

Note:

- All capacitors are in μF unless otherwise noted. $\text{pF} : \mu\mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, $\frac{1}{4}\text{W}$ unless otherwise noted. $\text{k}\Omega : 1000\Omega$, $\text{M}\Omega : 1000\text{k}\Omega$
- $\triangle$: internal component.
- --- : B+ bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (20 $\text{k}\Omega/\text{V}$).
- no mark: FM FREQUENCY DISPLAY: 98.1 MHz
() : AM FREQUENCY DISPLAY: 1023 kHz
(()) : SSB/CW
-  : signal path.
- Voltage variations may be noted due to normal production tolerances.
- Switches

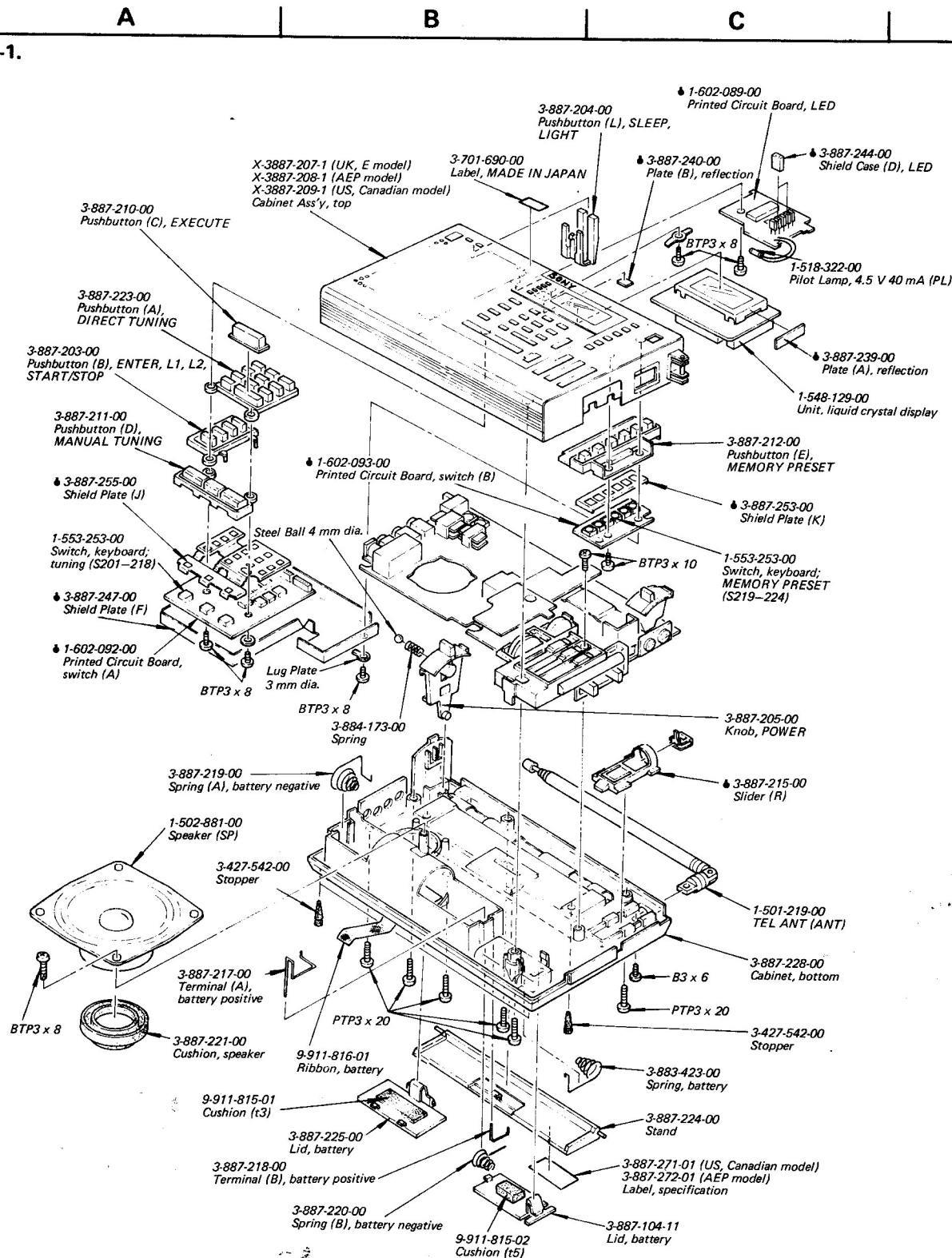
Ref. No.	Switch	Position
S1	BAND	FM
S2	LIGHT	OFF
S3	POWER	OFF
S4	SLEEP	OFF
S5	SCAN AUTO STOP	OFF
S6	RF GAIN	NORMAL
S7	ANT SELECTOR	ON
S201	DOWN	OFF
S202	FAST	OFF
S203	UP	OFF
S204	START STOP	OFF
S205	L2	OFF
S206	L1	OFF
S207	ENTER	OFF
S208	EXECUTE	OFF
S209	0	OFF
S210	1	OFF
S211	2	OFF
S212	3	OFF
S213	4	OFF
S214	5	OFF
S215	6	OFF
S216	7	OFF
S217	8	OFF
S218	9	OFF
S219	MEMORY 1	OFF
S220	MEMORY 2	OFF
S221	MEMORY 3	OFF
S222	MEMORY 4	OFF
S223	MEMORY 5	OFF
S224	MEMORY 6	OFF

