

Rockway Industries Ltd

Service Manual VISION X2120



Rockway Industries Ltd.

Service Manual

Model: Vision X2120

Version: A

Date: Dec. 2003

CONTENT :

1.	Content	1
2.	Repair Tools	2
3.	Trouble Shooting Chart	
	3.1 No ring sound	3
	3.2 No dialing and LCD display, but timer mode OK.....	4
	3.3 No display but rest function OK	5
	3.4 No pulse dialing but rest function OK	6
	3.5 No tone dialing	7
	3.6 The unit not taking current but ring OK	8
	3.7 No handset receive but rest normal	9
	3.8 Handset no transmit but rest normal	10
	3.9 Hand free no transmit, but rest normal	11
	3.10 Hand free no receive, but rest normal	12
4.	Specification.....	13
5.	Schematic Diagram	14
6.	Block Diagram	15
7.	PCB Diagram	
	7.1 Main PCB	16 – 18
	7.2 LCD PCB	19 – 20
	7.3 Key PCB	21 – 22
8.	Critical Parts List	23 – 24

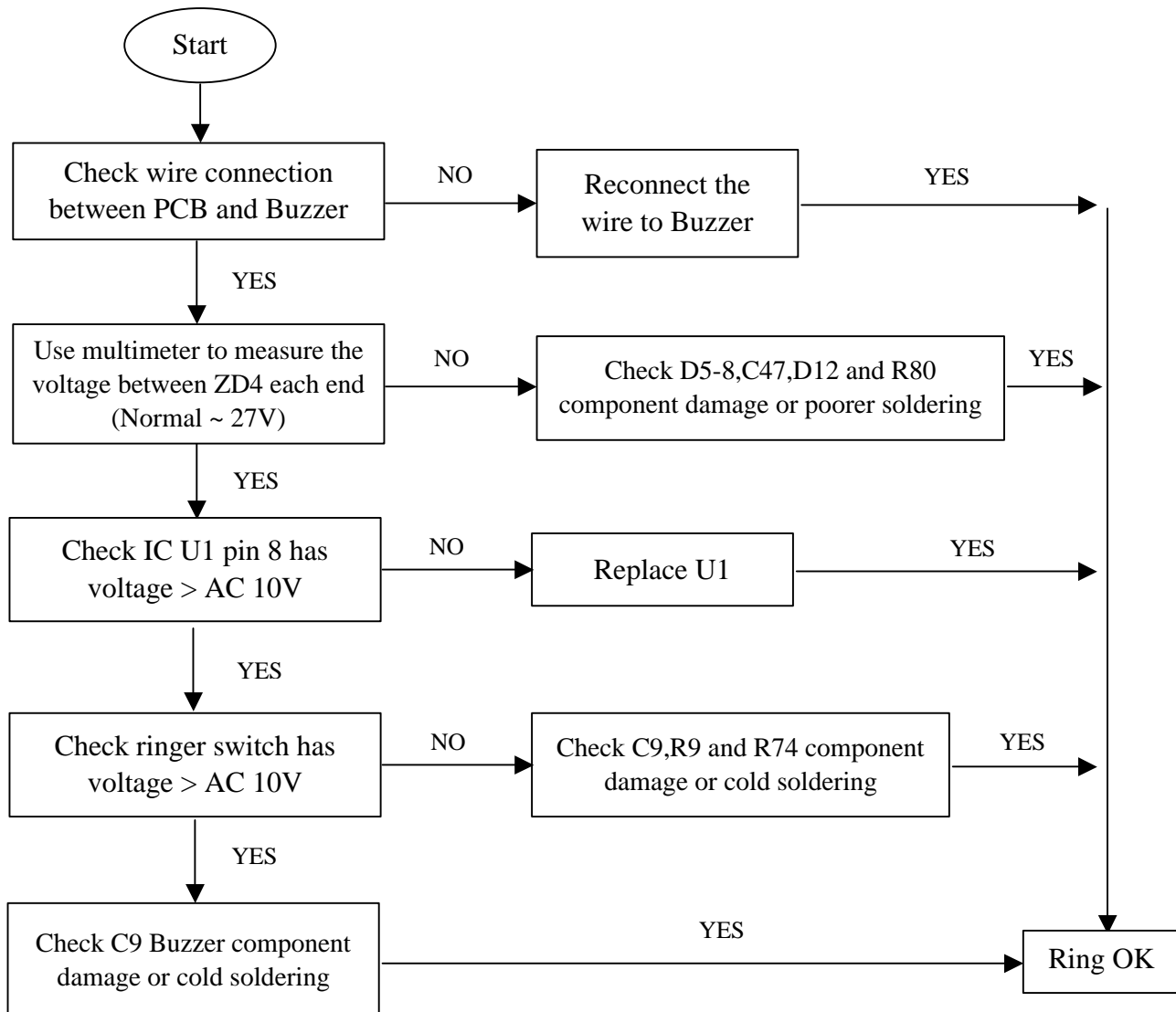
- **Repair Tools :**

1. Telephone analyzer(1076A DD5601)
2. Oscilloscope
3. Signal Generator
4. Multi-meter
5. Solider Iron
6. Plier,Seizer,Screw Driver,Solder Wire

