

**FM/SW/MW/LW  
33-BAND RADIO  
RECEIVER**

**CRF-330K**

*US Model*

*Serial No. 10201 and later*

*Canadian Model*

*E Model*

*AEP Model*

**SUPPLEMENT**

This supplement updates the service manual to include the production changes in US model and to cover information for Canadian, E and AEP models.

File this supplement with the service manual.

No. 1

October, 1977

**SONY**  
**SERVICE MANUAL**

## 1. MODEL IDENTIFICATION

— Specification Label —

USA, Canadian model

### SONY® WORLD ZONE MODEL NO. CRF-330K FM/SW/MW/LW 33 BAND RADIO RECEIVER

**FREQ RANGE:**

FM<sub>1</sub> 76-90MHz FM<sub>2</sub> 87.5-108MHz LW 150-400kHz  
MW 530-1605kHz SW 1.6-30.0MHz (29 BANDS)  
IF: FM 10.7MHz SW 1st 45.145MHz 2nd 455kHz MW, LW 455kHz

**BATTERY SUPPLY:**

1.5V x 8 USE SIZE "D" STANDARD FLASHLIGHT  
BATT OR EQUIVALENT

EXT DC POWER SUPPLY: 12V 900mA

AC POWER SUPPLY: 120V 12.5W 60Hz

CLOCK: QUARTZ CLOCK CRYSTAL FREQ

32.768kHz BATT SUPPLY

1.5V x 1 USE SIZE "D" STANDARD FLASH-  
LIGHT BATT OR EQUIVALENT

SERIAL NO.

CERTIFICATION: DESIGN CERTIFIED  
AS COMPLYING WITH F.C.C. RULES  
PART 15, IN EFFECT AS OF DATE  
OF MANUFACTURE.

**CAUTION**

TO PREVENT ELECTRIC  
SHOCK, DO NOT REMOVE  
COVER. NO USER-SERV-  
ICEABLE PARTS INSIDE.  
REFER SERVICING TO  
QUALIFIED SERVICE PER-  
SONNEL.

**ATTENTION**

AFIN DE PREVENIR UN  
CHOC ELECTRIQUE NE PAS  
ENLEVER LE COUVERCLE.  
IL NE SE TROUVE A  
L'INTERIEUR AUCUNE PIECE  
POUVANT ETRE REPARÉE  
PAR L'USAGER S'ADRESSER  
A UN REPARATEUR COM-  
PETENT

MADE IN JAPAN

AEP model

### SONY® WORLD ZONE MODEL NO. CRF-330K FM/SW/MW/LW 33 BAND RADIO RECEIVER

**FREQ RANGE:** FM<sub>1</sub> 76-90MHz FM<sub>2</sub> 87.5-108MHz

LW 150-400kHz MW 530-1605kHz

SW 1.6-30.0MHz (29 BANDS)

IF: FM 10.7MHz SW 1st 45.145MHz 2nd 455kHz  
MW, LW 455kHz

BATTERY SUPPLY (1.5V ) x 8 USE SIZE "D" STANDARD  
FLASHLIGHT BATT OR EQUIVALENT

EXT DC POWER SUPPLY: 12V  900mA

AC POWER SUPPLY: 110, 120, 220, 240V ~ 12.5W 50/60Hz

CLOCK: QUARTZ CLOCK CRYSTAL FREQ

32.768kHz BATT SUPPLY

(1.5V ) x 1 USE SIZE "D" STANDARD  
FLASHLIGHT BATT OR EQUIVALENT

SERIAL NO.

(N D S )



CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT  
REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE.  
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

MADE IN JAPAN

E model

### SONY® WORLD ZONE MODEL NO. CRF-330K FM/SW/MW/LW 33 BAND RADIO RECEIVER

FREQ RANGE: FM<sub>1</sub> 76-90MHz FM<sub>2</sub> 87.5-108MHz  
LW 150-400kHz MW 530-1605kHz  
SW 1.6-30.0MHz (29 BANDS)

IF: FM 10.7MHz SW 1st 45.145MHz 2nd 455kHz  
MW, LW 455kHz

BATT SUPPLY: 1.5V x 8 USE SIZE "D" STANDARD FLASH-  
LIGHT BATT OR EQUIV

EXT DC POWER SUPPLY: 12V 900mA

AC POWER SUPPLY: 110, 120, 220, 240V

12.5W 50/60Hz

CLOCK: QUARTZ CLOCK CRYSTAL FREQ:

32.768kHz

BATT SUPPLY: 1.5V x 1 USE SIZE "D" STANDARD FLASH-  
LIGHT BATT OR EQUIV



SERIAL NO.

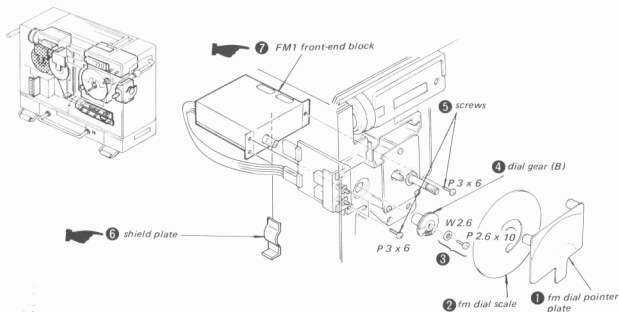
MADE IN JAPAN

## 2. DISASSEMBLY

Page 18:

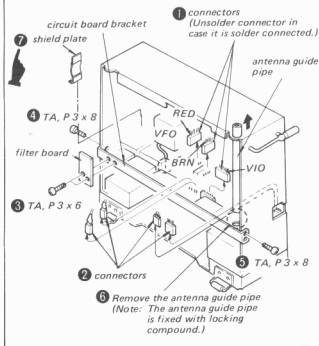
 : changed portions

## FM1 Front-end Block Removal



Page 28:

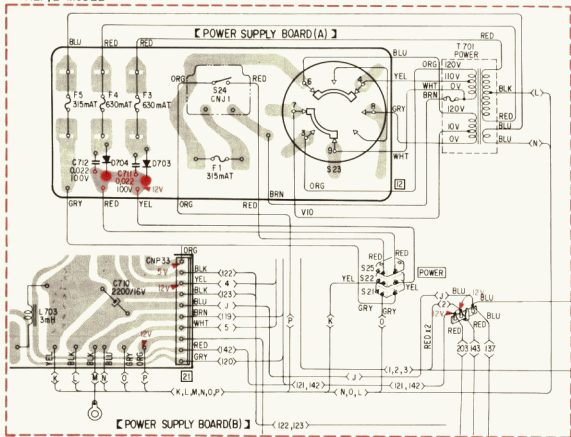
## Main Board Removal (2)



## 3. MOUNTING DIAGRAM

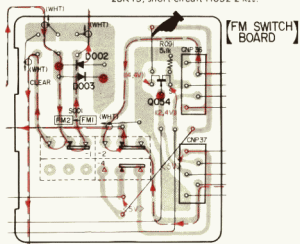
 : changed portion

### AEP, E MODEL



**Note:**

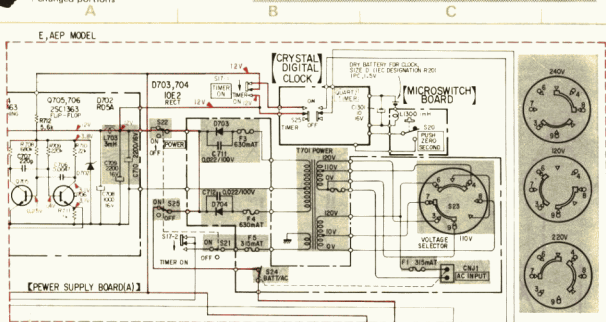
When replacing Q054 2SK23A with 2SK19, short-circuit R092 2 k $\Omega$ .



