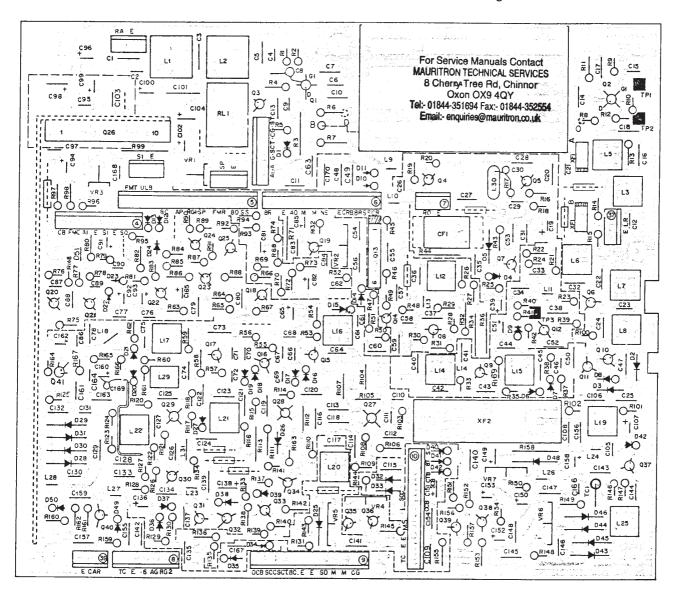
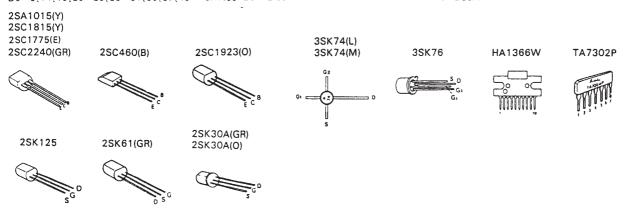
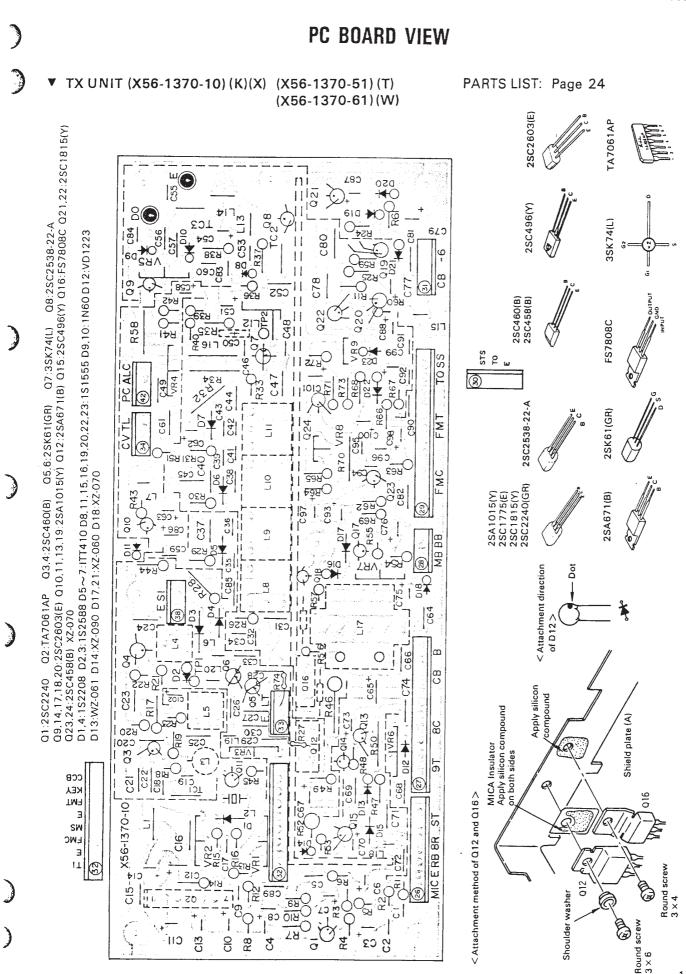
# PC BOARD VIEW

▼ RX UNIT (X55-1260-11)(K)(X) (X55-1260-61)(W)(T) PARTS LIST: Page 22



Q1:3SK74(L)(K) 3SK76(W) Q2:3SK74(L) Q3.10~12.18.19.22~24.31.36.38.39:2SC1815(Y) Q4.5.8.9.14~17.30.40:2SC460(B) Q6:2SK125 Q7:2SC1923(O) Q13:TA7302P Q20.21:2SC1775(E) Q25.33.35:2SA1015(Y) Q26:HA1366W Q27~29:3SK74(M) Q32:2SK30A(GR) Q34:2SK30A(O) Q37:2SK61(GR) Q41:2SC2240(GR) D1.4.5.10~13.16~19.26.27.32~35.38~41.47~50:1S1555 D2.3.42:1S1587 D6~8.14.15.20~23.28~31.36.37.43~46:1N60 D9:WZ-032 D24:1S1212 D25:1S2588 D51:D33A





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Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

Note 1:

K: U.S.A. T: Britain W: Europe X: Australia

#### Note 2:

Only special type of resistors (example: cement, metal film, etc.) and capacitors (example: electrolytic, tantalum, mylar, temp, coeff, capacitors) are detailed in the PARTS LIST. For the value of all common type components, refer to the schematic diagram of the P.C. board illustration. Resistors not otherwise detailed are carbon type (1/4W or 1/8W). Order carbon resistors and capacitors according to the following example:

A carbon resistor's part number is RD14BY 2E222J.

A ceramic capacitor's number is CK45F1H103Z, CC45TH1H220J.

#### RESISTOR

1. Type of the carbon resistor





RD14CY RD14CB (small size)

2. Wattage

$$1W \rightarrow 3A$$
  $3W \rightarrow 3F$   $5W \rightarrow 3H$   $2W \rightarrow 3D$   $4W \rightarrow 3G$ 

3' = CC45 0 0 ...

Ceramic capacitor (type I) temperature coeff. capacitor 1' 3'.

1st word	C	L	P	R	S	T	U
(Color)	(Black)	(Red)	(Orange)	(Yellow)	(Green)	(Blue)	(Violet)
ppm/°C	0	80	150	-220	-330	-470	750

#### 3 = CK45 O

Ceramic capacitor (type II) 3

Cord ,	В	D	Ε	F
Operating temperature °C	-30	-30	-30	10
	+85	+85	+85	+70

#### 6 = Tolerance

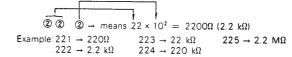
Cord	С	D	G	J	К	М	Х	Z	Ρ	No cord
(%)	±0.25	±0.5	±2	±5	±10	±20	+40 -20	+80 -20	+ 100 -0	More than $10 \mu\text{F} - 10 \sim +50$ Less than $4.7 \mu\text{F} - 10 \sim +75$

#### Less than 10 pF

Cord	В	С	D	F	G
(pF)	±0.1	±0.25	±0.5	±1	+2

Abbreviation		Abbreviation	
Cap.	Capacitor	ML	Mylar
С	Ceramic	s	Styren
E	Electrolytic	τ	Tantalum
MC	Mica		

### 3. Resistance value



4. Tolerance

 $J = \pm 5\% \text{ (Gold)} \qquad K = \pm 10\% \text{ (Silver)}$ 

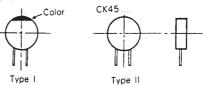
#### CAPACITORS

iyhe	•						1 ype	- 11				
CC	45	TH	1H	220	J		CK	45	F	1H	103	Z
1'	2	3′	4	5	6		1	2	3	4	5	6
1 =	Type	ÇE	ramic	. elec	trolytic.	etc	:.	4 =	Voltag	je rati	ng	
2 =	Shape	r	ound,	squar	e, etc.			5 =	Value			
3 ==	Temp	range	;					6 =	Tolera	nce		
3' =	Temr	coeff	ficient									

Ex CC45TH =  $-470 \pm 60 \text{ ppm/}^{\circ} \text{ C}$ 

2nd Word	G	Н	J	K	L
ppm/°C	±30	±60	±120	±250	±500

CC45 .



