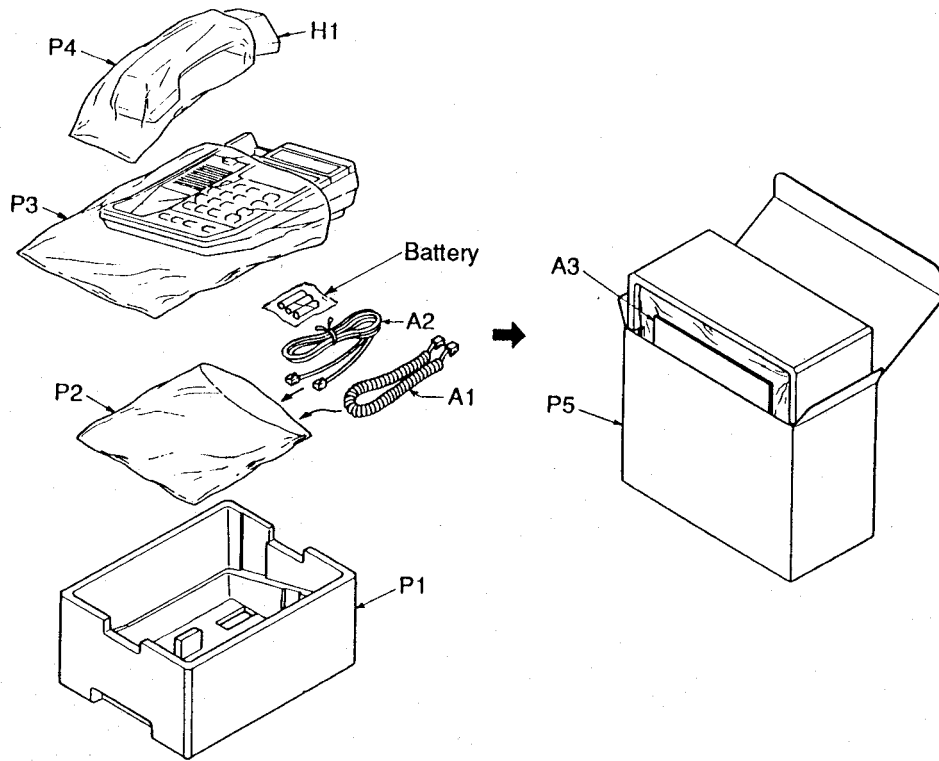
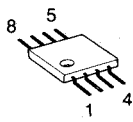
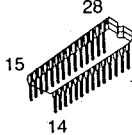
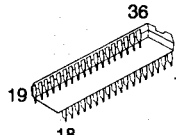
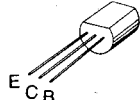
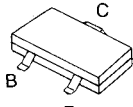
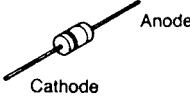
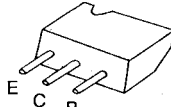
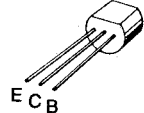
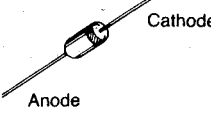
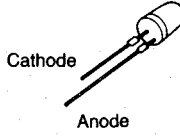


Fig. 5

# TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

 <p>PQVIBA8205F</p>	 <p>PQVISC79101S</p>	 <p>PQVI73722</p>	 <p>2SA1776P</p>	 <p>2SD1819A 2SB1218A UN5113</p>
 <p>MA4150 MA4300</p>	 <p>2SD662B</p>	 <p>PQVTKSD261CY</p>	 <p>Anode Cathode PQVDMZJ5R1C PQVDMZJ2R4A PQVDS5688G 1SS131 MA161</p>	 <p>Cathode Anode LN28RPL</p>