4. SCHEMATIC DIAGRAM

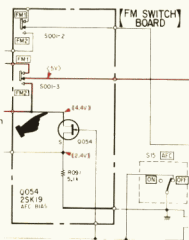
Note: The components identified by shading are critical for safety. Replace only with part number specified.

changed portions



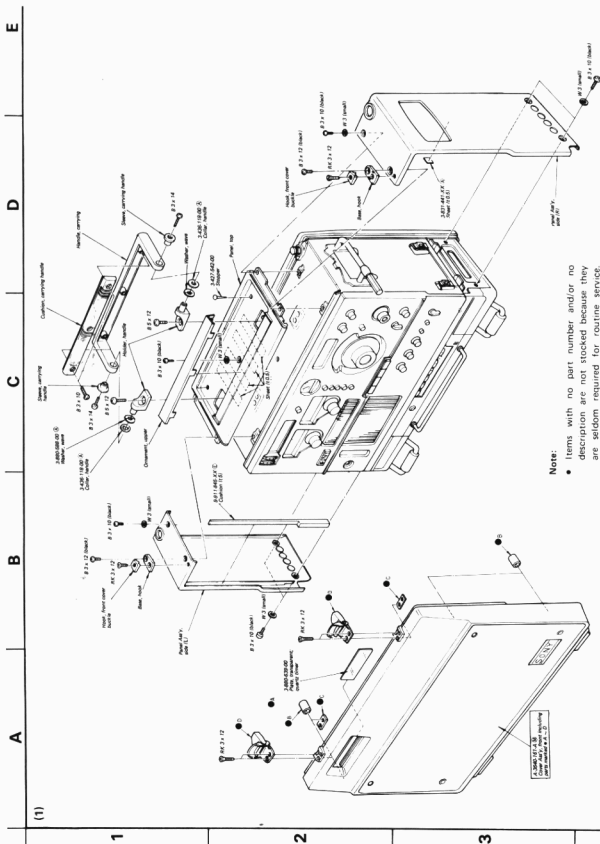
Note:

When replacing Q054 2SK23A with 2SK19, short-circuit R092 2 kΩ.



— : B+ pattern

## 5. EXPLODED VIEWS



E

D

C

B

A

## (2) Note:

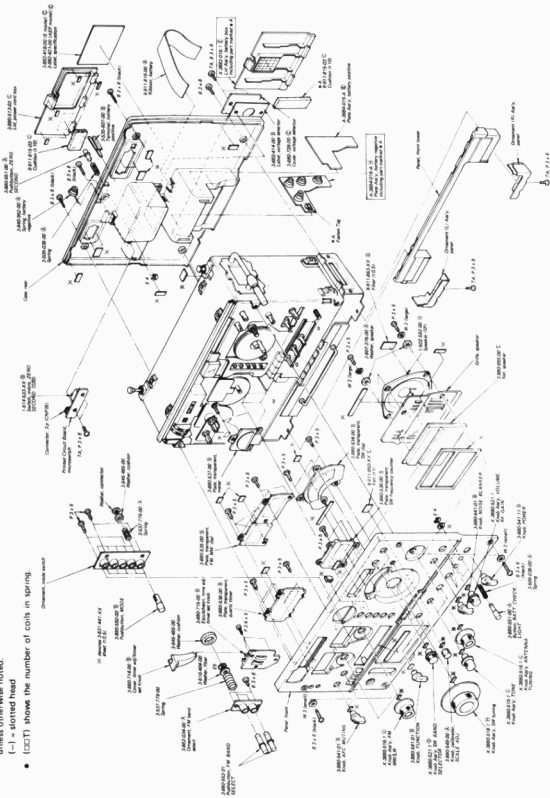
- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- (-) = slotted head
- [□□□] shows the number of coils in spring.

1

2

3

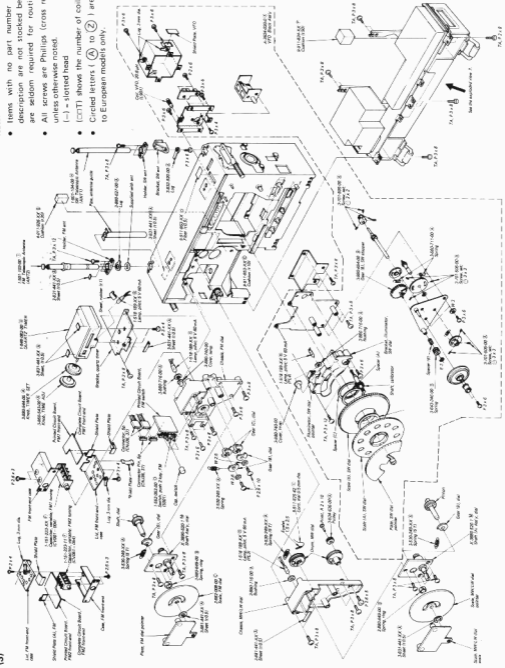
4



A B C D E

(3)

- Note:
- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
  - All screws are Phillips (cross recess) type unless otherwise noted.
  - (-) - slotted head
  - [ ] shows the number of coils in spring.
  - Circled letters (A) to (Z) are applicable to European models only.



1

2

3





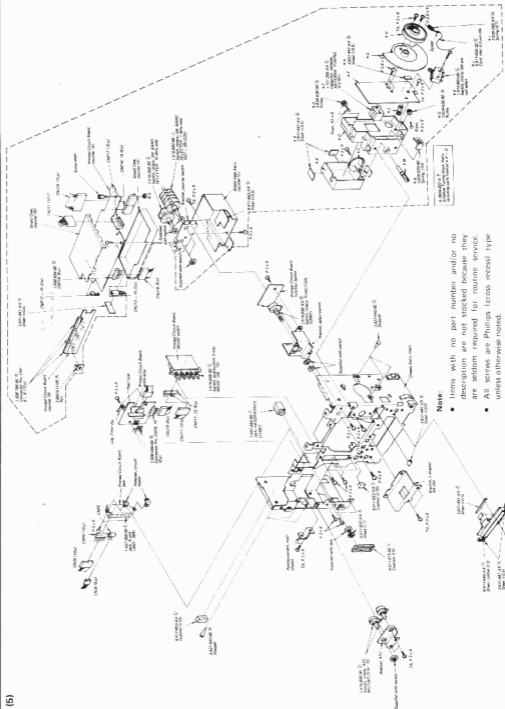
A B C D E

(5)

1

2

3



**Note:**

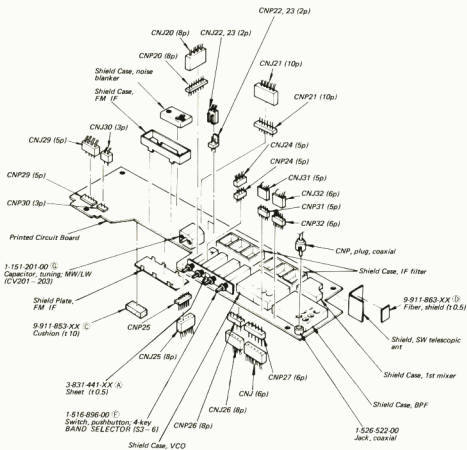
- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- (-) = slotted head
- (L) shows the number of coils in spring.
- Circled letters (A) to (Z) are applicable to European models only.