#### 5 - Canacitor value

5 ≕ Cap	acitor value
Example:	010 → 1 pF
	100 → 10 pF
	101 → 100 pF
	$102 \rightarrow 1000  \text{pF} = 0.001  \mu\text{F}$
	103 → 0.01 μF

## **GENERAL**

☆: New Parts

A: from	S/N	008 ×	×	×	×	~012×	×	×	×
B : from	S/N	101 ×	x	х	×	~			

Ref. No.	Ref. No. Parts No. Description		Re- marks
_	A01-0762-13	Case (upper)	☆
_	A01-0763-12	Case (lower)	☆
_	A13-0612-02	Angle ass'y (right)	☆
_	A13-0613-02	Angle ass'y (left)	☆
_	A13-0614-04	Angle (Top)	☆
_	A20-2372-15	Panel	☆
_	B01-0626-02	Panel escutcheon (K),(X)	☆
***	801-0627-02	Panel escutcheon (W)	☆
_	B01-0628-02	Panel escutcheon (T)	☆
	B03-0513-14	Switch mask (B) × 6	☆
-	B05-0701-04	SP grill cloth	
_	B05-0712-14	Grill cloth 148 × 27 mm	4

Ref. No.	Parts No.	Description	Re- marks
_	B05-0713-04	Grill cloth 32 × 32 mm	☆
-	B07-0621-03	Side escutcheon × 2	☆
<b> </b> -	B10-0625-04	Front glass	立
	B31-0625-05	S meter	拉
<b> </b>	B40-2490-04	Model name plate (T)	☆
-	B40-2509-04	Model name plate (K)	☆
-	B40-2510-04	Model name plate (W)(X)	☆
_	846-0058-00	Warranty card (K)	ļ
-	B50-2718-00	Operating manual (K)	☆
_	B50-2719-00	Operating manual (W)	☆
-	B50-2720-00	Operating manual (T)	☆
_	E06-0651-05	6P Metal socket (MIC jack)	효



Ref. No.	Parts No.	Description	Re- marks
_	E07-0651-05	6P Metal consent (MIC plug)	☆
-	E09-0471-05	4P Plug TONE PAD (K)	
_	E12-0001-05	Phone plug	
	E12-0401-05	STBY plug	☆
_	E23-0015-04	Lug terminal	١
_	E29-0412-05 E29-0413-05	1P Connector (male) 1P Connector (female)	☆
_	E30-1648-05	DC cord ass'y 4A	"
_	230-1048-05	DC Cold ass y 4A	
	F05-4022-05	Fuse (4A) × 2	-
_	F15-0622-04	Shadow mask (meter)	
-	F15-0627-04	Shadow mask (LED)	☆
	F20-0078-05	MICA insulator (Q101)	
_	F29-0014-05	Shoulder washer (Q101)	
_	G02-0505-05	Knob spring RIT	
_	G09-0412-04	Eeath spring	☆
	G10-0609-04	Cushion (upper case)	☆
_	G53-0510-04	Packing × 4 upper, lower case	☆
	H01-2676-03	Carton (inside)(K)(W)(X)	☆
_	H01-2677-03	Carton (inside)(T)	☆
	H10-2501-03	Styrene foam cushion	
_	H10-2528-12	Packing fixture	☆
_	H25-0049-03	Protective bag	^
_	H25-0079-04	Protective bag (MIC)	
_	H25-0103-04	Protective bag (cord)	
-	H25-0106-04	Protective bag	
_	J02-0069-05	Foot × 2	
_	J02-0416-04	Metal foot	☆
_	J25-2714-04	PC board MODE	<u>.</u>
_	J25-2715-04	PC board Memory	<u>.</u>
_	J25-2716-24	PC board SCAN	¥ .
	J25-2744-04	PC board TX OFF SET	☆
-	J30-0509-04	Spacer	☆
- ,	J31-0514-04	Spacer collar × 2	☆
- 1	J32-0739-14	Round boss × 5 PLL	☆ A
-	J32-0739-24	Round boss × 5 PLL	☆®
-	J42-0409-04	Knob bush	
-	J61-0019-05	Vinyletie × 5	
_	K21-0749-03	Main knob	
_	K21-0750-04	Knob (C) RF GAIN	à
-	K23-0727-04	Knob (A) × 2 MODE, MEMORY	ŵ
-	K23-0728-04	Knob (B) × 2 VOL, SQL	☆
-	K23-0729-04	Knob (D) RIT	☆
-	K23-0733-04	Knob (E) TX OFF SET	☆
-	K27-0408-04	Push knob (A) × 5	☆
	<b>207</b> 0400 04	M,MR,NB,RIT,D.STEP	.
-	K27-0409-04	Push knob (B) × 2 SCAN,HOLD	*
-	K27-0412-04	Push knob (D) VFO A/B	<u> </u>
_	K29-0733-04 K23-0733-04	Push knob (C) Knob (E) TX OFF SET	쇼
j			
-	N09-0008-04	Screw × 4 (angle)	Ì
-	N14-0510-04	Flange nut × 4	
-	N14-0512-05	Speed nut × 4	☆
-	N15-1040-46	Flat washer × 4 (angle)	1
-	N15-1060-46	Flat washer	
-	N16-0060-46	Spring washer × 4	-
-	N33-3006-45	Round flat screw (case)	
-	N35-3006-45	Bind screw × 4 (Speaker mounting plate)	
-	N99-0304-04	Allen head boit × 4 (angle)	ł

Ref. No.	Parts No.	Description	Re- marks
R103	RS14A83A101J	Metal film $100\Omega$ $\pm 5\%$ 1W	/
VR101	R01-3409-05	Potentiometer 10 kΩ (A) SW VOL	☆
VR102	R01-4405-05	Potentiometer 50 kΩ (B) SW SQL	☆
VR103,104	R19-3406-05	Potentiometer 10 k $\Omega$ (B) × 2 RIT, RF GAIN	☆
S101	W02-0308-05	Rotary encoder	☆
S102	S01-2421-05	Rotary switch MODE	☆
S103	S01-1420-05	Rotary switch M.CH	☆
S104,105	S59-1405-05	Key board switch SCAN, HOLD	☆
S106	\$40-2403-05	Push switch A/B (W)	1
S107	S40-2403-05	Push switch H/L (K)(T)(X)	1
S107	S40-2406-05	Push switch TONE (W)	
S108	S01-1421-05	Rotary switch TX OFF SET	*
-	S50-1406-05	Tact switch (MIC)	☆
-	T03-0027-15	Speaker	
-	T91-0311-05	Microphone (T)	☆
-	T91-0313-05	Microphone (K)(W)(X)	☆
Ω101	V01-0671-16	TR 2SA671 (B)	
Q102	V03-2603-06	TR 2SC2603 (E)	
D101	V11-6172-26	5 digit LED SL-1502	☆
D102	V11-7272-36	LED PR5532K ON AIR	☆
D103	V11-7272-46	LED PY5532K BUSY	☆
D104	V11-6172-56	LED SLP-144B (T)	☆
D105	V11-6172-56	LED SLP-1448	☆
D106	V11-6176-66	LED SLP-2448 VFO A/B	☆
_	W01-0401-04	Allen key (angle)	
_	X41-1290-11	Switch unit	☆
-	X45-1140-00	Final unit (W)(T)(X)	☆
-	X45-1140-11	Final unit (K)	☆
-	X50-1620-00	PLL unit (W)(T)	☆
-	X50-1620-11	PLL unit (K)(X)	☆
-	X50-1630-11	CAR unit	☆
_	X52-1140-10	Side tone unit	☆
-	X53-1160-11	Control unit (K)	☆
_	X53-1160-61	Control unit (W)(T)	☆ .
_	X53-1160-71	Control unit (X)	*
-	X55-1260-11	RX unit (K)(X)	☆
-	X55-1260-61	RX unit(W)(T)	☆
-	X56-1370-10	TX unit (K)(X)	☆
_	X56-1370-51	TX unit (T)	<b>A</b>
1 -	X56-1370-61	TX unit (W)	☆

## SWITCH UNIT (X41-1290-11)

Ref. No.	Parts No.	Description	Re- marks
C1	CC45SL1H220J	C 22 pF ±5%	
VR1, 2	R12-3415-05	Semi-fixed resistor 22 kΩ	
VR3	R12-3421-05	Semi-fixed resistor 10 kΩ	☆
VR4	R12-4020-05	Semi-fixed resistor 50 kΩ (2 pole)	
VR5	R12-3421-05	Semi-fixed resistor 10 kΩ	☆
Q1~4	V03-1815-06	TR 2SC1815(Y)	

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Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

# **PARTS LIST**

Ref. No.	Parts No.		Description	Re- marks
D1~4. 12~15	V11-0051-05	Diode	1N60	
D5~11	V11-0076-05	Diode	1S1555	
S1	S40-2409-15	Push switch	М	
S2	\$40-2405-05	Push switch	MR	İ
S3.4	S40-2404-05	Push switch	RIT, NB	
S5	S40-2405-05	Push switch	D. STEP	
_	E23-0046-04	Square termin	ai	

Ref. No.	Parts No.	Description	Re- marks
_	E08-0471-05	4P Socket TONE PAD (K)	
_	E11-0405-05	Key jack	☆
_	E11-0406-05	STBY Jack	☆
	E11-0409-05	Earphone jack	☆
	E40-0373-05	Mini connect wafer 3P	
	E40-0673-05	Mini connect wafer 6P	
_	F01-0744-15	Heat sink (W)(T)(X)	
-	F01-0746-05	Heat sink (K)	☆

# FINAL UNIT (X45-1140-00)(W)(T)(X)

# (X45-1140-11)(K)

PLL	UNIT	(X50-1620-00)(W)(T)
		(X50-1620-11)(K)(X)