SECTION 5

EXPLODED VIEWS

Note:

- Items marked "•" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All screws are Phillips (cross recess) type unless otherwise noted.
(-) = slotted head



C



SECTION 6

ELECTRICAL PARTS LIST

- Items marked "•" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
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SEMICONDUCTORS

Transistors

Q1	8-727-312-00	2SK42-2
Q2-4	8-729-803-04	2SC930
Q5, 6	8-729-663-47	2SC1364
Q7	8-729-803-04	2SC930
Q8-10	8-729-663-47	2SC1364
Q11, 12	8-760-335-10	2SC1474
Q13-18	8-729-663-47	2SC1364
Q19, 20	8-729-218-42	2SK184
Q21	8-729-216-13	2SK161
Q22	8-727-312-00	2SK42-2
Q23	8-729-663-47	2SC1364
Q24	8-722-383-40	2SK23A-834
Q25	8-729-216-13	2SK161
Q26	8-729-663-47	2SC1364
Q27	8-760-514-10	2SA772-14
Q28	8-729-806-84	2SC668
Q29	8-729-216-13	2SK161
Q30	8-729-806-84	2SC668
Q31	8-722-381-20	2SK23A-812
Q32, 33	8-729-663-47	2SC1364
Q34, 35	8-729-803-04	2SC930
Q36	8-729-806-84	2SC668
Q37	8-729-803-04	2SC930
Q38, 39	8-729-663-47	2SC1364
Q41	8-722-383-40	2SK23A-834
Q43	8-729-216-13	2SK161
Q44	8-729-803-04	2SC930
Q45, 46	8-729-663-47	2SC1364
Q47	8-729-803-04	2SC930
Q48, 49	8-729-663-47	2SC1364
Q50	8-729-803-04	2SC930
Q51	8-729-663-47	2SC1364
Q52	8-722-383-40	2SK23A-834
Q53		
Q201-208	8-729-663-47	2SC1364

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
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Q209	8-729-612-77	2SA1027R
Q211	8-729-663-47	2SC1364

ICs

IC1	8-751-620-00	CX162
IC2	8-759-814-05	LB1405
IC3	8-759-155-21	μPB552C
IC4, 5	8-759-128-19	μPD2819C
IC201, 202	8-759-240-15	TC4015BP
IC203	8-759-240-11	TC4011BP
IC205	8-759-241-74	TC40174BP

Diodes

D1, 2	8-719-912-01	SVC201
D3-5	8-719-026-11	1T261
D7	8-719-112-01	VD1120
D8	8-712-600-00	1T26
D9-12	8-719-100-02	1S2222
D13	8-719-912-11	KV1211
D15-19	8-719-921-55	SLP155B
D20	8-719-112-01	VD1120
D21	8-719-912-01	SVC201
D23	8-719-930-12	EQB01-12Z
D24	8-719-713-93	1S2139C
D25	8-719-912-01	SVC201
D27	8-719-136-17	RD3.6E-BZ8
D28	8-719-815-55	1S1555
D29	8-719-116-07	RD16E
D33-35	8-719-815-55	1S1555
D36	8-719-162-07	RD6.2E
D201	8-719-815-55	1S1555

CAPACITORS

Common capacitors are omitted. Refer to the lists on pages 28 and 29 for their part numbers. pF: μμF.