A

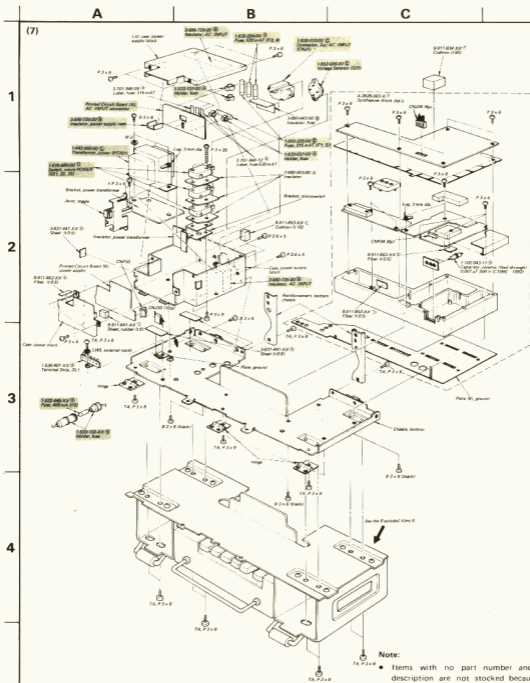
B

C

(6)

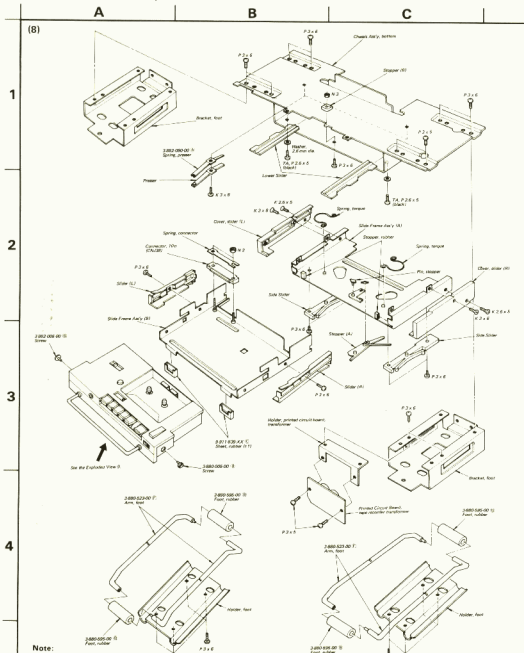
**Note:**

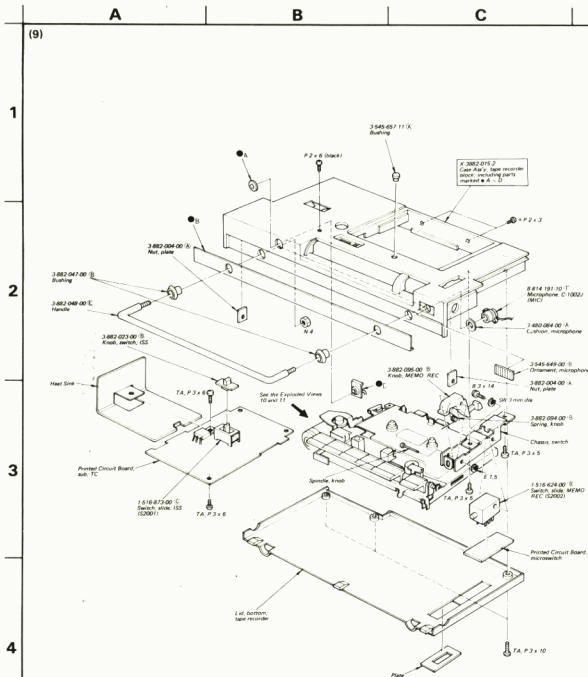
- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.  
(-) - slotted head
- [C][I][T] shows the number of coils in spring.
- Circled letters ( **A** ) to ( **Z** ) are applicable to European models only.



**Note:** The components identified by shading are critical for safety. Replace only with part number specified.

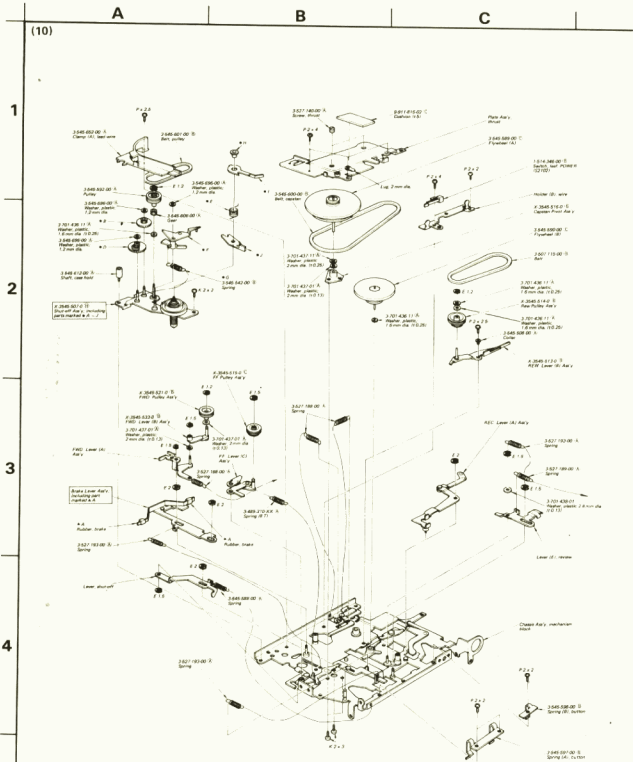
- Note:**
- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
  - All screws are Phillips (cross recess) type unless otherwise noted. (-) = slotted head
  - ( ) shows the number of coils in spring.
  - Circled letters ( A ) and ( Z ) are applicable to European models only.





**Note:**

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.  
(-) = slotted head
- (□□T) shows the number of coils in spring.
- Circled letters ( A ) to ( Z ) are applicable to European models only.

**Note:**

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- (-) = slotted head
- (□T) shows the number of coils in spring.
- Circled letters (A to Z) are applicable to European models only.





## 6. ELECTRICAL PARTS LIST

Note: Circled letters (A) to (Z) are applicable to European models only.

<i>Ref. No.</i>	<i>Part No.</i>	<i>Description</i>	<i>Ref. No.</i>	<i>Part No.</i>	<i>Description</i>
<b>SEMICONDUCTORS</b>					
<b>Transistors</b>					
⇒ Q001	(C)	2SK42-1	⇒ Q805, 806	(B)	2SC1364
⇒ Q002	(C)	2SK23A-840	⇒ Q901,	(C)	2SK42-1
Q003	(B)	2SC710	⇒ Q902, 903	(E)	2SK23A-824
⇒ Q051	(C)	2SK42-1	Q1001, 1002	(E)	3SK37
⇒ Q052	(C)	2SK23A-840	Q1003, 1004	(B)	2SC710
Q053	(B)	2SC710	⇒ Q1006	(C)	2SK23A-825
⇒ Q054	(B)	2SK23A-860 (US model: Serial No. up to 10200)	⇒ Q1007 – 1012	(B)	2SC634A
	(B)	2SK19-BL (US model serial No. 10201 and later, AEP, E model)	Q1013 – 1018	(B)	2SC710
Q201	(E)	3SK37	Q1019, 1020	(C)	2SC641K
⇒ Q202, 203	(B)	2SK23A-840	Q1021, 1022	(B)	2SC710
Q204	(E)	3SK37	⇒ Q1023, 1024	(B)	2SC634A
⇒ Q205, 206	(C)	2SK23A-840	Q1025, 1201	(E)	2SK23A-824
Q207 – 209	(B)	2SC710	Q1202, 1203	(B)	2SC710
⇒ Q210, 211	(B)	2SC710-14	⇒ Q1204 – 1212	(B)	2SC1364
⇒ Q212	(B)	2SC710-15	⇒ Q1213 – 1216	(C)	2SA678
Q213 – 215	(B)	2SC710	⇒ Q2001	(D)	2SC1016
⇒ Q216	(B)	2SC634A	⇒ Q2002 – 2005	(B)	2SC634A
⇒ Q217	(C)	2SA678	⇒ Q2101, 2102	(B)	2SC632A
⇒ Q218 – 221	(B)	2SC634A	⇒ Q2103, 2104	(B)	2SC634A
⇒ Q222	(B)	2SC710-14	⇒ Q2105	(C)	2SA678
Q223	(B)	2SC710	⇒ Q2106, 2107	(B)	2SC634A
⇒ Q224	(C)	2SK42-1	Q2108	(B)	2SC1474
⇒ Q225, 226	(C)	2SC1129	<b>ICs</b>		
Q227	(E)	3SK37	⇒ IC801, 802	(D)	CX075B
⇒ Q228	(B)	2SA634A	IC1001	(D)	TA7060P
⇒ Q229	(C)	2SA684	⇒ IC1002	(H)	SN74S113DC
⇒ Q230	(B)	2SC634A	IC1003, 1004	(J)	SN74162N
⇒ Q231	(C)	2SA678	⇒ IC1005	(K)	μPC1008C
Q401	(B)	2SC632A	IC1006	(E)	HD74LS00P
⇒ Q501	(B)	2SC634A	IC1007	(D)	TA7060P
⇒ Q601	(B)	2SC634A	IC1201	(K)	34013PC
⇒ Q602, 603	(C)	2SC1429-□5	IC1202	(D)	MSM505
⇒ Q604	(B)	2SC634A	IC1203	(K)	MSM551H
Q701	(C)	2SA678	IC1204	(F)	MSM530
⇒ Q702	(E)	2SA684	IC1205 – 1207	(K)	MSM5503
⇒ Q703 – 706	(B)	2SC634A	IC1208 – 1210	(H)	MSM561
Q801 – 803	(B)	2SC710-14	IC2101	(F)	CX170
⇒ Q804	(B)	2SC634A	⇒ IC2102	(H)	BX295A

⇒ Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

Note: Circled letters (A to Z) are applicable to European models only.