Schematic: Page 13

	Ref. No.	Parts No.	D	escription		Re- marks	
	C1,2	CC45SL2H070D	c	7oF	±0.5pF		
	C3.4	CC45SL2H101J	lc	100pF	±5%		
	C5	CC45SL2H330J	c	33pF	_ ±5%		
	C6	CC45SL2H390J	C	39pF	±5%		
	C7	CC45SL2H100D	c	10pF	±5%		
-4	C8 '	CC45CH1H010C	ŧ	1pF	±0.25pF		
	C9	CC45SL2H22OJ	c	22pF	±5%		
Ì	C11	CC45CH1H330J	C	33pF	±5%		
	C13	CC45CH1H0R5C	С	0.5pF	±0.25pF		
	C18	CS15E1C010M	ĪΤ	1μF	16V		
	C22	CE04W1C101Q	E	100µF	16V		
	C24	CE04W1C470Q	Ε	47µF	16V		
	C26	CE04W1C101Q	E	100µF	16V		,
	C27	C90-0817-05	Ε	1000µF	16V(small)		
	C32	CC45SL2H12OJ	С	12pF	±5%		
1	C29	CS15E1VOR1M	Т	0.1μF	35V		
ļ	VR1	R12-5024-05	Semi fixed resis	-		- 1	
١	VR2	R12-4016-05	Semi-fixed resis		Z po.o,	- 1	
İ	VR3	R12-0048-05	Semi-fixed resis				
ł	*11.5	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CO.III				
	Q1.2	V01-1815-06	TR	2SC1815(	Y)		
-	03	V01-1015-06	TR	2SA1015(	Y)	- 1	
1	04	V01-1815-06	TR	2SC1815(	Y)		
1	Ω5	V30-1131-06	Power module	M57713	·	☆	
ł		-					
1							
ı	D1	V11-5260-16	Diode	M1402			i
1	D2	V11-0414-05	Diode	1S2588		1	
1	D3.4	V11-0051-05	Diode	1N60		- 1	
1	D5	V11-0076-05	Diode	1S1555	i	- 1	
ı	D6	V11-0270-05	Diode	U05B			
۱						-	ĺ
ı	L1	L34-0823-05	VHF Coil	5φ3Τ		İ	
1	L2	L34-0438-05	Coil	0.9µH	İ		
1	L3	L34-0692-05	VHF Coil	5φ4T			
	L4.5	L34-0817-05	VHF Coil	5φ3T	Ì	- 1	
1	L6	L33-0025-05	Choke coil	1μΗ		ĺ	
1	L7	L40-1001-03	Ferri-inductor	10μH			
ı	L8	L34-0887-05	VHF Coil	5φ3T		立	١
	-	842-1682-04	T. Pad badge	(K)		낣	
	_	E04-0102-05	UHF Type recep	tacle			
	_	E08-0203-25	2P Connector				ļ
1	_	E08-0304-05	Power jack	BACK UP			
L		200 0004-00	. Ovver jack	3,,01,07			-

Ref. No.	Parts No.	D	escription		Re- marks
C1	CC45PG1H080D	c	8pF	±0.5pF	
C2	CC45CH1H060C	С	6pF	±0.5pF	
C3	CC45CH1H0R5C	С	0.5pF	±0.25pF	
C4	CC45CH1H060D	С	6pF	±0.5pF	
C5	CC45CH1H150J	c ć	15pF	±5%	
C6	CC45CH1H030C	С	3pF	±0.25pF	
C7 .	CE04W1A101Q	E	100µF	10V	
C9	CC45CH1H040C	С	4pF	±0.25pF	
C10	CC45CH1H010C	С	1pF	±0.25pF	
C12	CC45CH1H220J	С	22pF	±5%	
C13	CC45CH1H020C	С	2pF	±0.25pF	
C15	CE04W1C100Q	E	10μF	16V	
C23.24	CC45CH1H040C	С	4pF	±0.25pF	
C25.26	CC45CH1H0R5C	С	0.5pF	±0.25pF	
C28	CE04W1A470Q	Ε	47µF	10V	
C29	CC45CH1H220J	С	22pF	±5%	
C30.31	CC45CH1H101J	С	100pF	±5%	
C33	CC45TH1H020C	С	2pF	±0.25pF	
C34	CC45TH1H560J	С	56pF	±5%	
C35	CC45PG1H470J	С	47pF	±5%	
C37.38	CS15E1VR47M	T	0.47µF	35V	-
C40	C91-0455-05	С	0.01µF	±10%	
C41	CQ92M1H473K	ML	0.047µF	±10%	
C43	CS15E1C4R7M	Т	$4.7\mu F$	16V	
C44	CS15E1C2R2M	T	$2.2\mu F$	16V	
C47	CE04W1E4R7Q	E	4.7μF	25V	
C48	CE04W1A101Q	E	100µF	10V	
C49	CE04W1H010Q	Ε	1μF	50V	
C50,51	C91-0457-05	С	$0.022 \mu F$	±10%	
C52	CE04W1A101Q	E	100μF	10V	
C54	CC45SL1H101J	С	100pF	±5%	
C55	CQ92M1H223K	MŁ	0.022µF	±10%	
C56	CC45SL1H101J	С	100pF	±5%	
C57,58	CC45CH1H100D	С	10pF	±0.5pF	
C59	C91-0457-05	С	$0.022 \mu F$	± 10%	
C60	CE04W1C100Q	E	10μF	16V	
C62	CE04W1A101Q	Е	100µF	10V	
C70	CC45CH1H100D	С	10pF	±0.5pF	
C71	CC45TH1H020C	С	2pF	±0.25pF	
C72	CC45TH1H010C	С	1pF	±0.25pF	1
C74	CQ92M1H223K	ML	0.022μF	±10%	
VR1	R12-5014-05	Semi-fixed resis	tor 100 kΩ		
VR2	R12-3025-05	Semi-fixed resis			
TC1	C05-0062-05	Ceramic Trimme	er 6pF		



Ref. No.	Parts No.	С	Description	Re- marks
Q1	V09-1001-16	FET	2SK19(GR)TRIO-5	
02	V03-1923-06	TR	2SC1923(O)	
03	V09-1002-56	FET	3SK74(L)	
04	V03-1775-06	TR	2SC1775(E)	
0.5	V09-1002-56	FET	3SK74(L)	
Q6	V03-0079-05	TR	2SC460(B)	
Q7	V09-0060-05	FET	2SK30A(GR)	
08.9	V03-2240-06	TR	2SC2240(GR)	
Q10~12	V03-0079-05	TR	2SC460(B)	
013	V03-1923-06	TR	2SC1923(O)	
Q14.15	V03-1815-06	TR	2SC1815(Y)	
Q16	V30-1132-06	IC	TC5081P	☆
Q17	V30-1147-06	IC	TC5082P-GL	☆
Q18	V30-1036-16	IC	TC9122P	
D1	V11-1260-36	Vari-cap Diode	1SV50S	
D2.3	V11-0414-05	Diode	1S2588	
D4	V11-0374-05	Diode	15516	
D5	V11-1260-36	Vari cap Diode	1SV50S	
D6	V11-0317-05	Vari-cap Diode	1S2208	
D7	V11-0076-05	Diode	1S1555	
L1	L40-3391-03	Ferri-inductor	3.3µH	
L2	L32-0624-05	Oscillating coil	vco	☆
L3	L40-3391-03	Ferri-inductor	3.3µH	
L4	L34-0820-05	Tuning coil	•	1
L5	L34-0683-05	Tuning coil		
L6,7	L34-0901-05	Tuning coil		☆
L8	L33-0631-05	Choke coil	4.7μH	☆
L9	L77-0855-05	Crystal	14.2005 MHz	☆
L10.11	L40-1021-03	Ferri-inductor	1mH	
L12	L40-4711-03	Ferri-inductor	470µH	
L13	L40-1021-03	Ferri-inductor	1mH	
L14	L40-1501-03	Ferri-inductor	15µH	
L15,16	L40-1021-03	Ferri-inductor	1mH	
L17	L40-4711-03	Ferri-inductor	470µH	
_	E40-0273-05	Mini connect wa	afer 2P	
_	E40-0473-05	Mini connect wa	afer 4P	
<b> </b> -	E40-0573-05	Mini connect wa	afer 5P	
-	E40-0673-05	Mini connect wa	afer 6P (K)	
l — '	E40-0773-05	Mini connect wa	afer 7P	

Ref. No.	Parts No.	Description		Re- marks
L5.6 L7	L40-1511-03 L77-0856-05	Ferri-inductor Crystal	150µH 10.6943 MHz	☆
X1	L77-0857-05	Crystal (LSB)	10.6965 MHz	☆
_	E23-0046-04	Square termina	I	

## SIDE TONE UNIT (X52-1140-10)

Ref. No.	Parts No.		Description	Re- marks
C1	CS15E1VOR1M	Т	0.1μF 35°	v
C2	CQ92M1H123K	ML	0.012µF ±1	0%
C3	CC45SL1H101J	c	100pF ±5	%
C4,5	CQ92M1H103K	ML	0.01μF ±1	0%
C6	CS15E1VOR1M	Т	0.1μF 35\	/
C7	CS15E1A100M	т	10µF 10	/
C8	CQ92M1H123K	ML .	0.012µF ±1	0%
C9	CE04W1A470Q	Ε	47μF 10\	/
01	V03-1775-06	TR	2SC1775(E)	
D1	V11-0076-05	Diode	1S1555	
	E40-0574-05	Mini connect	wafer 5P	

For Service Manuals Contact
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8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel:- 01844-351694 Fax:- 01844-352554
Email:- enquiries@mauritron.co.uk

## CAR UNIT (X50-1630-11)

Ref. No.	Parts No.	Description			Re- marks
C5	CC45SL1H330J	С	33pF	±5%	
C6.7	CC45SL1H220J	С	22pF	±5%	
C9,10	CC45SL1H221J	С	220pF	±5%	
C12	CC45CH1H030C	С	3pF	±0.25pF	
C13	CC45SL1H470J	С	47pF	±5%	
TC1~3	C05-0067-05	Ceramic trimme	er25pF		
Q1.2	V03-0079-05	TR	2SC460(	8)	
D1~5	V11-0076-05	Diode	1S1555		
L1∼3 L4	L40-1021-03 L30-0281-05	Ferri-inductor IFT	1mH		