# IC BLOCK DIAGRAM

IC3 PQVIBA8205F

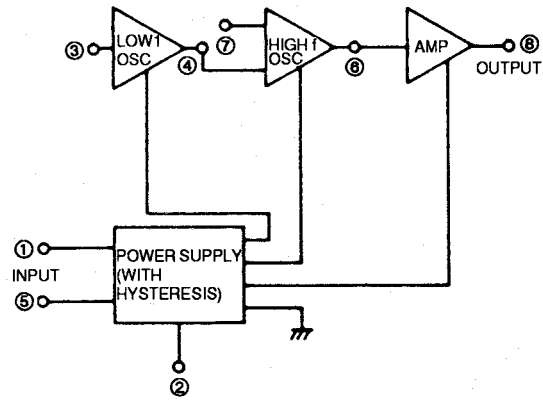
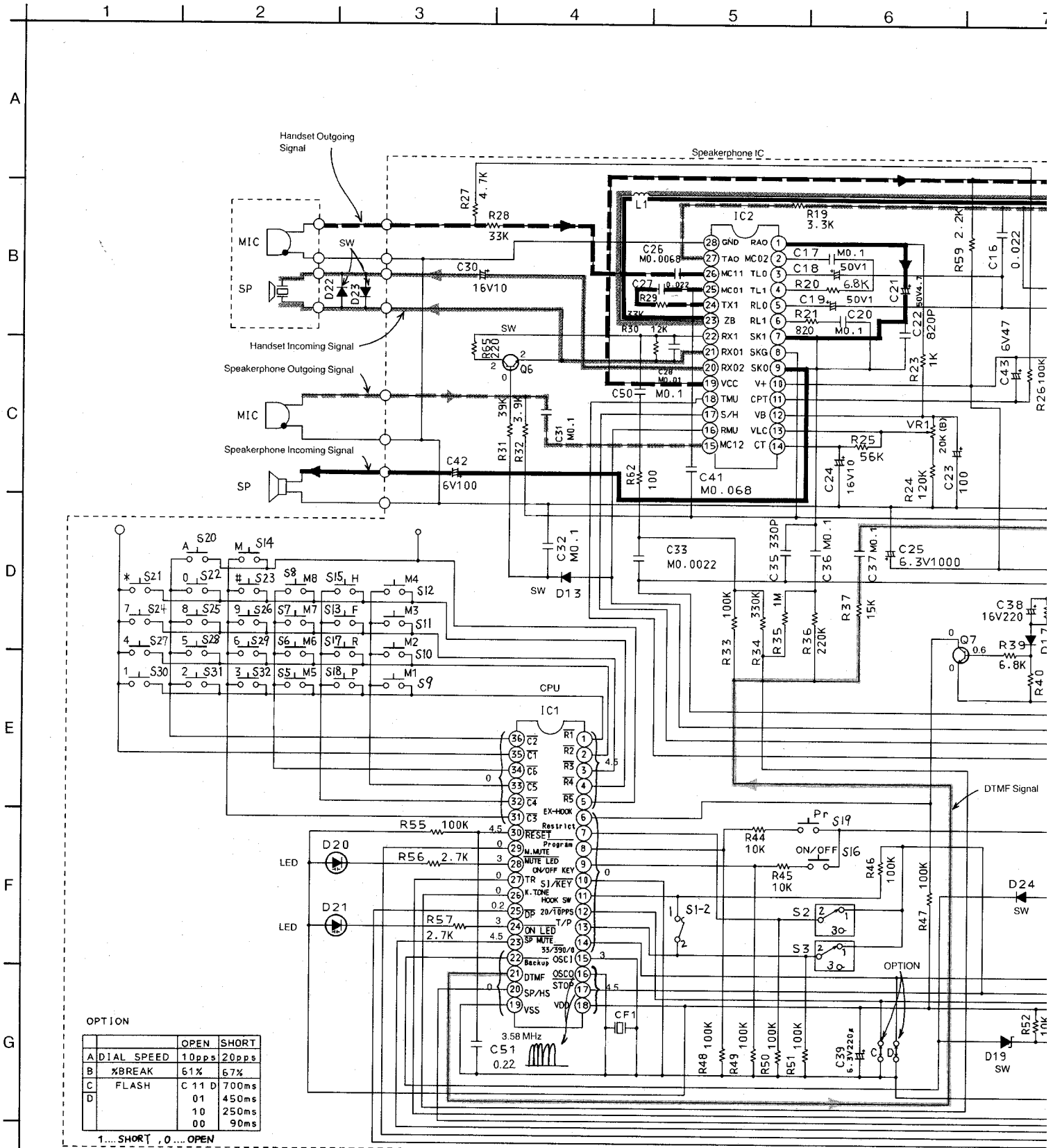