Ref. No.    Part No.    Description

### Diodes

D001, 051	(B) IS2687S-2
D201 - 209	(B) IS1555
D211 - 215	(B) IS1555
D216	(B) 1T23S
D217 - 219	(B) IS1555
D220, 221	(B) 1T23S
D223, 225	(B) IS1555
D226, 227	(C) 1T18-0
D228 - 234	(B) IS2222
D235	(B) 1T261
D236	(B) RD6A
D237 - 241	(B) IS1555
D401	(B) IS1555
D601, 602	(B) VD1120
D701	(B) 2SB324
D702	(B) RD5A
D703, 704	(B) 10E2
D801, 802	(B) 1T261
D803 - 807	(B) IS1555
D1001, 1002	(B) 1T261
D1003, 1004	(B) IS1555
D1201 - 1204	(B) IS1555
D2001, 2002	(B) IS1555
D2003	(C) TLR109 (LED)
D2004	(B) IS1555
D2101 - 2105	(B) IS1555

### Thermistors

Th701	1-800-071-XX	(A) S-300
Th1001	1-800-198-XX	(A) S-1K
Th1002	1-800-194-00	(A) S-90
Th2101	1-800-198-00	(A) S-1K

### COILS

L001	1-425-909-00	(B) FM Antenna
L002	1-425-910-00	(B) FM RF
L003	1-425-909-00	(B) FM Antenna
L004	1-405-750-00	(B) FM Osc

Ref. No.    Part No.    Description

L051	1-425-929-00	(B) Coil
L052	1-425-930-00	(B) Coil
L053	1-425-929-00	(B) Coil
L054	1-405-527-21	(B) FM Osc
L201	1-407-178-XX	(A) Microinductor, 1 $\mu$ H
L210, 215	1-407-741-00	(B) Microinductor, 18 $\mu$ H
L224	1-407-864-00	(B) RF BPF
L225	1-407-865-00	(B) RF BPF
L228	1-407-864-00	(B) RF BPF
L231	1-407-862-00	(B) RF BPF
L232	1-407-863-00	(B) RF BPF
L235	1-407-862-00	(B) RF BPF
L261	1-401-665-00	(F) MW/LW Ferrite-rod Antenna
L262	1-425-911-00	(B) MW RF
L263	1-425-444-00	(B) LW RF
L264	1-405-717-00	(B) MW Osc
L265	1-405-716-00	(B) LW Osc
L266	1-417-053-00	(D) VCO Matching Transformer
L267	1-407-178-XX	(A) Microinductor, 1 $\mu$ H
L268	1-433-184-00	(B) VCO (1)
L269	1-433-185-00	(B) VCO (3)
L270	1-433-188-00	(B) VCO (4)
L271	1-433-189-00	(B) VCO (6)
L272	1-433-190-00	(B) VCO (7)
L273	1-433-186-00	(B) VCO (5)
L274	1-433-187-00	(B) VCO (2)
L275	1-425-912-00	(B) Mixing
L282, 283	1-407-661-XX	(A) Microinductor, 470 $\mu$ H
L287, 288	1-407-157-XX	(A) Microinductor, 10 $\mu$ H
L289	1-407-661-XX	(A) Microinductor, 470 $\mu$ H
L290	1-407-178-XX	(A) Microinductor, 1 $\mu$ H
L401 - 403	1-407-883-00	(C) Microinductor, 100 mH
L701	1-407-857-00	(D) Choke, 3 mH
L702	1-407-884-00	(H) Choke, 6 mH
L703	1-407-857-00	(D) Choke, 3 mH
L804	1-407-169-XX	(A) Microinductor, 100 $\mu$ H
L1010	1-407-178-XX	(A) Microinductor, 1 $\mu$ H
L1016	1-407-169-XX	(A) Microinductor, 100 $\mu$ H

Note: The components identified by shading are critical for safety. Replace only with part number specified.

Note: Circled letters (A to Z) are applicable to European models only.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
L1021-1023	1-407-856-00	(C) Choke, 1 mH
L1025, 1026	1-407-169-XX	(A) Microinductor, 100 $\mu$ H
L1201, 1202	1-407-856-00	(C) Choke, 1 mH
L1203	1-407-175-XX	(A) Microinductor, 330 $\mu$ H
L2011	1-407-175-XX	(A) Microinductor, 330 $\mu$ H
L2031	1-407-206-XX	(B) Microinductor, 10 mH
<b>TRANSFORMERS</b>		
T1	1-433-105-00	(B) Osc
T601	1-423-140-11	(C) Input
FL201	1-403-165-00	(C) Ceramic Filter
FL202A	1-403-888-11	(E) Mechanical Filter
FL202B	1-403-888-21	(E) Mechanical Filter
FL203A	1-404-024-11	(F) Mechanical Filter
FL203B	1-404-024-21	(B) Mechanical Filter
IFT001, 051	1-404-031-00	(B) FM IFT
IFT202	1-404-023-00	(B) AM IFT
IFT203	1-403-152-00	(B) AM IFT
IFT204-206	1-404-023-00	(B) AM IFT
IFT207	1-459-153-00	(B) BFO
IFT801	1-403-959-00	(B) FM Discriminator
IFT802	1-403-953-00	(B) FM Discriminator
IFT803	1-403-243-00	(B) FM IFT
<b>CAPACITORS</b>		
All capacitors are in $\mu$ F and ceramic unless otherwise noted.		
50WV or less are not indicated except for electrolytics.		
pF = $\mu$ F, elect = electrolytic		
C001	1-102-956-11	(A) 15 p
C002	1-161-013-11	(A) 0.01 (boundary layer)
C003, 004	1-102-960-11	(A) 24 p (boundary layer)
C005	1-161-013-11	(A) 0.01 (boundary layer)
C006	1-102-972-11	(A) 91 p
C009	1-161-013-11	(A) 0.01 (boundary layer)
C011	1-102-870-11	(A) 8 p
C012	1-102-947-11	(A) 10 p

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C013	1-102-870-11	(A) 8 p
C014	1-161-013-11	(A) 0.01 (boundary layer)
C015	1-127-019-11	(B) 0.1 16 V solid aluminum elect
C016	1-121-651-11	(A) 10 16 V elect
C051	1-102-949-11	(A) 12 p
C052	1-161-013-11	(A) 0.01 (boundary layer)
C053, 054	1-102-953-11	(A) 18 p
C055	1-161-013-11	(A) 0.01 (boundary layer)
C056	1-102-972-11	(A) 91 p
C059	1-161-013-11	(A) 0.01 (boundary layer)
C061	1-102-858-11	(A) 10 p
C062	1-102-944-11	(A) 7 p
C063	1-102-663-11	(A) 8 p
C065	1-127-019-11	(B) 0.1 16 V solid aluminum
C066	1-121-651-11	(A) 10 16 V elect
C067	1-101-978-11	(A) 10 p
C100	1-103-733-11	(A) 0.0022 50 V polystyrol
C101	1-103-729-11	(A) 0.0015 50 V polystyrol
C102	1-103-728-11	(A) 0.0013 50 V polystyrol
C103	1-107-082-11	(A) 75 p silvered mica
C105	1-101-882-11	(A) 51 p
C106	1-102-946-11	(A) 9 p
C107	1-102-975-11	(A) 100 p
C201-203	1-101-118-11	(A) 0.01
C204	1-101-361-11	(A) 150 p
C205	1-107-082-11	(A) 75 p silvered mica
C206	1-107-068-11	(A) 20 p silvered mica
C207-209	1-161-013-11	(A) 0.01 (boundary layer)
C210	1-102-979-11	(A) 240 p
C211	1-107-081-11	(A) 68 p silvered mica
C212	1-107-102-11	(A) 5 p silvered mica
C213	1-101-367-11	(A) 160 p silvered mica
C214	1-121-651-11	(A) 10 16 V elect
C215	1-161-013-11	(A) 0.01 (boundary layer)
C216	1-107-079-11	(A) 56 p silvered mica
C217	1-161-013-11	(A) 0.01 (boundary layer)
C218	1-107-075-11	(A) 39 p silvered mica