Trouble Shooting Chart

Problem : No Ring sound

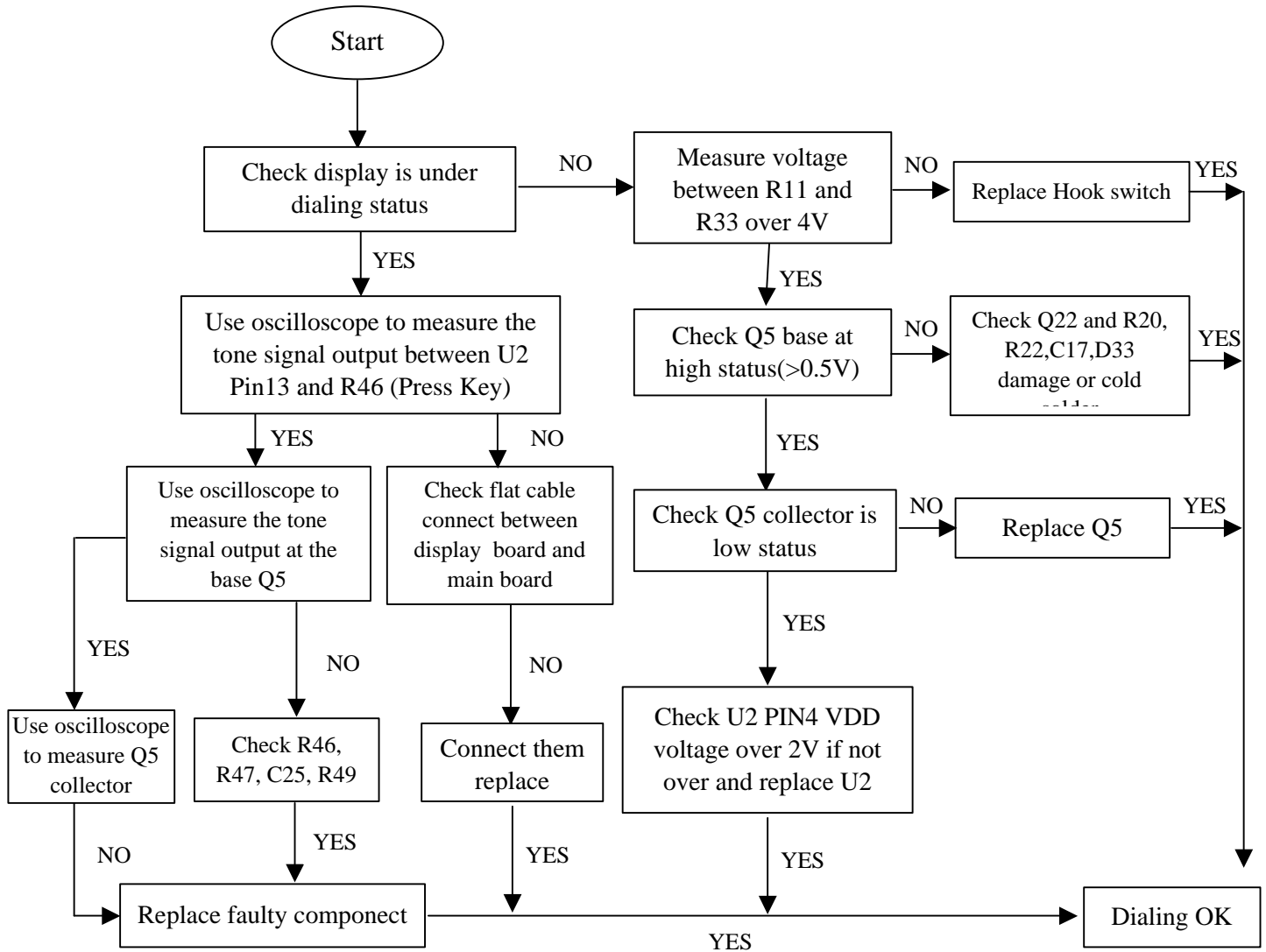
Condition : Connect the unit to telephone analyzer,Add 50Hz,70V ring signal between telephone line.



