

# ICF-C55L

*AEP Model*  
*UK Model*

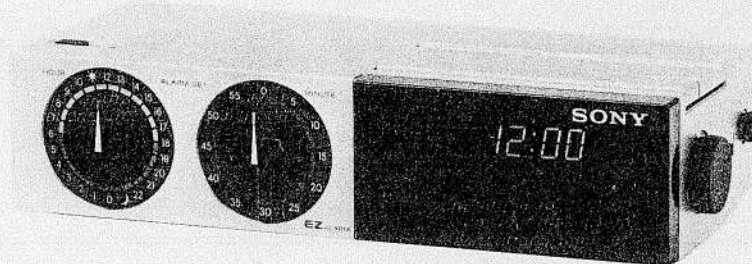



Photo : AEP model

## FM/MW/LW DIGITAL CLOCK RADIO

### SPECIFICATIONS

Frequency range	FM 87.5–108 MHz MW 530–1,605 kHz (566–187 m) LW 150–255 kHz (2,000–1,177 m)
Antennas	FM: Wire antenna MW/LW: Built-in ferrite bar antenna
Speaker	Approx. 7.7 cm (3 inches) dia.
Power output	250 mW (at 10% harmonic distortion)
Power requirements	UK model: 240 V ac, 50 Hz AEP model: 220 V ac, 50 Hz For the power backup function: 9 V dc, one battery size 6F22 (IEC designation)
Power consumption	6 W ac (3 W when only the clock is in operation)
Dimensions	Approx. 276 × 72 × 117 mm (w/h/d) (10 <sup>7</sup> / <sub>8</sub> × 2 <sup>7</sup> / <sub>8</sub> × 4 <sup>1</sup> / <sub>8</sub> inches) incl. projecting parts and controls
Weight	Approx. 1.1 kg (2 lb 7 oz) incl. battery

### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.



# SONY<sup>®</sup>

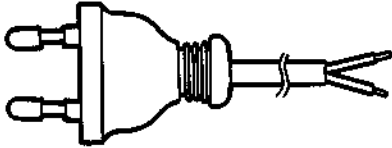
## SERVICE MANUAL

# ICF-C55L

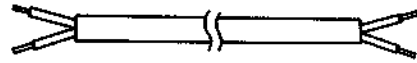
## MODEL IDENTIFICATION

— Power Cord —

**AEP Model**  
Euro-plug  
1-534-817-XX



**UK Model**  
1-551-884-00



**Handling Precautions for MOS ICs**

Generally, the insulation resistance of the oxide layer in MOS IC structures is very high, and the oxide layer is very thin. Because of this, it is possible that the static voltages usually present on clothes and the human body will be enough to generate a potential difference across the insulator, high enough to cause a breakdown of the insulating layer.

The following precautions should be taken while handling these ICs.

(Particular care should be taken under conditions of low humidity.)

3. Equalize any potential difference between the clothes, the tools in use, the work bench, the set being worked on, and the packaged IC by touching them all in succession with the hands or a conductive wire or tool.
4. The following are effective methods for handling ICs that remove the potential difference across the oxide layer.
  - Use a paper clip modified by soldering in a wire braid insert.

**Precautions in Replacing MOS ICs**

1. Store new ICs by inserting them into a urethane-polyester cushion (which is somewhat conductive), or wrapping it in aluminum foil, so that all the pins are at the same potential. (The ICs should be stored in that manner until mounted on the circuit board.)

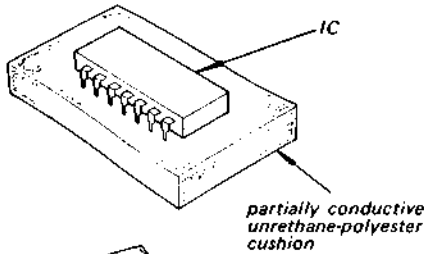


Fig. A

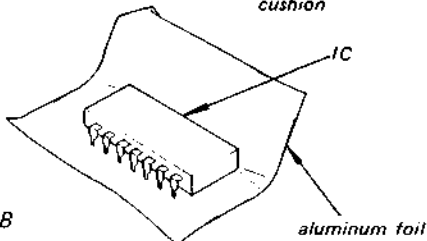


Fig. B

2. Check the soldering iron for possible power-line leakage current. Make sure that there is no leakage path by connecting an ohmmeter to the tip of the soldering iron and the plug as shown in Fig. C. If there is a leakage path, use some other soldering iron.

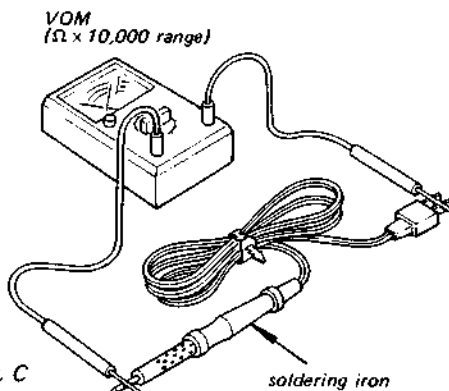


Fig. C

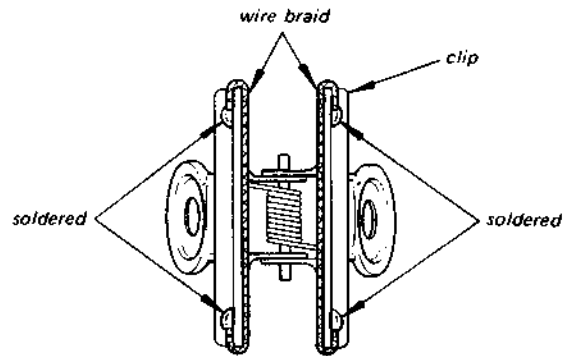


Fig. D

Make sure that there is no solder on the inside.