CONTROL UNIT (X53-1160-11)(K) (X53-1160-61)(T) (X53-1160-71)(X)

## RX UNIT (X55-1260-11)(K)(X) (X55-1260-61)(W)(T)

(X53-1160-61)(I) (X53-1160-71)(X) Schematic: Page 15

	Parts No.	D	escription	Re- marks
C1	CQ92M1H223K	ML	0.022µF	
C3	CE04W1A101Q	1	100µF 10V	1
C4.5	CE04W1A471Q	1 '	470μF 10V	
C6	CE04W1A470Q	1 '	•	1
C9	CE04W1C470Q	] =	47μF 10V	
C10	CE04W1C220Q	1	47μF 16V	
C10 C11,12		-	22μF 16V	1
C11,12	CE04W1H010Q	1	1μF 50V	1
1	CE04W1A101Q	E	100μ <b>F 10V</b>	
C16	C90-0811-05	E	330μF 16V	
C17.18	C91-0460-05	Laminated cap.	•	☆
C19.20	C91-0460-05	Laminated cap.	0.1µF	
R1	R90-0526-05	Resistor 27kΩ ×	<b>4</b>	☆
R36	R90-0526-05	Resistor 27kΩ ×		±
		11001010. 27.112	7	<b>"</b>
Q1.2	V03-1815-06	TR	2SC1815(Y)	
Q3.4	V01-1015-06	TR	2SA1015(Y)	'
Q5~13	V03-1815-06	TR	2SC1815(Y)	1 /
Q14	V03-0336-05	TR	2SC496(Y)	1 !
Q15	V30-1136-06	Micro computer	иРD650C- <b>021</b>	₩
Q16	V30-1008-66	IC	MN1201A	1 1
Q17	V30-1067-06	IC	NJM78L06K	
Q18	V30-1054-06	IC	TC5022BP	
Q19.20	V30-1815-06	TR	2SC1815(Y)	
<u>.</u> :	2051 25	·		
D1	V11-0051-05	Diode	1N60	
D2~12	V11-0076-05	Diode	1S1555	
D13.14	V11-0051-05	Diode	1N60	1 1
D15.16	V11-0076-05	Diode	1S1555	l j
	V11-0051-05	Diode	1N60	1 1
	V11-0076-05	Diode	1S1555	1 1
D20	V11-1162-16	Diode	MA522(Q)	
D21	V11-4176-76	Zener diode	XZ-057	1
D22~30	V11-0051-05	Diode	1N60	1 1
D31	V11-0051-05	Diode	1N60 (K)(X)	1 1
D32	V11-0051-05	Diode		
L1	L30-0503-05	IFT		
	710 0070 05			
		Mini connect wa		1
- 1		Mini connect wa		1
I		Mini connect wa		1
		Mini connect was	fer 7P	i
1	1	Mini connect was	fer 8P	1
-	E40-1173-05	Mini connect wat	fer 11P	. ]
-	G11-0605-04	Cushion (Transdu	ucer)	쇼
_  .	J29-0403-04	Transducer plate	,	☆
	T95-0051-05	Transducer	I	1

	<del></del>				
Ref. No.	Parts No.		Description		Re- marks
C1	CC45CH1H330	С	33pF	±5%	
C2	CC45RH1H120	1 -	12pF	±5%	
СЗ	CC45CH1H0300	1 '	3pF	±0.25pF	
C4	CC45RH1H1000	1	10pF	±0.5pF	
C5	CC45CH1H220J	1 -	22pF	±5%	
C7	C91-0456-05	C	0.047μF	±10%	1
C12	CC45CH1H330J		33pF	±10%	
C14	CC45CH1H150J		15pF	±5%	ĺ
C15	CC45CH1H0R50	1	0.5pF		
C16	CC45CH1H0200	1	•	±0.25pF	
C19	CE04W1A470Q		2pF 47μF	±0.25pF 10V	
C21	CC45CH1H0500				
C22	CC45CH1H470J	1 -	5pF	±0.25pF	
C23	1		47pF	±5%	
C24	CC45CH1H030C		3pF	±0.25pF	
C25	C91-0456-05	C	0.047μF	±10%	
C25	CC45CH1H470J	i .	470pF	±5%	
	CC45CH1H220J	1	22pF	±5%	
C28	CC45SL1H451J	C	450pF	±5%	
C31	CC45CH1H180J	1 -	18pF	±5%	
C34	CQ92M1H393K	ML	0.039µF		
C35	CQ92M1H223K	ML	0.022µF	1	
C36	CQ92M1H103K	ML	0.01μF	±10%	
C37	CC45SL1H101J	C	100pF	±5%	
C39	CE04W1C100Q	E	10μF	16V	İ
C40	CQ92M1H393K	ML	$0.039 \mu F$	±10%	
C41	CQ92M1H223K	ML	$0.022 \mu F$	±10%	
C43	CQ92M1H393K	ML	$0.039 \mu F$	±10%	
C44	CQ92M1H223K	ML	$0.022 \mu F$	±10%	
C45	CQ92M1H222K	ML	0.0022µF	±10%	
C51	CE04W1H010Q	Ε	1μF	50V	
C53	CQ92M1H393K	ML	0.039µF	±10%	
C54.55	CQ92M1H473K	ML	0.047µF	±10%	
C56	CQ92M1H393K	ML	$0.039 \mu F$	±10%	
C57	CQ92M1H103K	ML	0.Q1μF	±10%	
C59,60	CQ92M1H223K	ML	0.022µF	±10%	- 1
C64	CQ92M1H223K	ML	$0.022 \mu F$	±10%	1
C65	CE04W1A101Q	E	100μF	10V	
C68	CC45SL1H470J	С	47pF	±5%	
C69	CQ92M1H222K	MŁ	0.0022µF	±10%	- I
C72	CQ92M1H222K	ML	0.0022µF	±10%	- 1
C73	CQ92M1H473K	ML	$0.047 \mu F$	±10%	
C74	CQ92M1H223K	ML	$0.022 \mu F$	±10%	- 1
C75	CQ92M1H102K	ML	0.001µF	±10%	
C76	CQ92M1H332K	ML	0.0033μF	±10%	
C77	CQ92M1H222K	ML	0.0022µF	±10%	ŀ
C78	CQ92M1H393K	ML	0.039µF	±10%	l
279	CQ92M1H223K	ML	0.022µF		
080	CQ92M1H473K	ML	0.047μF	±10%	
281,82	CE04W1C220Q	E	22μF	16V	
C83	CQ92M1H103K	ML	0.01μF	±10%	- 1
284	CQ92M1H332K	ML	0.0033µF		
C85	CS15E1VOR1M	Т	0.1μF	35V	
286	CQ92M1H222K	ML	0.0022µF	±10%	1
87	i i	С	22pF	±5%	
88		ML		±10%	
89	1	C	39pF	±5%	
90		ML	0.0022μF	I	- 1
91	1	E	47μF	10V	ľ
92.93		T	3.3μF	100	-
94	ı	' E	3.3μr 1μF	50V	1
95	1	E ML		1	
í	ı			±10%	ļ
96	į.	E		10V	J
98		E		16V	- 1
		Ε	47µF	10V	