Trouble Shooting Chart

Problem : No dialing and LCD display, but timer mode OK

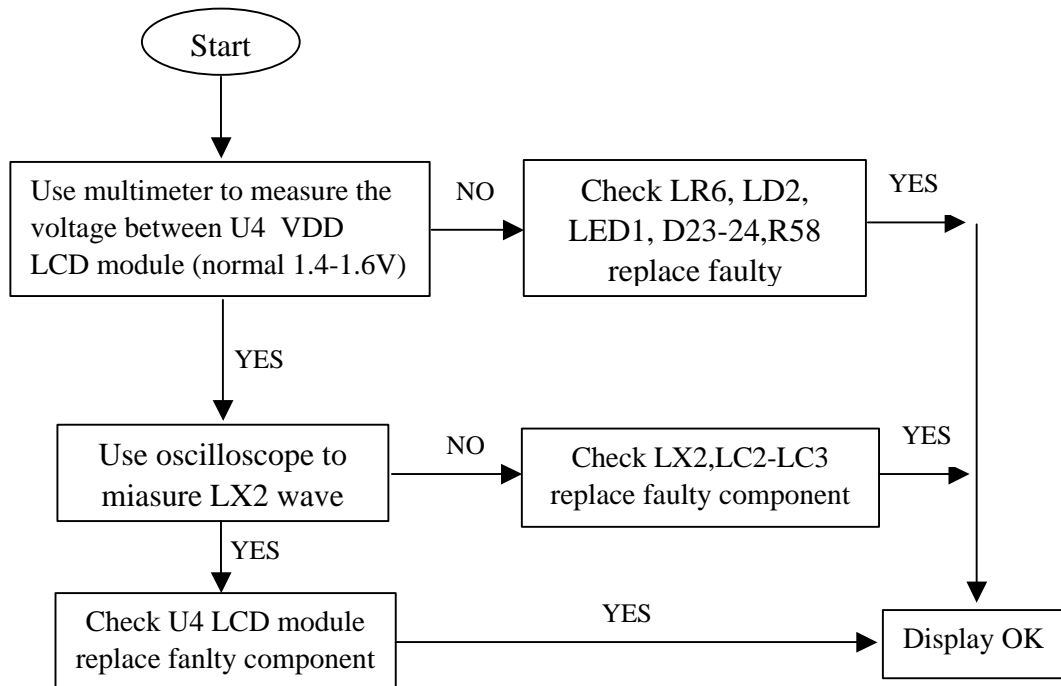
Condition : Connection the unit to real telephone line or telephone analyzer and pick up the handset.



Trouble Shooting Chart

Problem : No display but rest function OK

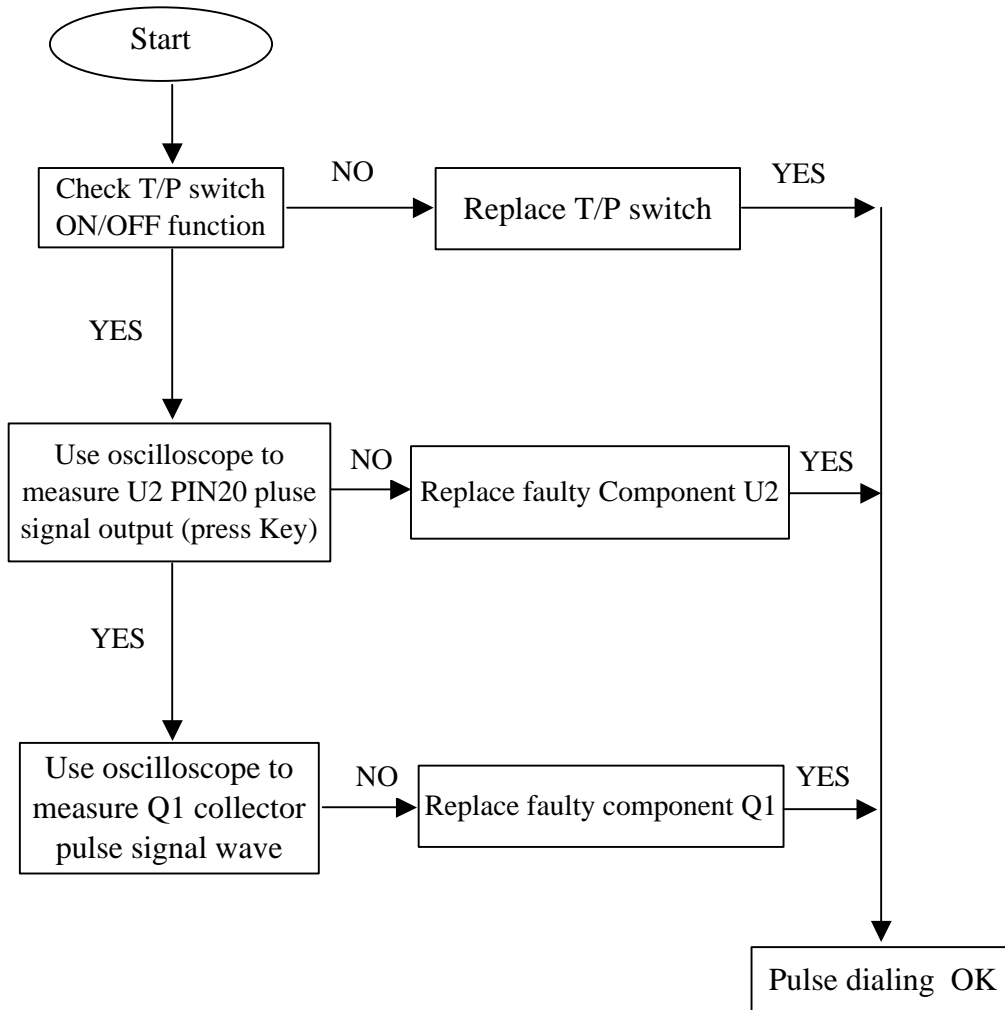
Condition : connection the unit to real telephone line or telephone analyzer and pick up the handset or ON HOOK status.