Note: Circled letters (A) (Z) are applicable to European models only.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C219	1-107-086-11 (A)	110 p silvered mica	C267	1-107-078-11 (A)	51 p silvered mica
C220	1-107-072-11 (A)	30 p silvered mica	C268	1-102-074-11 (A)	0.001
C221	1-107-086-11 (A)	110 p silvered mica	C272	1-107-078-11 (A)	51 p silvered mica
C222	1-107-075-11 (A)	39 p silvered mica	C273, 274	1-107-079-11 (A)	56 p silvered mica
C223	1-121-651-11 (A)	10 16 V elect	C276	1-107-233-11 (A)	430 p silvered mica
C224	1-107-078-11 (A)	51 p silvered mica	C277	1-102-125-11 (A)	0.0047
C225	1-161-013-11 (A)	0.01 (boundary layer)	C278	1-107-078-11 (A)	51 p silvered mica
C226	1-107-074-11 (A)	36 p silvered mica	C280	1-102-944-11 (A)	7 p
C227	1-161-013-11 (A)	0.01 (boundary layer)	C281 - 290	1-101-924-11 (A)	0.022
C228	1-107-067-11 (A)	18 p silvered mica	C284	1-108-239-12 (A)	0.01 mylar
C229	1-107-081-11 (A)	68 p silvered mica	C294	1-108-242-12 (A)	0.022 mylar
C230	1-107-066-11 (A)	16 p silvered mica	C295	1-101-924-11 (A)	0.022
C231	1-107-081-11 (A)	68 p silvered mica	C296	1-107-079-11 (A)	56 p silvered mica
C232	1-107-067-11 (A)	18 p silvered mica	C297, 298	1-108-239-12 (A)	0.01 mylar
C233	1-107-071-11 (A)	27 p silvered mica	C299	1-107-235-11 (A)	510 p silvered mica
C234	1-121-651-11 (A)	10 16 V elect	C302	1-108-563-12 (B)	0.0022 mylar
C235	1-161-013-11 (A)	0.01 (boundary layer)	C303	1-101-924-11 (A)	0.022
C236	1-102-507-11 (A)	9 p	C304	1-121-391-11 (A)	1 50 V elect
C237	1-161-013-11 (A)	0.01 (boundary layer)	C305, 306	1-108-244-12 (A)	0.033 mylar
C238	1-102-511-11 (A)	13 p	C307	1-102-942-11 (A)	5 p
C239	1-102-516-11 (A)	27 p	C308	1-102-949-11 (A)	12 p
C240	1-102-510-11 (A)	12 p	C309	1-102-679-11 (A)	120 p
C241	1-102-516-11 (A)	27 p	C310	1-103-714-11 (A)	360 p 50 V polystyrol
C242	1-102-511-11 (A)	13 p	C312	1-102-964-11 (A)	36 p
C243	1-102-501-11 (A)	1 p	C313, 314	1-102-947-11 (A)	10 p
C244	1-121-651-11 (A)	10 16 V elect	C315	1-108-242-12 (A)	0.022 mylar
C245	1-161-013-11 (A)	0.01 (boundary layer)	C318	1-121-414-11 (A)	100 6.3 V elect
C246	1-102-505-11 (A)	6 p	C319	1-102-125-11 (A)	0.0047
C247	1-161-013-11 (A)	0.01 (boundary layer)	C321	1-102-504-11 (A)	4 p
C248	1-102-864-11 (A)	5 p	C322	1-102-751-11 (A)	22 p
C249	1-102-514-11 (A)	22 p	C323	1-102-526-11 (A)	75 p
C250	1-102-504-11 (A)	4 p	C324	1-101-999-11 (A)	10 p
C251	1-102-514-11 (A)	22 p	C325	1-102-755-11 (A)	43 p
C252	1-102-864-11 (A)	5 p	C326	1-102-743-11 (A)	3 p
C254	1-121-651-11 (A)	10 16 V elect	C328	1-102-112-11 (A)	330 p
C255	1-161-013-11 (A)	0.01 (boundary layer)	C329 - 335	1-102-125-11 (A)	0.0047
C264	1-107-077-11 (A)	47 p silvered mica	C337	1-102-505-11 (A)	6 p
C265	1-102-125-11 (A)	0.0047	C338	1-102-074-11 (A)	0.001
C266	1-107-079-11 (A)	56 p silvered mica	C340	1-102-074-11 (A)	0.001

Note: Circled letters (A) to (Z) are applicable to European models only.

<i>Ref. No.</i>	<i>Part No.</i>	<i>Description</i>	<i>Ref. No.</i>	<i>Part No.</i>	<i>Description</i>
C341	1-121-413-11	(A) 100 6.3 V elect	C411	1-161-021-11	(A) 0.47 (boundary layer)
C345	1-101-924-11	(A) 0.022	C412	1-127-019-11	(B) 0.1 10 V solid aluminum
C346	1-107-235-11	(A) 510 p silvered mica	C501	1-127-377-11	(B) 0.22 16 V solid aluminum
C350	1-107-071-11	(A) 27 p silvered mica	C502	1-101-918-11	(A) 0.001
C351	1-101-924-11	(A) 0.022	C504	1-121-415-11	(B) 100 16 V elect
C353	1-108-242-12	(A) 0.022 mylar	C505	1-127-377-11	(B) 0.22 16 V solid aluminum
C356, 357	1-108-242-12	(A) 0.022 mylar	C506	1-127-018-11	(B) 0.0047 10 V solid aluminum
C358	1-101-924-11	(A) 0.022	C507	1-127-378-11	(B) 0.68 10 V solid aluminum
C359	1-121-651-11	(A) 10 16 V elect	C509	1-127-378-11	(B) 0.68 10 V solid aluminum
C360, 361	1-101-924-11	(A) 0.022	C601	1-121-415-11	(B) 100 16 V elect
C362	1-102-832-11	(A) 330 p	C602	1-127-377-11	(B) 0.22 16 V solid aluminum
C363	1-121-651-11	(A) 10 16 V elect	C603	1-102-975-11	(A) 100 p
C364	1-102-114-11	(A) 470 p	C604	1-102-074-11	(A) 0.001
C365	1-127-022-11	(A) 0.47 16 V solid aluminum	C605	1-121-479-11	(A) 22 16 V elect
C367	1-127-023-11	(B) 1 10 V solid aluminum	C606	1-161-015-11	(A) 0.015 (boundary layer)
C368	1-107-102-11	(B) 5 p silvered mica	C607	1-161-019-11	(A) 0.033 (boundary layer)
C371	1-108-239-12	(A) 0.01 mylar	C608, 609	1-121-521-11	(B) 330 16 V elect
C372	1-108-242-12	(A) 0.022 mylar	C610	1-127-203-11	(B) 0.33 16 V solid aluminum
C373	1-101-924-11	(A) 0.022	C611, 612	1-121-939-11	(B) 470 16 V elect
C374	1-107-085-11	(A) 100 p silvered mica	C613	1-102-123-11	(A) 0.0033
C377	1-123-070-11	(C) 2200 16 V elect	C614	1-102-119-11	(A) 0.0015
C378	1-121-943-11	(B) 1000 10 V elect	C701	1-123-078-11	(B) 2200 6.3 V elect
C380	1-108-234-12	(A) 0.0047 mylar	C702	1-121-944-11	(E) 1000 16 V elect
C383, 384	1-101-924-11	(A) 0.022	C704	1-108-232-12	(A) 0.0033 mylar
C385	1-102-934-11	(A) 1 p	C705	1-101-923-11	(A) 0.01
C386	1-102-935-11	(A) 2 p	C706	1-108-234-12	(A) 0.0047 mylar
C387	1-161-013-11	(A) 0.01 (boundary layer)	C707	1-107-093-11	(A) 220 p silvered mica
C390	1-127-023-11	(B) 1 10 V solid aluminum	C708	1-121-944-11	(E) 1000 16 V elect
C401	1-127-018-11	(B) 0.047 10 V solid aluminum	<b>C709, 710</b>	<b>1-121-660-11</b>	<b>(B) 2200 16 V elect</b>
C402	1-108-244-12	(A) 0.033 mylar	C711, 712	1-108-381-12	(A) 0.022 100 V mylar
C403	1-121-951-11	(A) 0.47 50 V elect	C805	1-121-413-11	(A) 100 6.3 V elect
C404	1-127-019-11	(B) 0.1 10 V solid aluminum	C810	1-101-924-11	(A) 0.022
C405	1-127-022-11	(B) 0.47 10 V solid aluminum	C812	1-102-964-11	(A) 36 p
C406	1-127-020-11	(B) 0.22 10 V solid aluminum	C813	1-101-924-11	(A) 0.022
C407	1-121-415-11	(B) 100 16 V elect	C814	1-108-234-12	(A) 0.0047 mylar
C408	1-102-099-11	(A) 0.0015	C815	1-121-651-11	(A) 10 16 V elect
C409	1-108-244-12	(A) 0.033 mylar	C816	1-108-228-12	(A) 0.0015
C410	1-161-015-11	(A) 0.015 (boundary layer)			