Tell	Def M			_		Re-		_			Re-
C102	Ref. No.	Parts No.		Description			Ref. No.	Parts No.		Description	marks
C104   C649N1A1010   C		1		0.1μF	±10%		1	V03-1815-06	TR	2SC1815(Y)	
C109				1μF	50V			i i	TR	2SC460(B)	
C106   C1045CH1050C   C							1		T .		
C109		1					1	1			
C107		1	1				1	1			
C108		i					1	1	1		
C100		1	1 -				1		1		☆
C112-114   C12-0457-05   C								1	ı		
C112-114   C13-048-70-8   C	C110	1	1 ~				1	1 003-1815-06	1 H	2501815(1)	
C115,116   C21-0485-05   C	C112~114	C91-0457-05	1	•			1	V03-1175-06	ТО	2001775(0)	
C113  C465CH14700  C 47pF ±5%	C115,116	C91-0455-05	С	0.01μF			1	1	1		
C120	C117,119	C91-0457-05	c	0.022μF	±10%		I .	1	1		
C129   C126   C13   C45   C14   C15   C13   C12   C1	C118	CC45CH1H470J	C	47pF	±5%	1	1		1		
C124   25   C124   C125   C124   C125   C126   C126   C126   C126   C126   C126   C126   C126   C127   C126   C126   C127   C127   C128   C129   C127   C128   C129   C129   C1	C120~122	C91-0457-05	С	$0.022 \mu F$	±10%		1		1		
C124   125   C31-0457-05   C		CC45CH1H100C	C	10pF	±0.5pF	1	1	1	1		Ì
C126		1		$0.022 \mu F$	±10%		Q32		1		
C128.129   C91-0457-05   C		Į.	1	10pF	±0.5pF		033	1	1		
C130		1	1	$0.022 \mu F$	±10%	- 1	Q34	V09-0056-05	1		
C131		1	1	$0.01 \mu F$	±10%	İ	Q35	V01-1015-06	TR	2SA1015(Y)	
C134		I.	1	-			Q36	V03-1815-06	TR	2SC1815(Y)	
C134			1				Q37	V09-1014-06	FET		☆
C135			1				Q38,39	V03-1815-06	TR	2SC1815(Y)	
C136			1	•			1	V03-0079-05	TR	2SC460(3)	
C137		i			- 1	İ	Q41	V03-2240-06	TR	2SC2240(GR)	
C138         CE04W1H010Q         E         1μF         50V         D2.3         V11-0076-05         Diode         1S1587           C144         CC45CH1H040C         C         4pF         ±0.25pF         D4.5         V11-0076-05         Diode         1S1587           C145         C91-0455-05         C         0.01μF         ±10%         D9         V11-4172-26         Zearer diode         WZ-032           C147,148         C91-0455-05         C         0.01μF         ±10%         D9         V11-4172-26         Zearer diode         WZ-032           C149         CE04W1H3R30         E         3.3μF         50V         D16~19         V11-0076-05         Diode         1S1555           C151         CE04W14700         E         47μF         10V         D22~23         V11-0076-05         Diode         1S1555           C152         CE04W14700         E         4.7μF         25V         D25         V11-0076-05         Diode         1S1555           C153         CE04W16400         E         1μF         50V         D26.27         V11-0076-05         Diode         1S1555           C154         C2094M1473K         ML         0.047μF         ±10%         D28~31         V11-0076-05 </td <td></td> <td>1</td> <td>I</td> <td></td> <td>ı</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		1	I		ı						
C143			1				1 -				
C144   CC45CH1H040C   C			1		1	İ	•	1	1		
C145					1	- 1		i .	1		
C146         CC45CH1H330J C147,148         C         33pF C91-0455-05         ±5% C         0.01µF D10% D10% D10% D10% D10% D10% D10% D10%			1	•	· 1			j.	1		
C147.148   C91-0455-05   C	146		1		1	į,		1	l .		
C149	147,148		l .	•				[			ĺ
C150	149	CE04W1H010Q	1					1			
C151   CE04W1A470Q   E   47μF   10V   E   4.7μF   25V   E   4.7μF   25V   E   4.7μF   25V   C154   C204W1H010Q   E   1μF   50V   C154   C292M1H473K   C155   C91-0455-05   C   0.01μF   ±10%   C   0.022μF   ±10%   C158   CE04W1E4RQ   C158   CE04W1E4RQ   C159   C24SL1H221J   C   220pF   ±5%   E   10μF   16V   C161   C292M1H473K   C162   C204W1H010Q   C161   C292M1H473K   C162   C204W1H010Q   C161   C292M1H473K   C162   C204W1H010Q   C161   C292M1H473K   C162   C204W1H010Q   C161   C292M1H473K   C162   C204W1H010Q   C161   C292M1H682K   C165   C2515E1C4R7M   C166   C245CH1H22U   C   C204W1H010Q   C166   C292M1H682K   C165   C2515E1C4R7M   C166   C245CH1H20J   C   C294W1H01Q   C166   C292M1H682K   C165   C2515E1C4R7M   C166   C245CH1H20J   C   C294W1H01Q   C166   C245CH1H20J   C   C294W1H01Q   C166   C294W1H01Q   C164W1H01Q   C166W1H01Q   0	CE04W1H3R3Q	E		- 1		- 1	i	1			
C152	151	CE04W1A470Q	Ε	47μF	10V				1		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	I	CE04W1E4R7Q	E	$4.7\mu F$	25V						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4		l	1μF	50V		D26,27		ł		
C155	I			$0.047\mu F$	±10%		D28~31	V11-0051-05	l		
C158	- 1			-	±10%		D32~35	V11-0076-05	Diode	1S1555	
C159	1				i	- 11	D36.37	V11-0051-05	Diode	1N60	
C160	· ·					- 11	,	V11-0076-05	Diode	1S1555	
C161 CQ92M1H473K C162 CE04W1H010Q C163 C91-0455-05 C 0.01μF ±10% C164 CQ92M1H682K C165 CS15E1C4R7M T 4.7μF 16V C166 CC45CH1H12OJ C 12pF ±5%				•	- 1	- 11	D42	V11-0370-05	Diode	1S1587	
C162   CE04W1H010Q   E   1μF   50V   C   0.01μF   ±10%   C164   CQ92M1H682K   C165   CS15E1C4R7M   C166   CC45CH1H12OJ   C   12pF   ±5%   C								V11-0051-05	Diode	1N60	
C163					<b>I</b>		I		Diode	1S1555	į .
C164							D51	V11-3161-86	Thermistor	D33A	
C165 CS15E1C4R7M T 4.7μF 16V L3 L34-0683-05 Tuning coil Tuning coil L34-0683-05 Tuning coil L34-0683-05 Tuning coil L4 L79-0457-05 Helical block (W) (T) L79-0460-05 Helical block (K) (X) L5~8 L30-0281-05 IFT L9 L40-1511-03 Ferri-inductor 150μH L10 L40-4711-03 Ferri-inductor 470μH L10 L40-4711-03 Ferri-inductor 470μH L11 L40-4701-03 Ferri-inductor 47μH L12 L30-0503-05 IFT L13 L40-1011-03 Ferri-inductor 47μH L13 L40-1011-03 Ferri-inductor 47μH L13 L30-0503-05 IFT L13 L40-1011-03 Ferri-inductor 100μH L14 L30-0503-05 IFT L15.16 L30-0503-05 IFT L15.16 L30-0503-05 IFT L15.16 L30-0503-05 IFT L15.16 L30-0503-05 IFT L30-05											
C166 CC45CH1H12OJ C 12pF ±5%  TC1 CO5-0031-05 Ceramic trimmer 10pF  VR1 R12-3415-05 Semi-fixed resistor 22 kΩ VR2 R12-4016-05 Semi-fixed resistor 50 kΩ VR3 R12-3416-05 Semi-fixed resistor 47 kΩ VR4 R12-1016-05 Semi-fixed resistor 3 kΩ VR5 R12-1016-05 Semi-fixed resistor 3 kΩ VR6 R12-7013-05 Semi-fixed resistor 500 kΩ VR7 R12-1016-05 Semi-fixed resistor 3 kΩ VR8 R12-1016-05 Semi-fixed resistor 3 kΩ VR9 R12-1016-05 Semi-fixed resistor 3 kΩ VR9 R12-1016-05 Semi-fixed resistor 3 kΩ VR9 R12-1016-05 Semi-fixed resistor 500 kΩ VR9 R12-1016-05 Semi-fixed resistor 100 kΩ VR9 R12-1016-05 Semi-fixed resistor 100 kΩ VR9 R12-1016-05 Semi-fixed resistor 500 kΩ VR9 R12-1016-0	- 1				l l	- 11	· i		-		
TC1 C05-0031-05 Ceramic trimmer 10pF L5~8 L30-0281-05 IFT  VR1 R12-3415-05 Semi-fixed resistor 22 kΩ L10 L40-4711-03 Ferri-inductor 150μH  VR2 R12-4016-05 Semi-fixed resistor 50 kΩ L11 L40-4701-03 Ferri-inductor 470μH  VR3 R12-3416-05 Semi-fixed resistor 47 kΩ L12 L30-0503-05 IFT  VR4 R12-1016-05 Semi-fixed resistor 3 kΩ L13 L40-1011-03 Ferri-inductor 100μH  VR5 R12-7013-05 Semi-fixed resistor 500 kΩ L14 L30-0503-05 IFT  VR6 R12-0048-05 Semi-fixed resistor 100Ω L15.16 L30-0504-05 IFT	1	i i		-	- 1	- 11			*		
TC1 C05-0031-05 Ceramic trimmer 10pF				1201	-5/0		L4				☆
VR1 R12-3415-05 Semi-fixed resistor 22 kΩ L9 L40-1511-03 Ferri-inductor 150μH VR2 R12-4016-05 Semi-fixed resistor 50 kΩ L11 L40-4701-03 Ferri-inductor 470μH L12 L30-0503-05 IFT VR4 R12-1016-05 Semi-fixed resistor 3 kΩ L13 L40-1011-03 Ferri-inductor 100μH VR5 R12-7013-05 Semi-fixed resistor 500 kΩ L14 L30-0503-05 IFT VR6 R12-0048-05 Semi-fixed resistor 100Ω L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 Semi-fixed resistor 500 kΩ L15.16 L30-0504-05 IFT VR7 R12-4016-05 R12	1	C05-0031-05	Ceramic trimmer	10oF		- 11	15.0			(X)	☆
VR1	1			ТОРТ			I			150 H	
VR2         R12-4016-05         Semi-fixed resistor         50 kΩ         L11         L40-4701-03         Ferri-inductor         47 μH           VR3         R12-3416-05         Semi-fixed resistor         47 kΩ         L12         L30-0503-05         IFT           VR4         R12-1016-05         Semi-fixed resistor         500 kΩ         L13         L40-1011-03         Ferri-inductor         100μH           VR5         R12-0048-05         Semi-fixed resistor         100Ω         L14         L30-0503-05         IFT           VR7         R12-4016-05         Semi-fixed resistor         100Ω         L15.16         L30-0504-05         IFT	₹1	R12-3415-05	Semi-fixed resist	or 22 kΩ		- 11	1				
VR3         R12-3416-05         Semi-fixed resistor 47 kΩ         L12         L30-0503-05         IFT           VR4         R12-1016-05         Semi-fixed resistor 3 kΩ         L13         L40-1011-03         Ferri-inductor 100μH           VR5         R12-7013-05         Semi-fixed resistor 500 kΩ         L14         L30-0503-05         IFT           VR6         R12-0048-05         Semi-fixed resistor 100Ω         L15,16         L30-0504-05         IFT	32					- 11		1			
VR4         R12-1016-05         Semi-fixed resistor 3 kΩ         L13         L40-1011-03         Ferri-inductor 100μH           VR5         R12-7013-05         Semi-fixed resistor 500 kΩ         L14         L30-0503-05         IFT           VR6         R12-0048-05         Semi-fixed resistor 100Ω         L15,16         L30-0504-05         IFT           VR7         R12-4016-05         Semi-fixed resistor 100Ω         L15,16         L30-0504-05         IFT	1						- 1	1		¬/μΠ	1 1
VR5     R12-7013-05     Semi-fixed resistor 500 kΩ     L14     L30-0503-05     IFT       VR6     R12-0048-05     Semi-fixed resistor 100Ω     L15.16     L30-0504-05     IFT       VR7     R12-4016-05     Semi-fixed resistor 100Ω     L15.16     L30-0504-05     IFT	R4	R12-1016-05	Semi-fixed resist	or 3 kl?		11	1	I		100#H	
VR6 R12-0048-05 Semi-fixed resistor 100Ω L15.16 L30-0504-05 IFT		R12-7013-05	Semi-fixed resist	or 500 kΩ	}	1	1	· .		ισσμιι	[ ]
V87 1812-4016 05 15	1		Semi-fixed resist	or 100Ω				I			
1   1   1   1   1   1   1   1   1   1	17 F	712-4016-05	Semi-fixed resist	or 50 kΩ		- 11	L17	L30-0503-05	IFT		
L18 L40-6825-04 Ferri-inductor 6.8mH	1					- 11				6.8mH	1
Q1 V09-1002-56 FET 3SK74(L) (K)(X)   L19 L30-0507-05 FFT				3SK74(L)	(K)(X)		- 1				12
V09-1012-06   FET   3SK76 (W)(T)     L20~22   L30-0005-05   IFT		1		3SK76 (	W)(T)	- 11		ı			
Q2 V09-1002-56 FET 3SK74(L) L23 L40-1021-03 Ferri-inductor 1mH	: \	/09-1002-56	FET	3SK74(L)			L23	1		1mH	