Trouble Shooting Chart

Problem : No pulse dialing but rest function OK

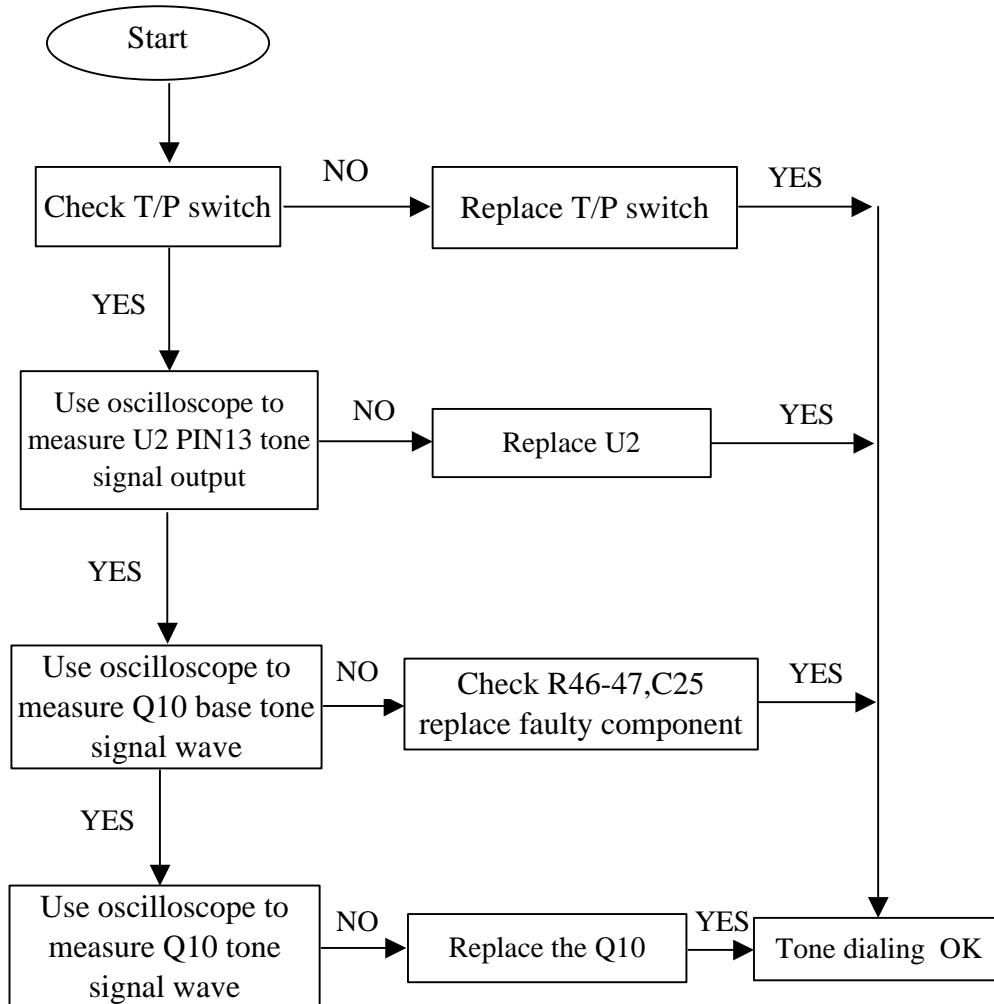
Condition : connection the unit to real telephone line or telephone analyzer and pick up the