Fig. 6

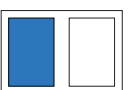
# SCHEMATIC DIAG



**OPTION**

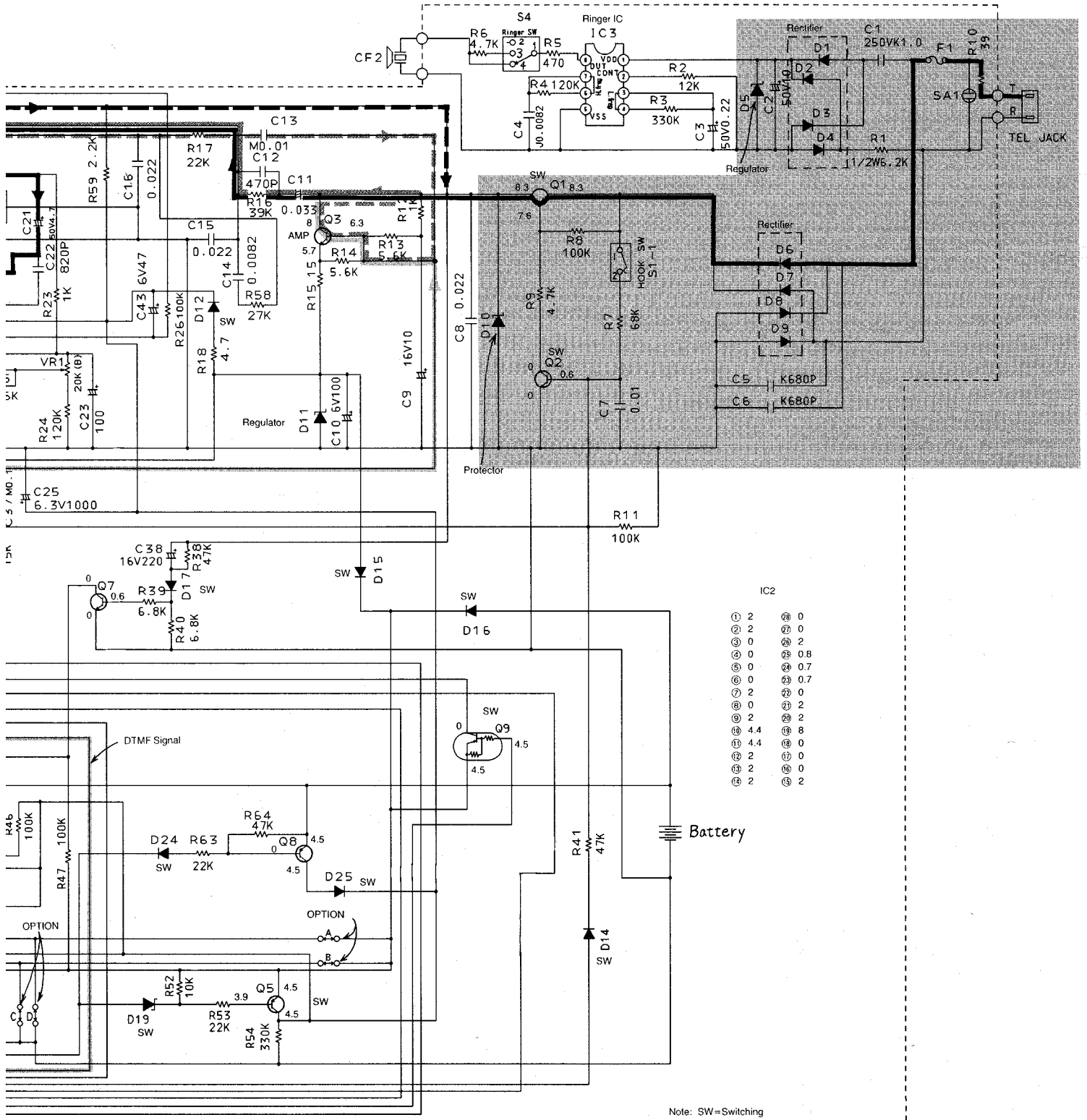
	OPEN	SHORT
A	DIAL SPEED 10pps	20pps
B	%BREAK 61%	67%
C	FLASH C 11 D	700ms
D		01 450ms
		10 250ms
		00 90ms