Note: The components identified by shading are critical for safety. Replace only with part number specified.

Note: Circled letters (A to Z) are applicable to European models only.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C817	1-127-022-11 (B) 0.47	16 V solid aluminum
C819	1-102-962-11 (A) 30 p	
C823	1-102-940-11 (A) 3 p	
C824	1-131-196-11 (B) 2.2	20 V tantalum
C825	1-102-940-11 (A) 3 p	
C829	1-127-019-11 (A) 0.1	16 V solid aluminum
C832	1-101-924-11 (A) 0.022	
C835	1-121-982-11 (A) 470	6.3 V elect
C836	1-121-426-11 (B) 470	16 V elect
C901	1-102-648-11 (A) 43 p	
C902	1-102-672-11 (A) 24 p	
C904	1-107-068-11 (A) 20 p	silvered mica
C905	1-107-089-11 (A) 150 p	silvered mica
C906	1-107-092-11 (A) 200 p	silvered mica
C907	1-108-279-12 (A) 0.015	mylar
C908	1-107-099-11 (A) 2 p	silvered mica
C909	1-107-098-11 (A) 1 p	silvered mica
C910	1-108-279-12 (A) 0.015	mylar
C911	1-107-071-11 (A) 27 p	silvered mica
C912	1-107-085-11 (A) 100 p	silvered mica
C913, 914	1-108-279-12 (A) 0.015	mylar
C1002	1-102-953-11 (A) 18 p	
C1004, 1005	1-107-087-11 (A) 120 p	silvered mica
C1007-1009	1-107-097-11 (A) 330 p	silvered mica
C1010-1012	1-107-087-11 (A) 120 p	silvered mica
C1013	1-102-949-11 (A) 12 p	
C1016, 1017	1-107-087-11 (A) 120 p	silvered mica
C1018	1-102-949-11 (A) 12 p	
C1021, 1022	1-107-087-11 (A) 120 p	silvered mica
C1024	1-161-013-XX (A) 0.01	(boundary layer)
C1025, 1026	1-101-923-11 (A) 0.01	
C1028	1-101-923-11 (A) 0.01	
C1029	1-101-924-11 (A) 0.022	
C1030	1-102-506-11 (A) 7 p	
C1031	1-102-503-11 (A) 3 p	
C1032	1-102-512-11 (A) 16 p	

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C1033	1-102-503-11 (A) 3 p	
C1034	1-102-505-11 (A) 6 p	
C1035-1037	1-101-923-11 (A) 0.01	
C1038, 1039	1-101-924-11 (A) 0.022	
C1040	1-102-864-11 (A) 5 p	
C1041	1-102-951-11 (A) 15 p	
C1042	1-102-504-11 (A) 4 p	
C1043	1-102-948-11 (A) 11 p	
C1044	1-102-943-11 (A) 6 p	
C1045	1-102-949-11 (A) 12 p	
C1046	1-102-503-11 (A) 3 p	(boundary layer)
C1047	1-161-013-11 (A) 0.01	
C1049	1-101-924-11 (A) 0.022	
C1055	1-101-923-11 (A) 0.01	
C1059	1-102-121-11 (A) 0.0022	
C1060-1065	1-101-923-11 (A) 0.01	
C1066	1-102-977-11 (A) 200 p	
C1067	1-102-973-11 (A) 100 p	
C1068	1-161-021-11 (A) 0.0047	(boundary layer)
C1069	1-107-070-11 (A) 24 p	silvered mica
C1070	1-102-409-11 (C) 30 p	
C1071, 1072	1-102-121-11 (A) 0.0022	
C1073	1-121-413-11 (A) 100	6.3 V elect
C1074	1-121-352-11 (A) 47	10 V elect
C1075, 1076	1-131-236-11 (B) 1	25 V tantalum
C1077	1-102-121-11 (A) 0.0022	
C1078	1-101-880-11 (A) 47 p	
C1079, 1080	1-107-093-11 (A) 220 p	silvered mica
C1081	1-102-963-11 (A) 33 p	
C1082, 1083	1-103-714-11 (A) 360 p	polystyrol
C1084	1-102-963-11 (A) 33 p	
C1085, 1086	1-108-555-12 (B) 0.001	mylar
C1090-1092	1-102-043-11 (A) 0.001	500 V feed-through
C1094	1-121-391-11 (A) 1	50 V elect
C1095	1-101-880-11 (A) 47 p	

Note: Circled letters (A to Z) are applicable to European models only.

Ref. No.	Part No.	Description
C1096, 1097	1-121-414-11 (A) 100	10 V elect
C1098	1-107-061-11 (A) 10 p	silvered mica
C1099	1-161-013-11 (A) 0.01	(boundary layer)
C1100, 1101	1-102-961-11 (A) 27 p	
C1102	1-102-977-11 (A) 200 p	
C1103	1-101-923-11 (A) 0.01	
C1104	1-101-924-11 (A) 0.022	
C1105	1-127-019-11 (B) 0.1	10 V solid aluminum
C1106	1-101-919-11 (A) 0.0022	
C1107	1-102-043-11 (A) 0.001	500 V feed-through
C1108	1-102-934-11 (A) 1 p	
C1201	1-121-424-11 (B) 470	6.3 V elect
C1203	1-131-193-11 (B) 10	10 V tantalum
C1207	1-131-392-11 (B) 33	3.15 V tantalum
C1210	1-101-890-11 (A) 75 p	
C1211, 1212	1-108-563-12 (B) 0.0022	mylar
C1213	1-127-019-11 (B) 0.1	10 V solid aluminum
C1301	1-121-651-11 (A) 10	16 V elect
C2001	1-121-963-11 (B) 33	25 V elect
C2021	1-121-352-11 (A) 47	10 V elect
C2022	1-121-726-11 (A) 0.47	50 V elect
C2031	1-108-575-12 (B) 0.0068	mylar
C2051	1-108-234-12 (A) 0.0047	mylar
C2052	1-108-227-12 (A) 0.001	mylar
C2110	1-131-387-11 (B) 47	6.3 V tantalum
C2101	1-131-169-11 (B) 0.47	10 V tantalum
C2102	1-131-202-11 (B) 1.5	20 V tantalum
C2103	1-131-380-11 (B) 33	10 V tantalum
C2104	1-105-669-12 (A) 0.0047	mylar
C2105	1-161-190-11 (A) 0.001	(boundary layer)
C2106	1-105-669-12 (A) 0.0047	mylar
C2108	1-107-123-11 (A) 47 p	silvered mica
C2109	1-131-170-11 (B) 3.3	10 V tantalum
C2111	1-131-173-11 (C) 33	10 V tantalum
C2112	1-131-202-11 (B) 1.5	20 V tantalum
C2113	1-161-190-11 (A) 0.001	(boundary layer)
C2114	1-131-380-11 (B) 33	10 V tantalum
C2115	1-131-387-11 (B) 47	6.3 V tantalum