Trouble Shooting Chart

Problem: No tone dialing

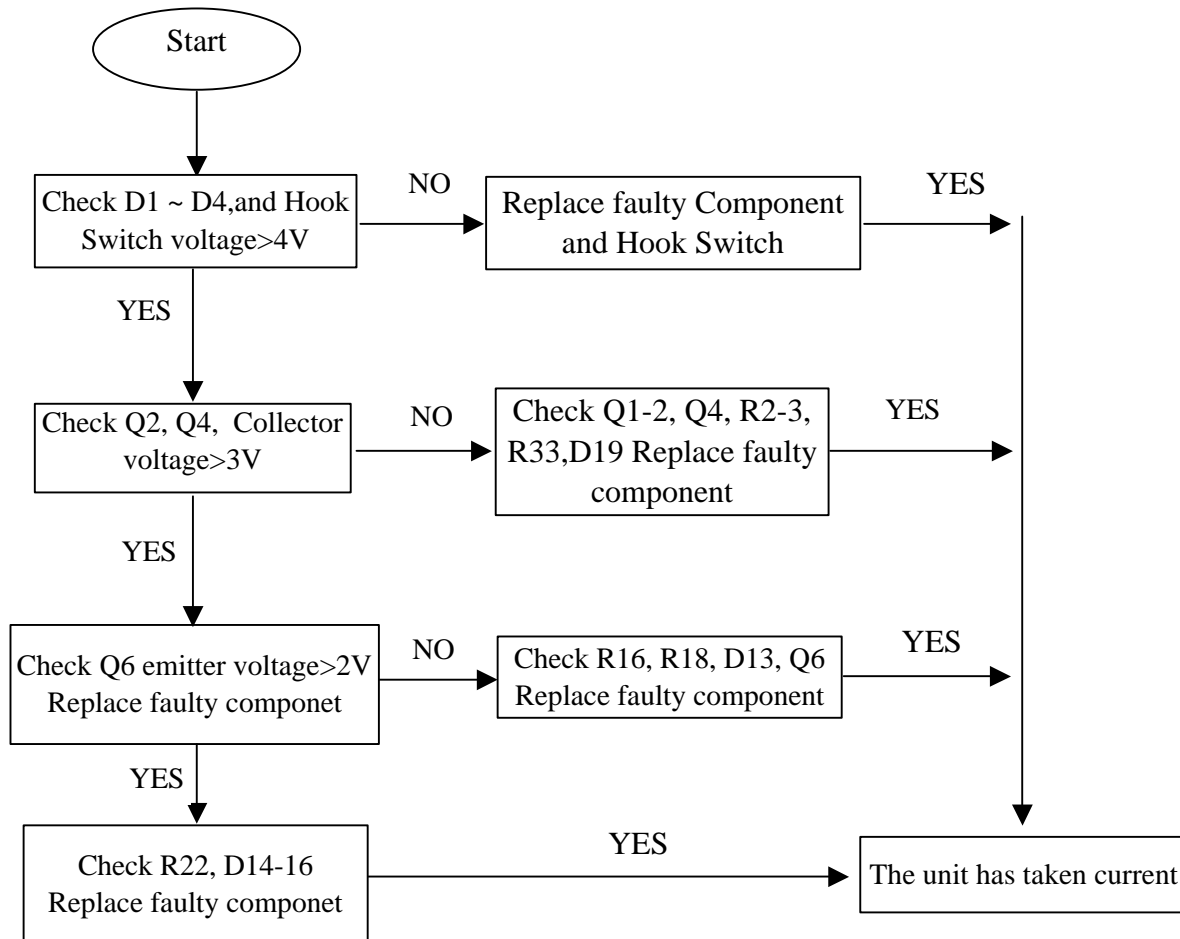
Condition: Connection the unit to real telephone line or telephone analyzer and pick up the handset



Trouble Shooting Chart

Problem: The unit not taking current but ring OK

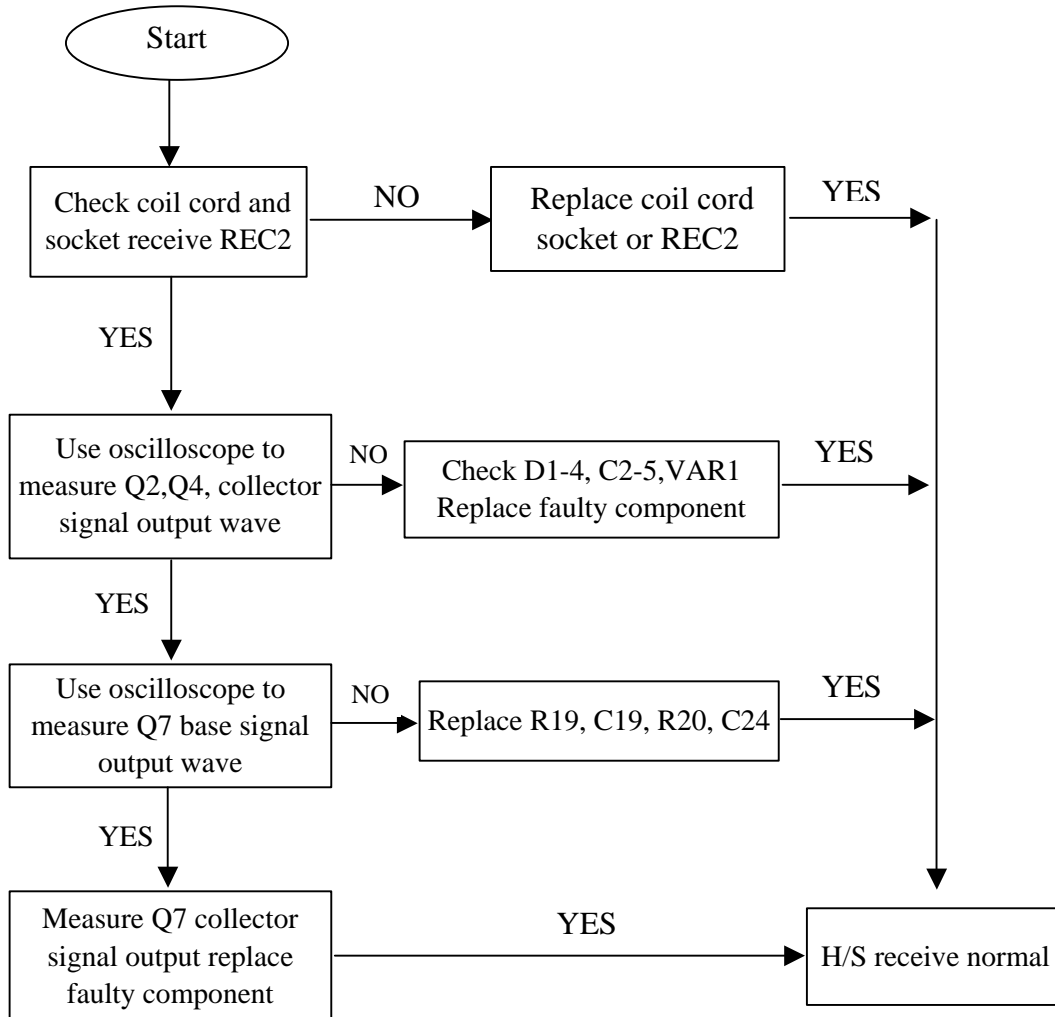
Condition: connection the unit to real telephone line or telephone analyzer and pick up the handset