1... SHORT, 0... OPEN



# MATIC DIAGRAM

6 | 7 | 8 | 9 | 10 | 11 | 12



IC2

①	2	②⑧	0
②	2	②⑦	0
③	0	②⑥	2
④	0	②⑤	0.8
⑤	0	②④	0.7
⑥	0	②③	0.7
⑦	2	②②	0
⑧	0	②①	2
⑨	2	②⑦	2
⑩	4.4	②⑥	8
⑪	4.4	②⑤	0
⑫	2	②④	0
⑬	2	②③	0
⑭	2	②②	2



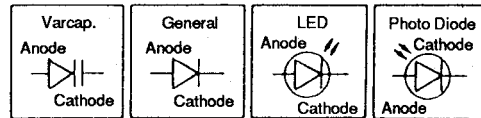
## ■ FOR SCHEMATIC DIAGRAM

### Notes:

1. S1: Hook switch in "ON-HOOK" position.
2. S2: Local call only switch.
3. S3: Dialing mode selector switch in "TONE" position.
4. S4: Ringer volume selector switch in "HIGH" position.
5. S5~12: Direct switch.
6. S13: Flash switch.
7. S14: Mute switch.
8. S15: Hold switch.
9. S16: Speakerphone switch.
10. S17: Redial switch.
11. S18: Pause switch.
12. S19: Program switch.
13. S20: Auto/Store switch.
15. DC voltage measurement is taken with electronic voltmeter from negative terminal of battery.  
(Add 40 mA to telephone line from the loop simulator.)  
Handset Mode (Off Hook Condition)

16. This schematic diagram may be modified at any time with the development of new technology.
- 17.

**Important safety notice**  
The shaded area on this schematic diagram incorporates special features important for protection from fire and electrical shock hazards. When servicing it is essential that only manufacturer's specified parts be used for the critical components in the shaded areas of the schematic.