Ref. No.	Part No.	Description
C2116	1-131-375-11 (B) 4.7	10 V tantalum
C2117	1-121-419-11 (B) 220	6.3 V elect
C2118	1-131-368-11 (B) 3.3	16 V tantalum
C2119	1-131-177-11 (C) 100	3 V tantalum
C2120	1-131-244-11 (B) 1	6.3 V tantalum
C2121	1-105-673-12 (A) 0.01	mylar
C2122	1-105-719-12 (B) 0.033	mylar
C2123	1-105-669-12 (A) 0.0047	mylar
C2124	1-131-375-11 (B) 4.7	10 V tantalum
C2125	1-131-170-11 (B) 3.3	10 V tantalum
C2126	1-121-420-11 (B) 220	10 V elect
C2127	1-131-395-11 (B) 100	3 V tantalum
C2128	1-131-377-11 (B) 33	10 V tantalum
C2129	1-161-190-11 (A) 0.001	(boundary layer)
C2132	1-161-190-11 (A) 0.001	(boundary layer)
C2133	1-131-368-11 (B) 3.3	16 V tantalum
C2134	1-108-249-12 (A) 0.068	mylar
	1-161-001-11 (A) 0.001	(boundary layer)
CT1001 - 1003	1-141-171-11 (B) Trimmer	
CT201 - 206	1-141-171-XX (B) Trimmer	
CT207	1-141-138-XX (B) Trimmer	
CT208	1-141-174-00 (B) Trimmer	
CT209 - 212	1-141-138-XX (B) Trimmer	
CT901	1-141-175-00 (D) Trimmer	
CV001 - 004	1-151-223-XX (F) Tuning	
CV051 - 054	1-151-223-11 (F) Tuning	
CV101	1-151-266-XX (E) Tuning	
CV201 - 203	1-151-201-00 (G) Tuning	

## RESISTORS

All resistors are in ohms. Common 1/4 W carbon resistors are omitted. Check schematic diagram for values.

R210, 214	1-212-879-11 (A) 82	fusible
R218, 222		
R226		
R235, 239	1-212-881-11 (A) 100	fusible
R244, 321		

Note: The components identified by shading are critical for safety. Replace only with part number specified.

Note: Circled letters (A to Z) are applicable to European models only.

Ref. No.	Part No.	Description
R363	1-212-857-11 (A) 10	fusible
R501	1-206-475-11 (A) 33	2 W metal-oxide
R511	1-244-837-11 (A) 33	½ W carbon
R610	1-212-869-11 (A) 33	½ W fusible
R618, 619	1-207-459-11 (A) 0.47	½ W wirewound
R620	1-212-857-11 (A) 10	fusible
R836	1-212-869-11 (A) 33	fusible
R1267	1-212-941-11 (A) 2	½ W fusible
R2005	1-212-857-11 (A) 10	fusible
R2101, 2102	1-209-878-11 (A) 1.8 k	½ W carbon
R2103	1-209-781-11 (A) 10	½ W carbon
R2108	1-210-381-11 (A) 33	½ W carbon
R2112	1-209-768-11 (A) 2.2 k	½ W carbon
R2113	1-210-113-11 (A) 18 k	½ W carbon
R2114	1-210-371-11 (A) 1.6 k	½ W carbon
R2115	1-210-363-11 (A) 270	½ W carbon
R2116	1-210-381-11 (A) 33 k	½ W carbon
R2119	1-210-363-11 (A) 270	½ W carbon
R2121	1-209-768-11 (A) 2.2 k	½ W carbon
R2122	1-209-113-11 (A) 18 k	½ W carbon
R2123	1-209-774-11 (A) 5.1 k	½ W carbon
R2124	1-209-770-11 (A) 2.7 k	½ W carbon
R2125	1-210-388-11 (A) 68 k	½ W carbon
R2126	1-210-392-11 (A) 75	½ W carbon
R2127	1-210-101-11 (A) 51	½ W carbon
R2128	1-210-846-11 (A) 33	½ W carbon
R2129	1-209-770-11 (A) 2.7 k	½ W carbon
R2130	1-209-774-11 (A) 5.1 k	½ W carbon
R2131	1-210-111-11 (A) 12 k	½ W carbon
R2132	1-209-781-11 (A) 10 k	½ W carbon
R2135, 2136	1-210-371-11 (A) 1.6 k	½ W carbon
R2137	1-210-102-11 (A) 150	½ W carbon
R2142	1.2 k	½ W carbon
R2144	1-210-105-11 (A) 560	½ W carbon
VR201	1-224-642-XX (B) 1 k, adjustable; first mixer balance	
VR202	1-224-644-XX (B) 4.7 k, adjustable; blank level	
VR501 - 503	1-224-207-00 (B) 20 k, variable; TREBLE, BASS, VOLUME	

Ref. No.	Part No.	Description
VR1001	1-224-649-XX (B) 200 k, adjustable; SW spurious beat	
VR1401	1-224-820-00 (B) 20 k, variable; RF GAIN	

## SWITCHES

S1	1-514-304-00 (B) Slide, antenna selector
S2	1-516-893-00 (F) Micro, SW antenna coil select
S3 - 6	1-516-896-00 (F) Pushbutton, 4-key; BAND SELECTOR
S8 - 12	1-516-895-00 (G) Pushbutton, 5-key; MODE
S14 - 16	1-516-898-00 (D) Rotary, NOISE BLANKER, AFC, MUTING
S17	1-516-624-00 (B) Slide, TIMER ON
S18 - 20	1-514-533-XX (B) Micro, BATT CHECK, LIGHT, ZERO SECOND
S21, 22	1-516-889-00 (D) Micro, POWER
S23	1-552-026-00 (E) Voltage Selector
S25	1-516-889-00 (E) Micro, POWER
S26	1-516-965-00 (F) Rotary, SW BAND SELECTOR
S27 - 29	1-516-892-00 (J) Rotary, SW BAND SELECTOR
S001	1-552-053-00 (D) Pushbutton, 2-key, FM
S2001	1-516-873-00 (C) Slide, ISS
S2002	1-516-624-00 (B) Slide, MEMO REC
S2003	1-516-898-XX (D) Rotary, FUNCTION
S2101	1-513-323-00 (C) Slide, REC/PB
S2102	1-514-346-00 (B) Leaf, POWER
S2103	1-552-052-00 (B) Leaf, MUTING

## JACKS

J501 - 505	1-507-369-00 (E) Jack, 5-unit; earphone, AUX IN
J1401	1-507-440-00 (C) Jack, HEADPHONES

## FUSES

F1	1-552-235-00 (E) 315 mA T
F2	1-532-448-XX (B) 400 mA
F3, 4	1-532-284-00 (B) 630 mA T
F5	1-552-235-00 (E) 315 mA T

## MISCELLANEOUS

ANT1	1-501-104-00 (H) SW Telescopic Antenna
ANT2	1-501-103-00 (I) FM Telescopic Antenna

Note: The components identified by shading are critical for safety. Replace only with part number specified.