Trouble Shooting Chart

Problem: No H/S receive but rest normal

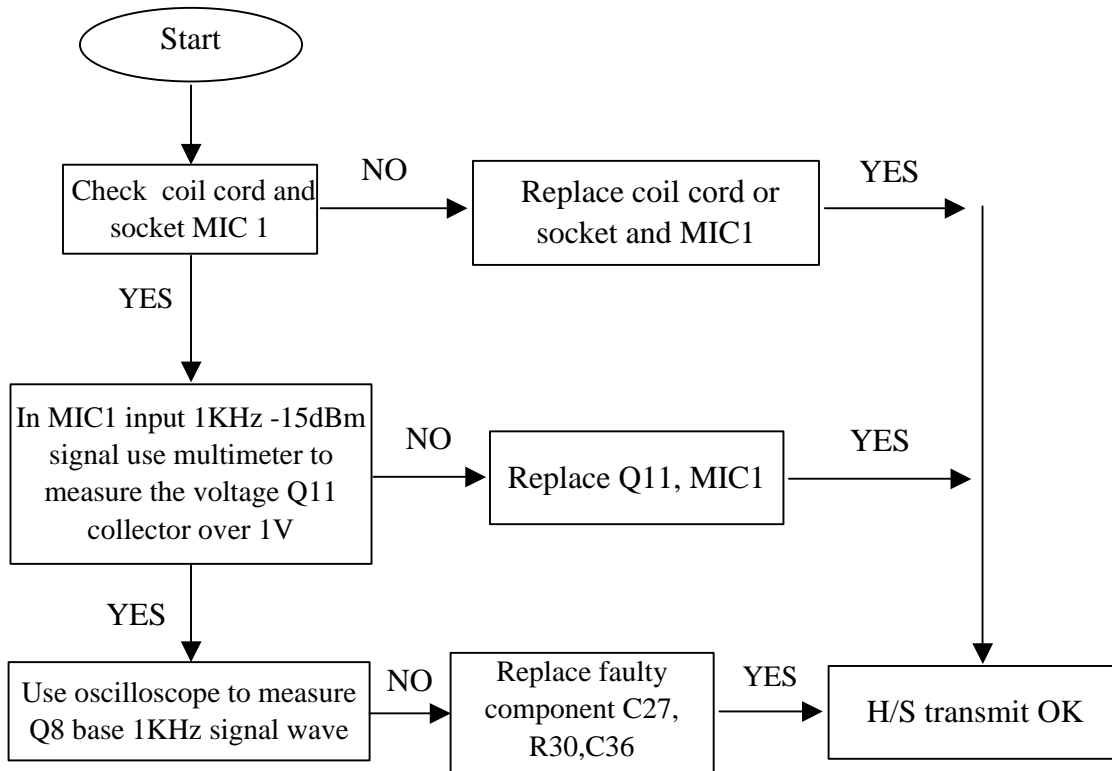
Condition: connection the unit to real telephone line or telephone analyzer and pick up the handset