C28	1-161-317-00	330 pF	50 V	ceramic
C74	1-102-602-00	27 pF	50 V	ceramic
C83	1-102-607-00	43 pF	50 V	ceramic

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
C100	1-102-653-00	82 pF 50 V ceramic
C101	1-102-654-00	91 pF 50 V ceramic
CT1, 2	1-141-179-12	Trimmer
CT5	1-141-232-00	11 pF, trimmer

RESISTORS

All resistors are in ohms. Common 1/4 W carbon resistors are omitted. Refer to the list on the last page for their part numbers. k: 1000 Ω , M: 1000 k Ω .

R13	1-247-053-00	1 M	1/8 W	carbon
R104	1-209-775-00	5.6 k	1/16 W	micro
R105	1-209-765-00	1.2 k	1/16 W	micro
R106	1-209-878-00	1.8 k	1/16 W	micro
R124	1-247-053-00	1 M	1/8 W	carbon
R127	1-246-795-00	10 k	1/8 W	carbon
R129	1-209-773-00	4.7 k	1/16 W	micro
R132	1-209-771-00	3.9 k	1/16 W	micro
R160	1-246-514-00	51 k	1/4 W	carbon (1 %)
R161	1-246-506-00	24 k	1/4 W	carbon (1 %)
R201	1-231-615-00	Encapsulated Component		
R243	1-246-795-00	10 k	1/8 W	carbon
R301	1-209-775-00	5.6 k	1/16 W	micro
R308	1-211-695-00	560 k	1/16 W	micro
R310	1-247-053-00	1 M	1/8 W	carbon
VR1	1-226-402-00	20 k-A, slide variable; TREBLE		
VR2	1-226-643-00	5 k-D, slide variable; BASS		
VR3	1-226-791-00	200 k-B, variable; AM ANTENNA ADJUSTMENT		
VR4	1-226-799-00	200 k-B, variable; SSB/CW COMPENSATOR		
VR5	1-226-643-00	5 k-D, slide variable; VOLUME		

MISCELLANEOUS

ANT	1-501-219-00	TEL ANT
CF1, 2	1-527-184-XX	Filter, ceramic; 10.7 MHz
FB	1-543-152-00	Ferrite Bead
IFT-A1	1-404-235-00	Transformer, AM IF
IFT-A2	1-404-233-00	Transformer, AM IF
IFT-A3	1-404-234-00	Transformer, AM IF

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
IFT-F1	1-403-872-00	Transformer, FM IF
IFT-F2	1-403-959-00	Transformer, FM discriminator
IFT-F3	1-403-953-00	Transformer, FM discriminator
J1-3	1-507-578-00	Jack; earphone, record, timer
J4	1-507-459-00	Jack, DC IN 4.5 V
•L1	1-422-008-00	Coil, FM ANT (US, Canadian, UK, E model)
	1-422-026-00	Coil, FM ANT (AEP model)
•L2	1-420-995-00	Coil, FM RF (US, Canadian, UK, E model)
	1-422-026-00	Coil, FM RF (AEP model)
•L5	1-401-456-00	Coil, AM trap
L6	1-401-843-00	Coil, AM ANT
L7	1-401-842-00	Coil, AM ANT
L8	1-401-841-00	Coil, AM ANT
L9, 10	1-401-861-00	Coil, AM ferrite-rod ANT
L11	1-401-838-00	Coil, AM ANT
L13, 14	1-459-287-00	Coil, AM IF
	1-459-289-00	Coil, VCO-1 OSC (US, Canadian, UK, E model)
L16	1-459-337-00	Coil, VCO-1 OSC (AEP model)
L17	1-459-290-00	Coil, VCO-2 OSC
L18	1-408-072-00	Microinductor, 47 μ H
L19	1-422-013-00	Coil, 0.22 μ H
•L20	1-425-608-00	Coil, 0.47 μ H
L21	1-405-895-00	Coil, OSC; 1.3 μ H
L22	1-408-080-00	Microinductor, 100 μ H
L23	1-407-182-XX	Microinductor, 2.2 μ H
L24	1-408-117-00	Microinductor, 10 μ H
L25	1-407-169-XX	Microinductor, 100 μ H
L26	1-408-188-XX	Microinductor, 6.8 μ H
L28	1-408-362-00	Microinductor, 517 μ H
L30-33	1-408-284-00	Microinductor, 10 μ H
L34	1-408-362-00	Microinductor, 517 μ H
•L35	1-425-607-00	Coil, ANT
L36	1-408-096-00	Microinductor, 470 μ H
L37	1-408-080-00	Microinductor, 100 μ H
PL	1-518-322-00	Pilot Lamp, 4.5 V 40 mA
S1	1-552-300-00	Switch, slide; BAND