## BLOCK DIAGRAM

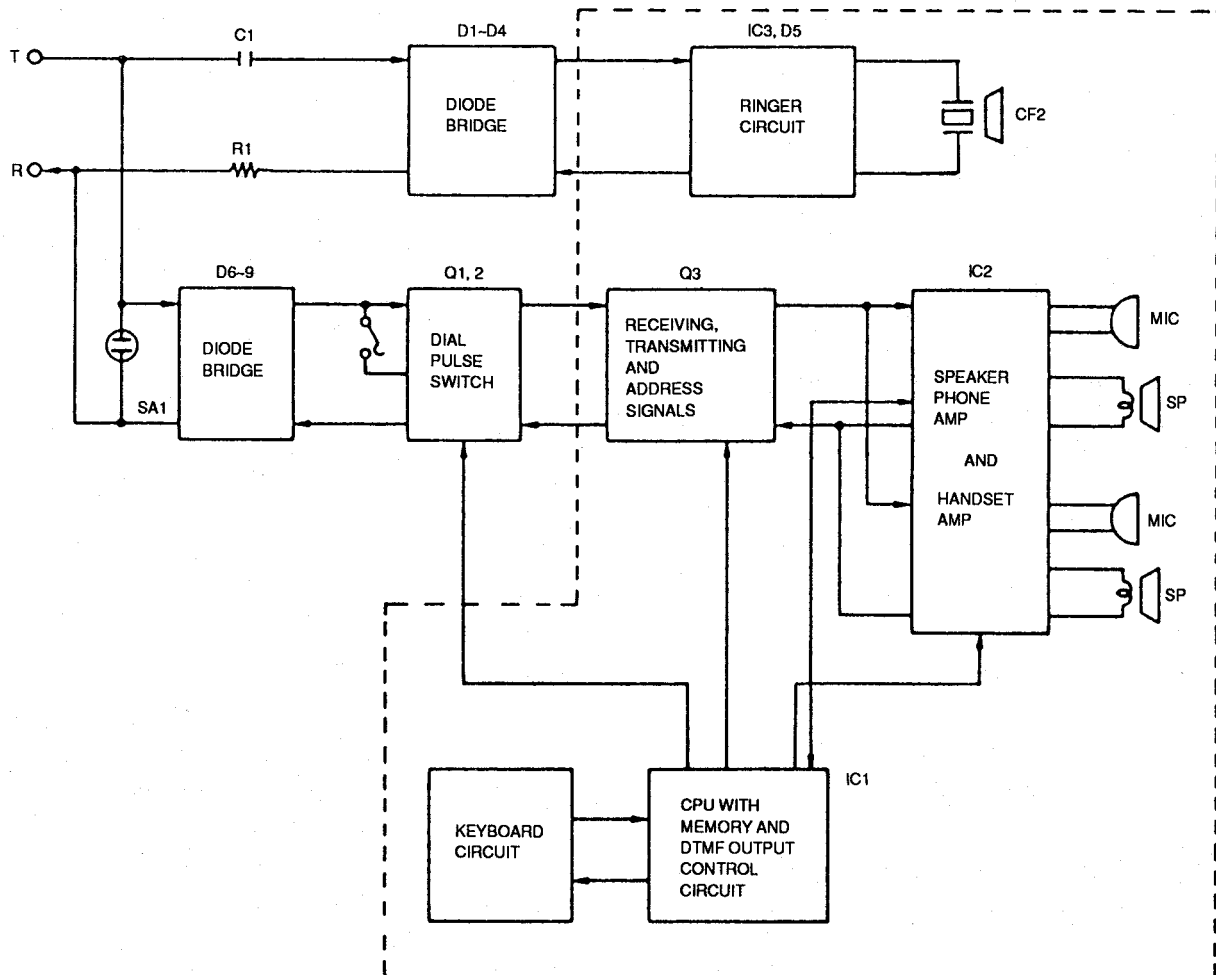
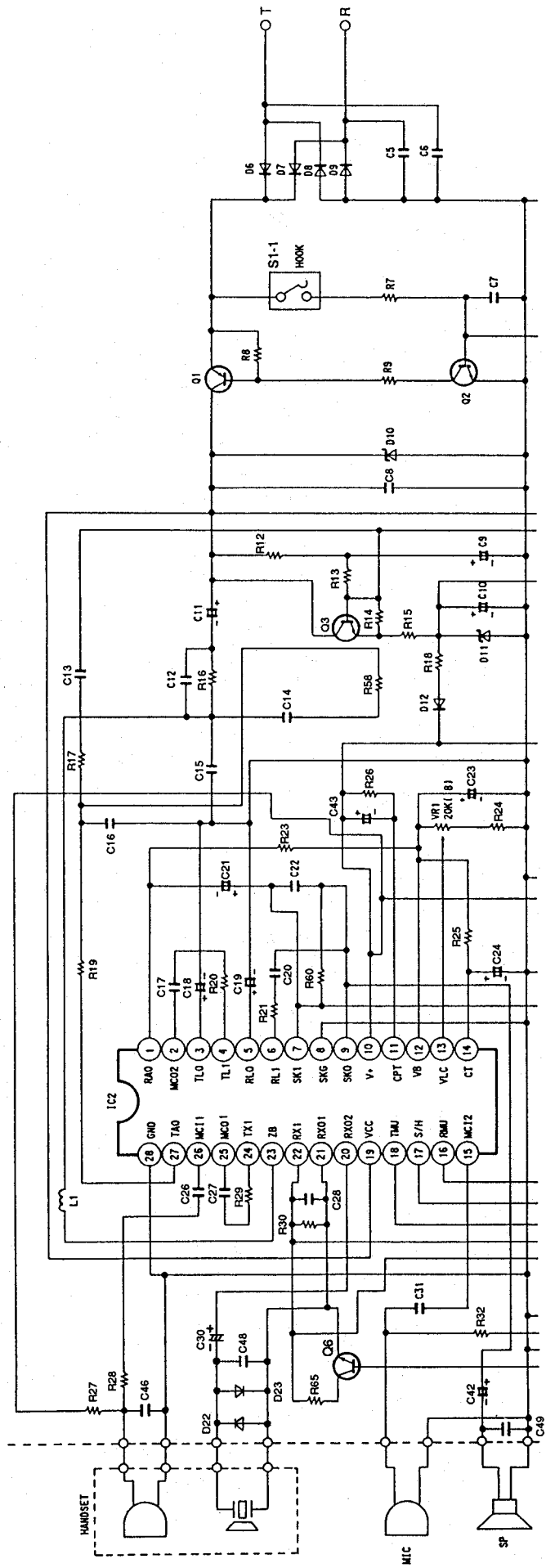