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Email:- enquiries@mauritron.co.uk

Ref. No.	Parts No.	Description	Re- marks
L24	L40-1511-03	Ferri-inductor 150µH	
L25	L30-0005-05	IFT ·	
L26	L40-1021-03	Ferri-inductor 1mH	
L27	L40-4711-03	Ferri-inductor 470µH	
L28	L40-1511-03	Ferri-inductor 150µH	
L29	L79-0446-05	Ceramic discri CFY455S	
L30	L77-0858-05	Crystal 10.24 MHz	₩ ₩
L31	L40-1021-03	Ferri-inductor 1mH	"
150.	1240-1021-03	Letti-tuductor tudi	
CF1	L72-0315-05	Ceramic filter CFW455F	
XF1(A.B)	L71-0216-05	MCF 10,695 MHz	☆
XF2	L71-0215-05	Crystal filter 10,695 MHz SSB	☆
RL1	S51-1407-05	Relay G2E9V	☆
_	E40-0273-05	Mini connect wafer 2P	
_	E40-0573-05	Mini connect wafer 5P	
l –	E40-0773-05	Mini connect wafer 7P	
-	E40-1073-05	Mini connect wafer 10P	
-	E40-1273-05	Mini connect wafer 12P	
_	J31-0502-04	PC Board collar	
<u>-</u>	J42-0404-05	1	
	342-0404-05	PC Board bush	

## TX UNIT (X56-1370-10)(K)(X) (X56-1370-51)(T) (X56-1370-61)(W)

Ref. No.	Parts No.		Description	on	Re- marks
C1.2	CC45SL1H101J	С	100pF	±5%	
C3	CS15E1CO10M	Т	1μF	16V	
C4	CE04W1E4R7Q	Ε	4.7µF	25V	
C5	CQ92M1H682K	ML	0.0068μF	±10%	
C6	CE04W1A470Q	E	47µF	10V	
C7	CE04W1H010Q	Ε	1μΕ	50V	
C8	CQ92M1H472K	ML	0.0047µF	±10%	
C10	CE04W1A470Q	E	47μF	10V	
C11	CE04W1E4R7Q	ε	$4.7\mu F$	25V	
C12	CE04W1A470Q	٤	47μF	10V	
C13	CE04W1C220Q	E	22µF	16V	
C14	CE04W1H010Q	E	1μF	50V	
C15	CQ92M1H103K	ML	0.01µF	±10%	
C16	CQ92M1H393K	ML	$0.039 \mu F$	±10%	
C18	CC45TH1H100D	С	10pF	±0.5pF	
C19	CC45UJ1H020C	С	2pF	±0.25pF	1
C20.21	CC45SL1H221J	С	220pF	±5%	
C23	CC45CH1H100D	С	10pF	±0.5pF	1
C26	CC45CH1H330J	С	33pF	±5%	j
C27,28	CC45CH1H22OJ	С	22pF	±5%	1
C32	CC45TH1H020C	С	2pF	±0.25pF	ŀ
C33,34	CC45TH1H080D	С	8pF	±0.5pF	ŀ
C35	CC45CH1H070D	С	7pF	0.5pF(W)(T)	- 1
C35	CC45CH1H080D	С	8pF	0.5pF(K)	- 1
C36	CC45TH1H030C	С	3pF	±0.25pF(K)	
C36	CC45TH1H040C	С	4pF	±0.25pF(W)(T)	1
C37	CC45TH1H060D	С	6pF	±0.5pF(K)	l
C37	CC45TH1H050C	С	5pF	±0.25pF(W)(T)	- 1
C38	CC45CH1H0R5C	С	0.5pF	±0.25pF	
C39	CC45TH1H040C	С	4pF	±0.25pF(K)	
C39	CC45TH1H050C	С	5pF	±0.25pF(W)(T)	
C40	CC45TH1H050C	С	5pF	±0.25pF	

Ref. No.	Parts No.	Description			Re- marks
C41	CC45CH1HOR5C	С	0.5pF	±0.25pF	
C42.43	CC45TH 1H050C	С	5pF	±0.25pF	
C44	CC45CH1H220J	c	22pF	±5%	
C50	C90-0804-05	С	0.001µF		
C51	CE04W1E4R7Q	E	4.7μF	25V	
C54	CE04W1E4R7Q	E	4.7μF	25V	
C55	CC45CH1H100D	-	10pF	±0.5pF	
C56	CC45CH1H010C	1	1pF	±0.25pF	
C58	CE04W1HR47Q	E	0.47μF	50V	
C62,63	CE04W1C100Q	E	10μF	16V	
C67	C90-0820-05	E	470µF	16V(small)	
C70	CE04W1C1000	E	10μF 22μF	16V 16V	
C73	CE04W1C220Q	E	22μΓ 47μF	10V	
C75	CE04W1A470Q	E	47μF	10V	
C76	CE04W1C470Q	E	47μF	16V	
C77	CE04W1C101Q	E	100μF	16V	
C78	CQ92M1H223K	ML	0.022µF	±10%	
C79	CE04W1C101Q	E	100µF	16V	
C80	CQ92M1H473K	ML	0.047µF	±10%	1
C86	CS15E1A3R3M	Т	3.3µF	10V	
C87	CE04W1C470Q	Ε	47μF	16V	
C88	CE04W1C330Q	E	33µF	16V	
C89	CQ92M1H472K	ML	0.0047μF	±10%	
C91,92		not used (K)			
C93	CE04W1C220Q	Ε	22µF	16V	
C94~96	C91-0433-05	Laminated cap	. 0.0039μF :	±5% 50V	- 1
C94~96	050414100000	not used (K)	22 5	4007	
C98.99	CE04W1C220Q	E	22μF	16V	
C100,101	CE04W1H010Q	T	1μF 15μF	50V 10V	1
C102	CE04W1C220Q	lė	13μ1 22μF	16V	
0.02	020111102200	-		100	.
C93,97~9	9	Not used (K)			ı
C100,101		Not used (K)(W	')		
R46	RC05GF2H2R2J	Solid	$2\Omega$	5%,1/2W	
R52	RC05GF2H100J	Solid	10Ω	±5%.1/2W	1
R62	R92-0616-05	Metal film	10kΩ	±1%.1/4W	-
R62		Not used (K)	47010	. 40/ 4/4141	
R63	RN14BK2E4703F	l	470kΩ	±1%,1/4W	
R64	R92-0616-05	Not used (K) Metal film	1000	±1%,1/4W	
R64	H92-0616-05	Not used (K)	10kΩ	I 170, 1/444	
R65	R92-0617-05	Metal film	7.5kΩ	±1%,1/4W	
R65	1132-0017-03	Not used (K)	7.584	± 1 /0, 1/ 4**	
		1101 0300 (11)			
TC1	C05-0062-05	Ceramic trimme		6pF	
TC2.3	C05-0030-15	Ceramic trimme	er	20pF	
VR1	R12-4016-05	Semi-fixed resis	to.	EOLO	
VR2	R12-2015-05	Semi-fixed resis		50kΩ 5kΩ	
VR3	R12-0042-05	Semi-fixed resis		500Ω	
VR4	R12-1016-05	Semi-fixed resis		3kΩ	
VR5	R12-4016-05	Semi-fixed resis		50kΩ	-
VR6.7	R12-1050-05	Semi-fixed resis		1kΩ	
VR8	R12-2405-05	Semi-fixed resis		5kΩ	- 1
VR9	R12-4403-05	Semi-fixed resis	tor	50kΩ	
					I
Q1	V03-2240-06	TR	2SC2240	· ·	
Q2	V30-0039-05	IC	TA7061AF	- 1	
Q3,4	V03-0079-05	TR	2SC460(B	1	
Ω5,6 Ω7	V09-1014-06	FET	25K61 (GF	17	
Q8	V09-1002-56	FET	3SK74(L)	,,	- 1
Q9 .	V03-2538-16 V03-2603-06	TR TR	2SC2538-	1	
43	VU3-20U3-U6	ın	2SC2603(	-1	