Trouble Shooting Chart

Problem: H/S no transmit but rest normal

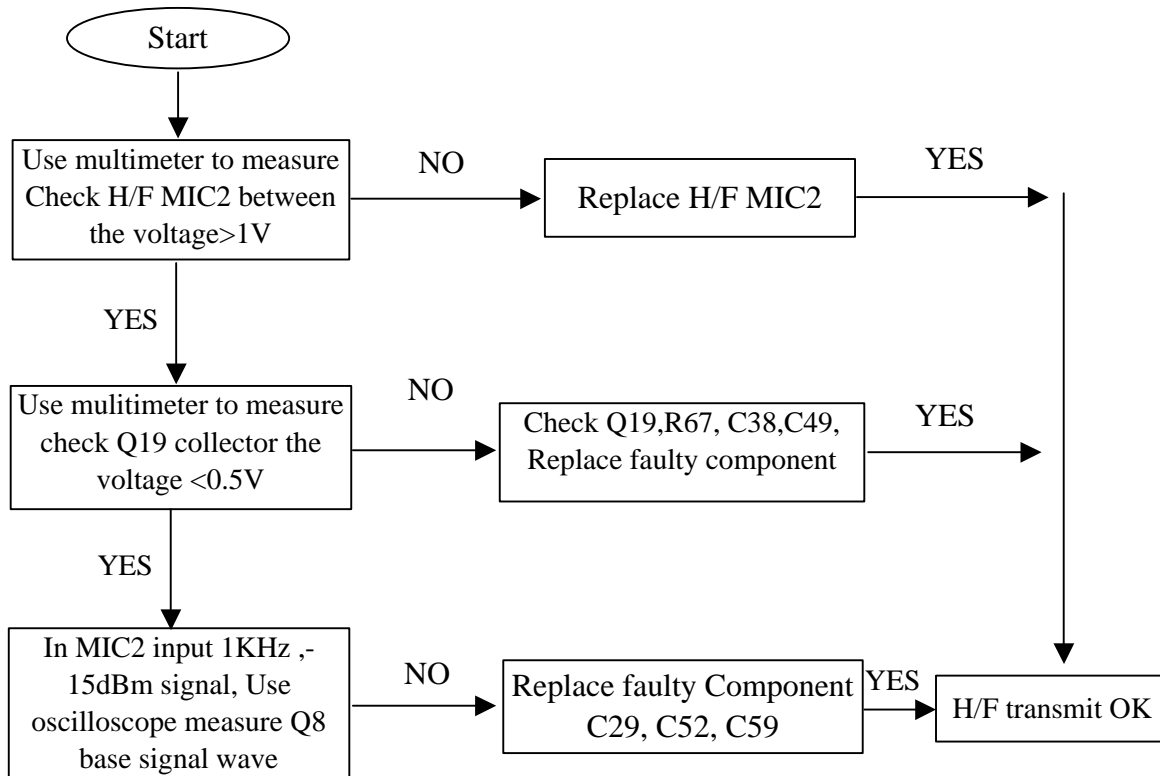
Condition: connection the unit to real telephone line or telephone analyzer and pick up the handset
set frequency and level at 1KHz , -15dB



Trouble Shooting Chart

Problem: H/F no transmit, but rest normal

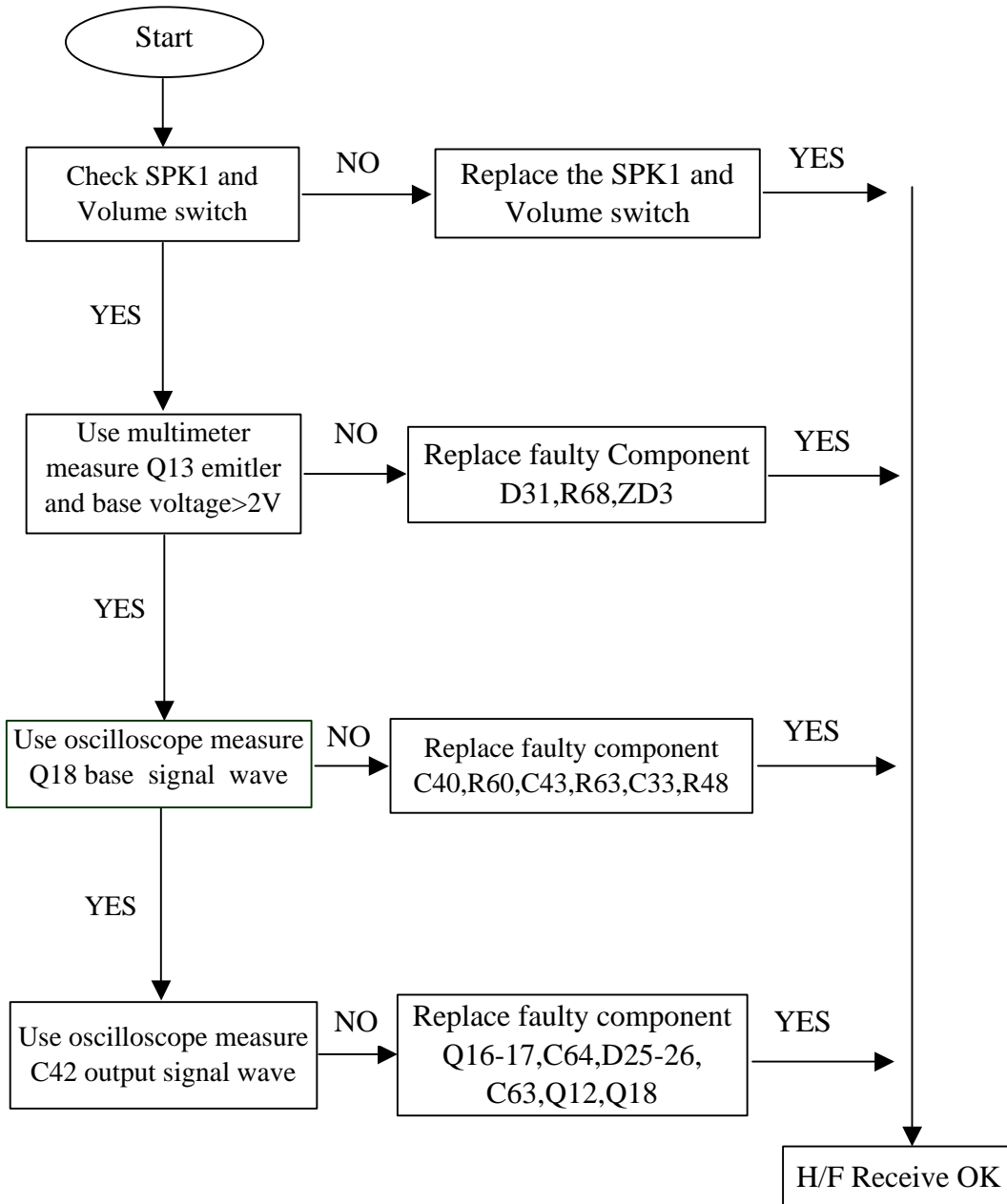
Condition: connection the unit to real telephone line or telephone analyzer and press speaker key turn set frequency and level at 1KHz , -15dBm