Fig. 7

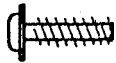



# Circuit Diagram



# CABINET AND ELECTRICAL PARTS LOCATION

## ACTUAL SIZE OF SCREWS

Part No.	
XTW3+S12P	
XTW3+S8P	

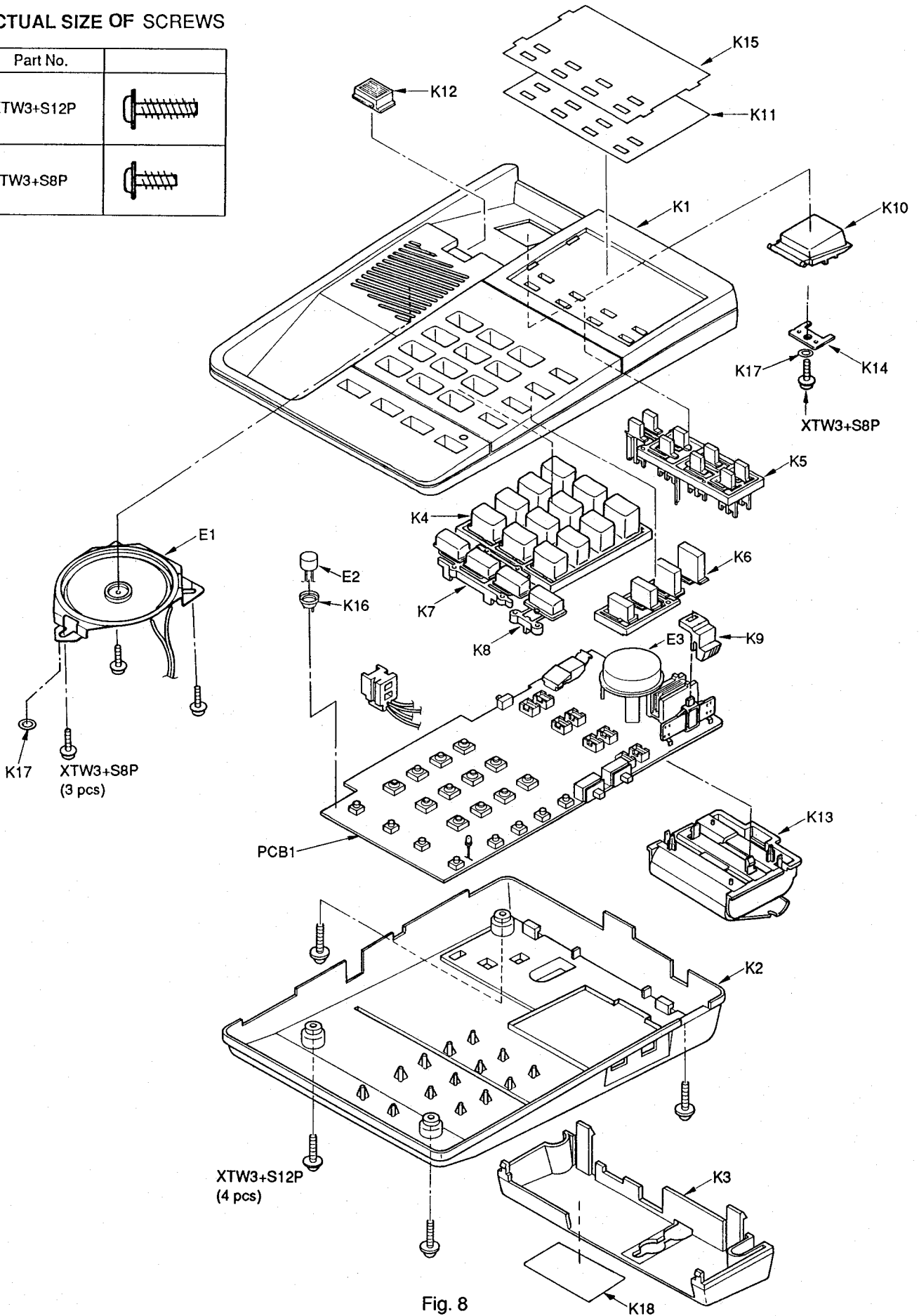


Fig. 8