Note: Circled letters (A to Z) are applicable to European models only.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
CF 801 - 803	1-527-184-XX	(B) Filter, ceramic (10.7 MHz)
CNJ1	1-509-510-00	(C) Connector, 2-p; AC IN, including S24
CNJ38	1-507-302-00	(C) Connector, 10 p
CNP5	1-508-743-00	(B) Connector Pin
CNP6 - 8	1-508-795-00	(B) Connector Pin, 12 p
CNP9, 10	1-508-699-00	(B) Connector Pin, 8 p
CNP16	1-508-694-00	(B) Connector Pin, 8 p
CNP28	1-508-698-00	(B) Connector, 6 p
CR801	1-231-202-00	(B) Encapsulated Component
LH	8-825-566-00	(B) Head, erase; EBF 5-02B
M	8-834-221-00	(L) Motor, D-221F
MF	1-520-249-00	(H) Meter, TUNING/BATT
MIC	8-814-191-10	(F) Microphone, C-1002J
PL1	1-518-138-XX	(B) Lamp, pilot; 5 V 60 mA; meter, timer
PL2, 3	1-518-189-XX	(B) Lamp, pilot; 5 V 60 mA; meter, timer
PL4 - 5	1-518-138-XX	(B) Lamp, pilot; 5 V 60 mA; meter, timer
PT701	1-442-950-00	(L) Transformer, power
RPH	8-829-336-07	(F) Head, record/playback; PP134-36G
SP	1-502-592-00	(H) Speaker
X201	1-527-270-00	(I) Crystal
X202	1-527-271-00	(I) Crystal
X1002	1-527-269-00	(K) Crystal

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
	1-407-856-00	(C) Choke Coil, power
	1-423-230-00	(H) Transformer, output
	1-526-522-00	(B) Jack, coaxial connector
	1-533-037-00	(A) Holder, fuse
	1-533-102-00	(B) Holder, fuse
	1-533-131-00	(A) Holder, fuse
	1-536-174-00	(B) Terminal Strip, MW/LW/SW antenna
	1-536-203-00	(B) Terminal Strip, FM antenna
	1-536-401-XX	(A) Terminal Strip, 2L1
	1-548-082-00	(U) QUARTZ TIMER

## ACCESSORIES &amp; PACKING MATERIALS

<u>Part No.</u>	<u>Description</u>
1-504-059-00	(C) Earphone, EM-20H
1-534-840-00	(E) Cord, power; DK-38 (AEP model)
1-551-235-00	(E) Cord, power; DK-51 (E model)
3-701-632-00	(A) Bag, plastic
3-880-697-00	(A) Bag, plastic
3-882-401-00	(C) Cushion, protection
3-882-410-00	(H) Carton
3-993-063-14	(B) Book, SHORT WAVE GUIDE
3-995-763-11	(I) Manual, instruction

Note: The components identified by shading are critical for safety. Replace only with part number specified.

## 1/4 WATT CARBON RESISTORS

$\Omega$	Part No.	$\Omega$	Part No.	$\Omega$	Part No.	$\Omega$	Part No.	$\Omega$	Part No.	$\Omega$	Part No.	$\Omega$	Part No.
1.0	1 244 601 11	10	1 244 625 11	100	1 244 649 11	1.0k	1 244 673 11	10k	1 244 697 11	100k	1 244 721 11	1.0M	1 244 745 11
1.1	1 244 602 11	11	1 244 626 11	110	1 244 650 11	1.1k	1 244 674 11	11k	1 244 698 11	110k	1 244 722 11	1.1M	1 244 746 11
1.2	1 244 603 11	12	1 244 627 11	120	1 244 651 11	1.2k	1 244 675 11	12k	1 244 699 11	120k	1 244 723 11	1.2M	1 244 747 11
1.3	1 244 604 11	13	1 244 628 11	130	1 244 652 11	1.3k	1 244 676 11	13k	1 244 700 11	130k	1 244 724 11	1.3M	1 244 748 11
1.5	1 244 605 11	15	1 244 629 11	150	1 244 653 11	1.5k	1 244 677 11	15k	1 244 701 11	150k	1 244 725 11	1.5M	1 244 749 11
1.6	1 244 606 11	16	1 244 630 11	160	1 244 654 11	1.6k	1 244 678 11	16k	1 244 702 11	160k	1 244 726 11	1.6M	1 244 750 11
1.8	1 244 607 11	18	1 244 631 11	180	1 244 655 11	1.8k	1 244 679 11	18k	1 244 703 11	180k	1 244 727 11	1.8M	1 244 751 11
2.0	1 244 608 11	20	1 244 632 11	200	1 244 656 11	2.0k	1 244 680 11	20k	1 244 704 11	200k	1 244 728 11	2.0M	1 244 752 11
2.2	1 244 609 11	22	1 244 633 11	220	1 244 657 11	2.2k	1 244 681 11	22k	1 244 705 11	220k	1 244 729 11	2.2M	1 244 753 11
2.4	1 244 610 11	24	1 244 634 11	240	1 244 658 11	2.4k	1 244 682 11	24k	1 244 706 11	240k	1 244 730 11	2.4M	1 244 754 11
2.7	1 244 611 11	27	1 244 635 11	270	1 244 659 11	2.7k	1 244 683 11	27k	1 244 707 11	270k	1 244 731 11	2.7M	1 244 755 11
3.0	1 244 612 11	30	1 244 636 11	300	1 244 660 11	3.0k	1 244 684 11	30k	1 244 708 11	300k	1 244 732 11	3.0M	1 244 756 11
3.3	1 244 613 11	33	1 244 637 11	330	1 244 661 11	3.3k	1 244 685 11	33k	1 244 709 11	330k	1 244 733 11	3.3M	1 244 757 11
3.6	1 244 614 11	36	1 244 638 11	360	1 244 662 11	3.6k	1 244 686 11	36k	1 244 710 11	360k	1 244 734 11	3.6M	1 244 758 11
3.9	1 244 615 11	39	1 244 639 11	390	1 244 663 11	3.9k	1 244 687 11	39k	1 244 711 11	390k	1 244 735 11	3.9M	1 244 759 11
4.3	1 244 616 11	43	1 244 640 11	430	1 244 664 11	4.3k	1 244 688 11	43k	1 244 712 11	430k	1 244 736 11	4.3M	1 244 760 11
4.7	1 244 617 11	47	1 244 641 11	470	1 244 665 11	4.7k	1 244 689 11	47k	1 244 713 11	470k	1 244 737 11	4.7M	1 244 761 11
5.1	1 244 618 11	51	1 244 642 11	510	1 244 666 11	5.1k	1 244 690 11	51k	1 244 714 11	510k	1 244 738 11	5.1M	1 244 762 11
5.6	1 244 619 11	56	1 244 643 11	560	1 244 667 11	5.6k	1 244 691 11	56k	1 244 715 11	560k	1 244 739 11		
6.2	1 244 620 11	62	1 244 644 11	620	1 244 668 11	6.2k	1 244 692 11	62k	1 244 716 11	620k	1 244 740 11		
6.8	1 244 621 11	68	1 244 645 11	680	1 244 669 11	6.8k	1 244 693 11	68k	1 244 717 11	680k	1 244 741 11		
7.5	1 244 622 11	75	1 244 646 11	750	1 244 670 11	7.5k	1 244 694 11	75k	1 244 718 11	750k	1 244 742 11		
8.2	1 244 623 11	82	1 244 647 11	820	1 244 671 11	8.2k	1 244 695 11	82k	1 244 719 11	820k	1 244 743 11		
9.1	1 244 624 11	91	1 244 648 11	910	1 244 672 11	9.1k	1 244 696 11	91k	1 244 720 11	910k	1 244 744 11		

Sony Corporation

9-950-367-81

© 1977

77J0578-1  
Printed in Japan

# **K4XL's** **BAMA**

This manual is provided **FREE OF CHARGE** from the “BoatAnchor Manual Archive” as a service to the Boatanchor community.

It was uploaded by someone who wanted to help you repair and maintain your equipment.

If you paid anyone other than BAMA for this manual, you paid someone who is making a profit from the free labor of others without asking their permission.

You may pass on copies of this manual to anyone who needs it. But do it without charge.

Thousands of files are available without charge from BAMA. Visit us at <http://bama.sbc.edu>