Ref. No.	Parts No.	Description	Re- marks
Q10,11	V01-1015-06	TR 2SA1015(Y)	
Q12	V01-0671-16	TR 2SA671(B)	
Q13	V01-1015-06	TR 2SA1015(Y)	
Q14	V03-2603-06	TR 2SC2603(E)	
Q15	V03-0336-05	TR 2SC496(Y)	
Q16	V30-1135-06	IC FS7808C	İ
Q17.18	V03-2603-06	TR 2SC2603(E)	
Q19	V01-1015-06	TR 2SA1015(Y)	
Q20	V03-2603-06	TR 2SC2603(E)	
Q21,22	V03-1815-06	TR 2SC1815(Y)	
Q23.24	V03-0093-05	TR 2SC458(B)	
D1	V11-0317-05	Vari-cap diode 1S2208	
D2.3	V11-0414-05	Diode 1S2588	
D4	V11-0317-05	Vari-cap diode 1S2208	
D5~7	V11-7761-86	Vari-cap diode ITT410	
D8	V11-0076-05	Vari-cap diode 1S1555	
D9.10	V11-0051-05	Diode 1N60	
D12	V11-0076-05 V11-1262-46	Diode 1S1555	
013	V11-0243-05	Diode VD1223 Zener diode WZ-061	
D14	V11-4167-06	Zener diode WZ-061 Zener diode XZ-090	
D15,16	V11-0076-05	Diode 1S1555	
D17	V11-4101-20	Zener diode XZ-060	
D18	V11-4161-96	Zener diode XZ-070	ļ
D19,20	V11-0076-05	Diode 1S1555	
D21	V11-4101-20	Zener diode XZ-060	
D22	V11-0076-05	Diode 1S1555 (W)(T)	
D22		not used (K)	
D23	V11-0076-05	Diode 1S1555 (T)	
D23	·	not used (K)(W)	
L1	L40-1545-06	Ferri-inductor 150mH	
L2	L77-0859-05	Crystal 10.710 MHz	
L3	L33-0615-05	Choke 15µH	
L4	L30-0005-05	Tuning coil	
L5	L31-0313-05	Tuning coil	
L6	L40-1001-03	Ferri-inductor 10µH	
L7	L40-1511-03	Ferri-inductor 150µH	
L8	L34-0886-05	Tuning coil MIX	
L9 L10	L31-0180-05	Tuning coil	
L11	L31-0266-05 L31-0267-05	Tuning coil	
L12	L34-0885-15	Tuning coil VHF Coil 5ø5T	₩
L13	L34-0452-05	VHF Coil 3\(\phi\)6T	и
L14	L34-0691-05	VHF Coil 5¢5T	
L15	L40-6825-04	Ferri-inductor 6.8mH	
L16	L33-0026-05	Choke 1µH	
L17	L15-0016-05	Choke trans.	
L18	L40-1511-03	Ferri-inductor 150µH	
L19,20	L40-1011-03	Ferri-inductor 100µH	
_	E40-0273-05	Mini connect wafer 2P	
_	E40-0373-05	Mini connect wafer 3P	
-	E40-0773-05	Mini connect wafer 7P	
_	E40-0873-05	Mini connect wafer 8P	
_	E40-1173-05	Mini connect wafer 11P	
-	E40-1273-05	Mini connect wafer 12P	1 1

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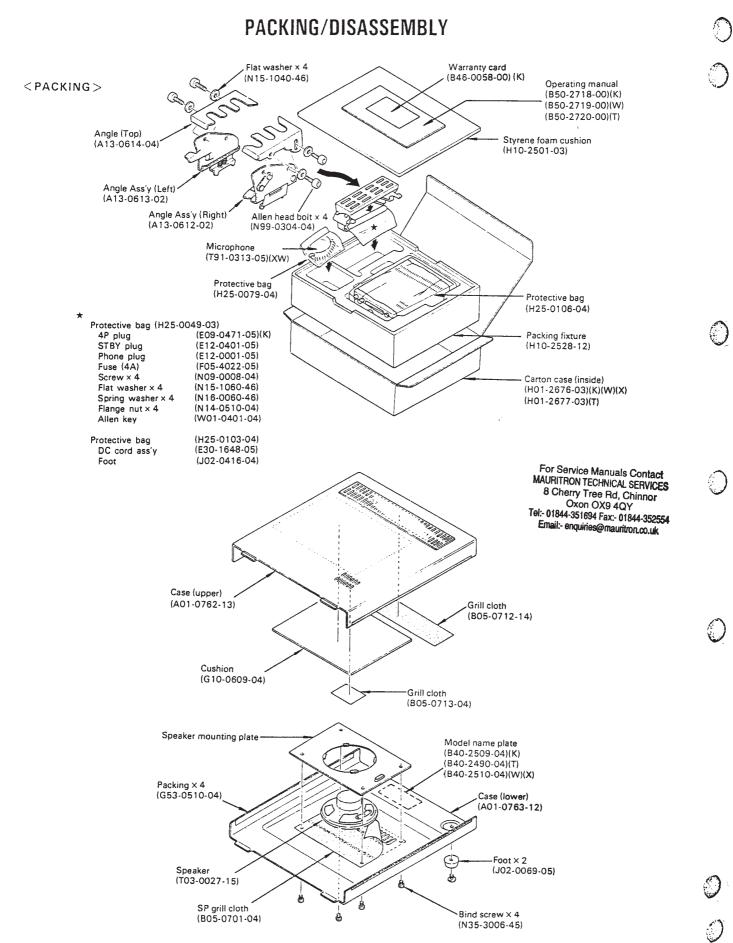