Trouble Shooting Chart

Problem: H/F no receive ,but rest normal

Condition: connection the unit to real telephone line or telephone analyzer and press speaker key turn



ROCKWAY INDUSTRIES LTD

SPECIFICATION

產品型號: VISION X2120(RS)		文件代碼: E 04		資料輸入: 雷中华	
文件版本號: A		制 作: 雷中华		日 期: Dec,23,2003	
TEST CONDITION: FCC 600R LOOP SIMULATOR @20mA TO 80mA LOOP CURRENT UNLESS OTHERWISE SPECIFIED 测试免提不应有啸叫			REMARKS: 1. "*"之項目為QA.生產及IPI不測試 2. 設置咪發送電平信號時,聲壓隔一H/S底殼. 3. QA要測試並機記憶&掛機記憶.		
	TEST ITEM	NORMAL	LIMIT	UNIT	REMARKS
1)	DTMF TONE OUTPUT FREQUENCY				
	ROW1	697	687-707	Hz	
	ROW2	770	759-781	Hz	
	ROW3 LOW GROUP	852	840-864	Hz	
	ROW4	941	927-955	Hz	
	COLUMN 1	1209	1191-1227	Hz	
	COLUMN 2 HIGH GROUP	1336	1316-1356	Hz	
	COLUMN 3	1477	1455-1499	Hz	
2)	DTMF LEVEL (阻抗 DD-5601 600OHM)	HI(-5) LO(-7)	HI(-3 ~ -7) LO(-5 ~ -9)	dBm dBm	
3)	MAKE/BREAK RATIO(阻抗 DD-5601 600 OHM)	40	38~45	%	
	DIAL PULSE SPEED	9.9	9~11	PPS	
4)	RINGER O/P, 70V RMS.1M FROM UNIT CENTER (25HZ) HI	80	≥75	dB	*
	LOW	70	≥65	dB	*
5)	ON-HOOK CURRENT	15	10~25	uA	
6)	OFF-HOOK DC @20mA	324	250~350	OHM	
7)	VOIC TRANSMIT LEVEL(94dBSPL 1KHZ INTO HF MIC) HANDFREE	-17	-14~-20	dBm	
8)	VOICE TRANSMIT LEVER(92dBSPL 1KHZ.INTO MIC.)(HANDSET) 40mA	4.5	1~8	dBm	
9)	SPEAKER OUTPUT @ 1KHZ -15dBm INPUT FROM TEL(HANDFREE)	70	>65	dB SPL	*
10)	RECEIVER OUTPUT @1KHZ -15dBm INPUT FROM TEL(HANDSET) 40mA	76	72~80	dB SPL	
11)	DTMF TWIST (阻抗 DD-5601 600 OHM)	2.2	1~4	dB	
12)	DTMF POWER LEVEL	-3	0~-7	dBm	
13)	FLASH (40mA)	96	83 ~ 103	ms	
14)	DTMF FREQUENCY TOLERANCE		1.5	%	
15)	OFF HOOK AC IMPEDANCE (@40mA. 1KHz) (CTR-38)	620	450~800	OHM	*
16)	ECHO RETURN LOSS (40mA) (CTR-38)	14	≥7	dB	*
17)	PAUSE TIME	3.6	±0.2	Sec	
18)	ROLR 500 OHM CTR-38	-6.7	-10≤500Ω≤-2	dB	*
	ROLR 1000 OHM CTR-38	-6.6	-10≤1KΩ≤-2	dB	*
	ROLR 2800 OHM CTR-38	-6.3	-10≤2K8Ω≤-2	dB	*
19)	TOLR 500 OHM CTR-38	8.2	3≤500Ω≤11	dB	*
	TOLR 1000 OHM CTR-38	7.7	3≤1KΩ≤11	dB	*
	TOLR 2800 OHM CTR-38	7.7	3≤2K8Ω≤11	dB	*
20)	SIDETONE 500 OHM CTR-38 (Impedance a)	13.0	≥8	dB	*
	SIDETONE 1000 OHM CTR-38 (Impedance b)	17.0	≥12	dB	*
	SIDETONE 2800 OHM CTR-38 (Impedance c)	19.0	≥15	dB	*
21)	MEMORY LAST NUMBER REDIAL	32	32	DIGITS	
	3 ONE-TOUCH+10 TWO TOUCH MEMORY	16	16	DIGITS	
22)	HI-POT (1650VAC,0.5mA,FOR 2 SECOND)	PASS			
檢查: 沈书江		覆核: 游志良		審批: 楊良泰	