Fig. 12 Case disassembly

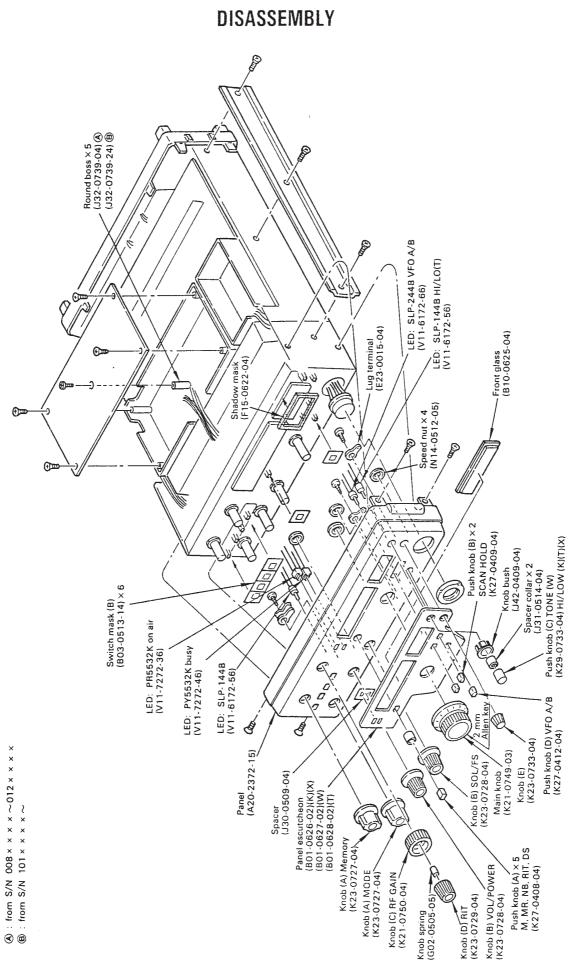


Fig. 13 Front panel disassembly

# **DISASSEMBLY**

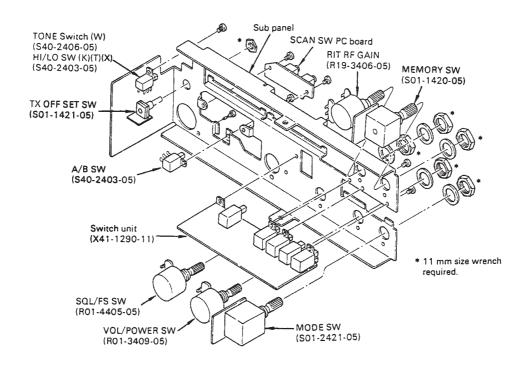


Fig. 14 Sub panel disassembly

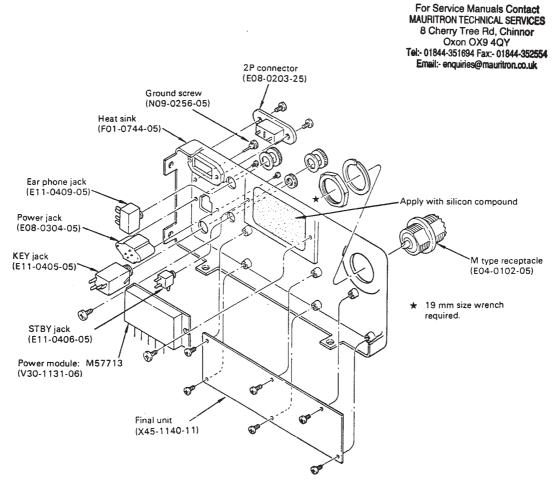


Fig. 15 Heat sink ass'y/disassembly

# **DISASSEMBLY**

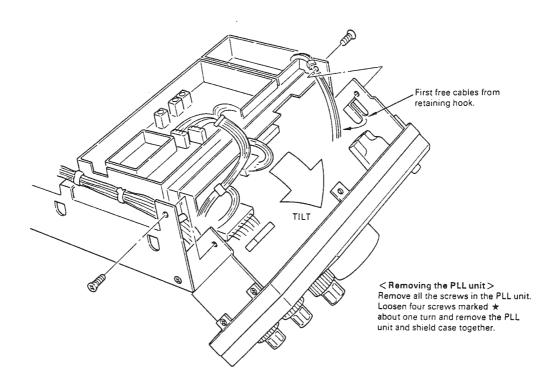


Fig. 16 Inspection of the PLL and switch unit

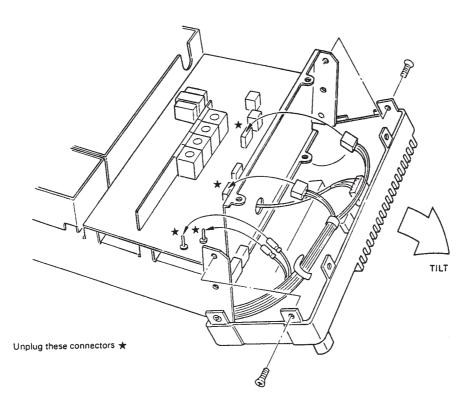
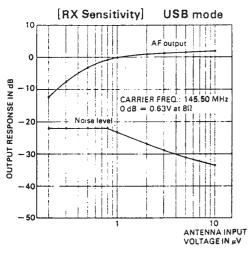
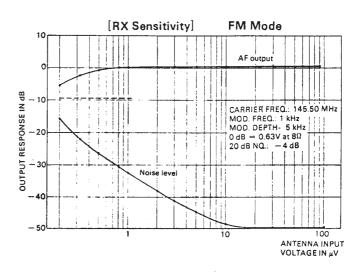
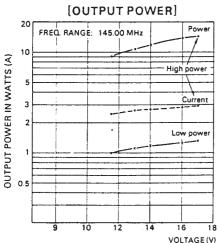


Fig. 17 Heat sink access

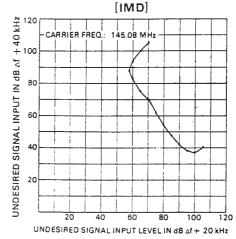
# REFERENCE DATA

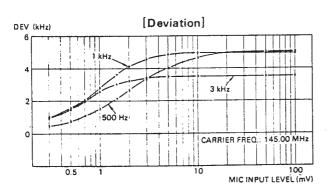






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[S meter]

10 CARRIER FREQ.: 145.005 MHz

MOD. FREQ.: 1 kHz

MOD. DEPTH. 5 kHz

AT USB NO MODULATION

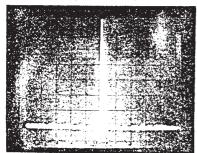
8 USB

(1.9 scale)

1 10 100

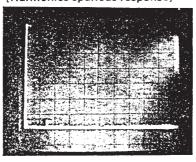
ANTENNA INPUT VOLTAGE IN #V

[Near spurious response]



CARRIER FREQ.: 145 02 MHz
RF POWER: 10 5W
SCAN WIDTH: 5 MHz/DIV
BAND WIDTH: 10 kHz
SCAN TIME: 0.5 sec.
VIDEO FILTER: 10 kHz
INPUT ATT.: 20 dB
LOG REF LEVEL: —5 dBm
10 dB/DIV

[Harmonics spurious response]



CARRIER FREQ.: 145.02 MHz RF POWER: 10.5W SCAN WIDTH: 100 MHz/DIV BAND WIDTH: 30 kHz SCAN TIME: 2 sec. VIDEO FILTER: 10 kHz INPUT ATT.: 20 dB LOG REF LEVEL: —5 dBm 10 dB/ DIV



## PS-20

## PS-20 SPECIFICATIONS

#### [POWER SUPPLY SECTION]

Continuous load current ..... 4A max. Output voltage fluctuation. Within ±50 mV at AC120/220/240V ±10% (at load current 4A) Within 0.1V at 0~4A of load current (at AC 120/220/240V) Less than 5 mV at 13.8V, 4A Ripple voltage..... (at AC 120/220/240V) Power consumption ...... Approx. 100W (at AC 120/220/240V, DC 13.8V, 4A) [GENERAL]

(9-17/64") D mm (inch)

Weight ...... Approx. 3.8 kg (8.4 lbs)

[ACCESSORIES]

Operating manual ...... 1 DC Power cord ...... 1 Fuse (1A): 1
Crimp style terminal 2

Parts No.

NOTE: The circuit and ratings may change without notice due to

Description

development in technology.

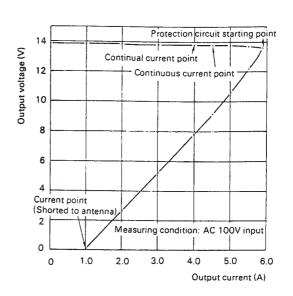


Fig. 19 Output voltage characteristic

#### PS-20

Ref. No.

#### ☆: New Parts

Re-

marks

	L		IIIaiks
C1	C90-0808-05	E 15000μF 25V	☆
_	A01-0732-03	Case (A)	☆
	A01-0733-02	Case (B)	☆
l –	A20-2333-03	Panel (T)	☆
_	A20-2336-03	Panel (K)(W)	☆
			1
_	839-0407-04	Spacer (assistance leg)	
-	B46-0058-00	Warranty card (K)	
_	B50-2616-10	Operating manual (K)(W)	☆
-	B50-2617-10	Operating manual (T)	☆
	E07-0252-05	2P Metal plug	
-	E20-0282-05	2P Terminal plate	☆
	E23-0412-05	Crimp style terminal × 2	☆
_	E30-0181-05	AC cord with plug (K)	
_	E30-0585-05	AC cord with plug (W)	
	E30-0602-05	AC cord with plug (T)	
-	E30-1620-05	DC power cord	☆
_	F05-1023-05	Fuse (1A) × 1 (K) × 2(W)(T)	
	F05-2023-05	Fuse (2A) × 2(K)	
-	F29-0014-05	Shoulder washer × 4	
_	H01-2592-14	Carton (inside) (K)(W)	☆
_	H01-2593-14	Carton (inside) (T)	☆
-	H10-2513-02	Styren foam cushion (front)	☆
-	H10-2514-02	Styren foam cushion (rear)	☆
_ _ _	H12-0460-04	Cushion	☆
-	H20-1407-03	Protective cover	☆
-	H25-0029-04	Accessories bag 60 × 110 mm	
	H25-0117-04	Accessories bag 80 × 250 mm	
_	J02-0323-05	Foot × 4	
	J02-0409-04	Foot supporter	☆
_	J21-2573-04	Foot stopper x 2	
_	J32-0133-04	Hex boss × 4	
. –	J41-0006-05	Cord bush (K)	
_	J41-0024-15	Cord bush (W)(T)	
_	L01-8056-05	Power trans.	☆

Ref. No.	Parts No.	Description	Re- marks
S1 S2	S36-2402-05 S31-2027-05	Seesaw switch (power) Slide switch (AC voltage)	
Q1,2	V04-0525-26	TR 2SD525(O) or (Y)	¥
D1 —	V11-2164-06 X43-1350-00	Rectifier stack M4B51-11 AVR unit	ф ф

## AVR UNIT (X43-1350-00)

Ref. No.	Parts No.		Description	Re- marks
C1,2	C91-0456-05	С	0.047µF 25V	
C3	CE04W1C100	E	10μF 16V	
C4.5	C91-0456-05	С	0.047µF 25V	
C6	CE04W1C222MA	Ε	2200μF 16V	☆
R14,15	R92-0618-05	Metal film 0.1	Ω	☆
VR1	R12-2015-05	Semi-fixed res	sistor 5kΩ	
VR2	R12-1016-05	Semi-fixed res	sistor 3kΩ	
Q1	V01-1015-06	TR	2SA1015(Y)	
Q2	V03-1959-06	TR	2SC1959 (Y)	
Q3	V01-0473-06	TR	2SA473(Y)	ŀ
Q4.5	V03-1815-06	TR	2SC1815(Y)	
D1	V11-4101-20	Zener diode	XZ-060	
02	V11-4161-76	Zener diode	XZ-137	
D3	V11-4101-20	Zener diode	XZ-060	
D4		not used		
D5	V11-0297-05	Zener diode	WZ-130	
D6	V11-5160-66	LED	SEL103R	☆
D7	V11-5160-76	LED	SEL303G	☆
	E23-0047-04	Square termin	al × 10	
_	J31-0503-05	Beads × 4		