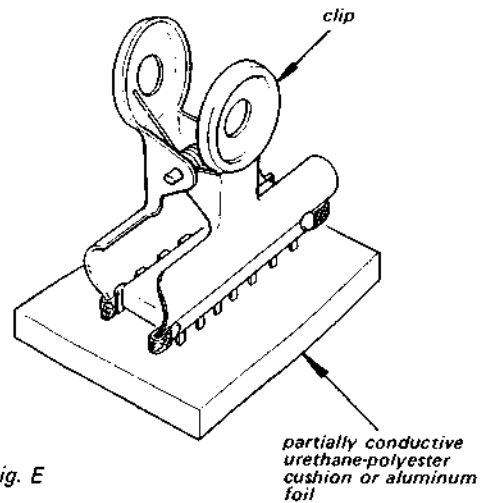


Fig. E

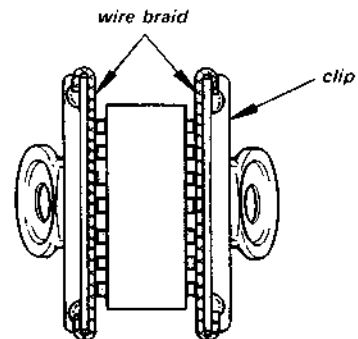


Fig. F

Make sure that all the pins are in contact with the wire braid (all the pins will then be at the same potential.).

- Take a short length of fine bare wire and wind it around the IC so that it shorts all the pins of the IC, while it is still in the urethane-polyester cushion or aluminum foil. This ensures that all the pins are at the same potential.

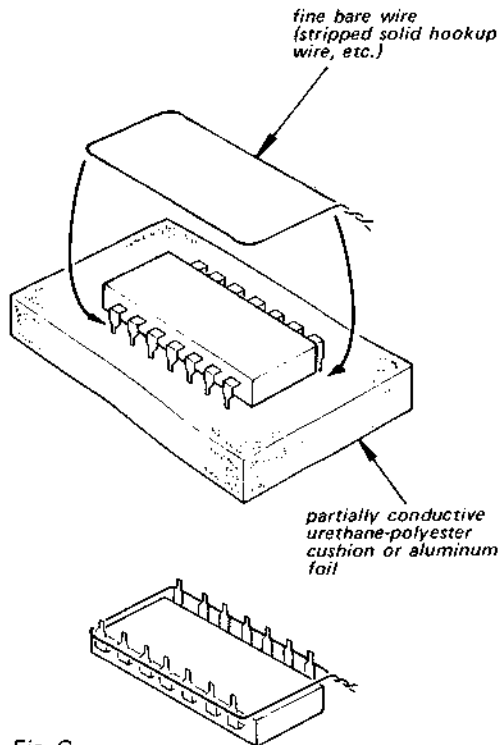


Fig. G

- When it is necessary to handle the IC with the fingers, do not touch any pin, and hold the IC at the ends of its plastic-package case as shown in Fig. H.

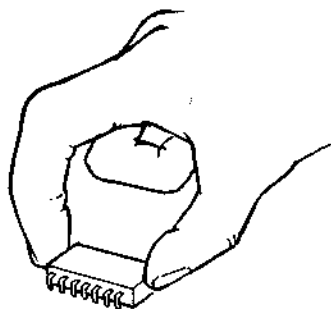


Fig. H

### 5. Method of Mounting

Insert the IC while holding it with the modified clip, and solder all the pins with the clip still shorting the pins. (Similarly, solder all the pins while the bare shorting wire is still wound around them.). Remove the clip or the bare shorting wire only after all the pins have been soldered.

### Precaution while Checking C-MOS ICs

The C-MOS ICs (Complementary MOS) are MOS ICs that have their output sections made up of N-channel and P-channel push-pull stages to increase their speed of operation. If the output terminal of these ICs comes into contact with B+ or B- voltage, then the FET which is ON at that time will either become shorted or open.

This is valid for all the output sections that are connected together by the interconnections. Even the circuits that are physically separated (and not on the same board) can be destroyed simultaneously.

### Example:

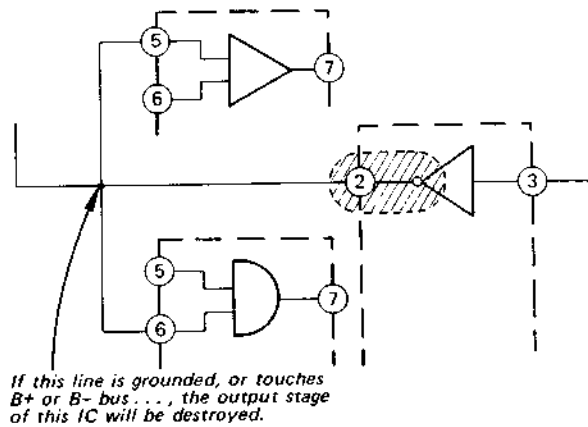
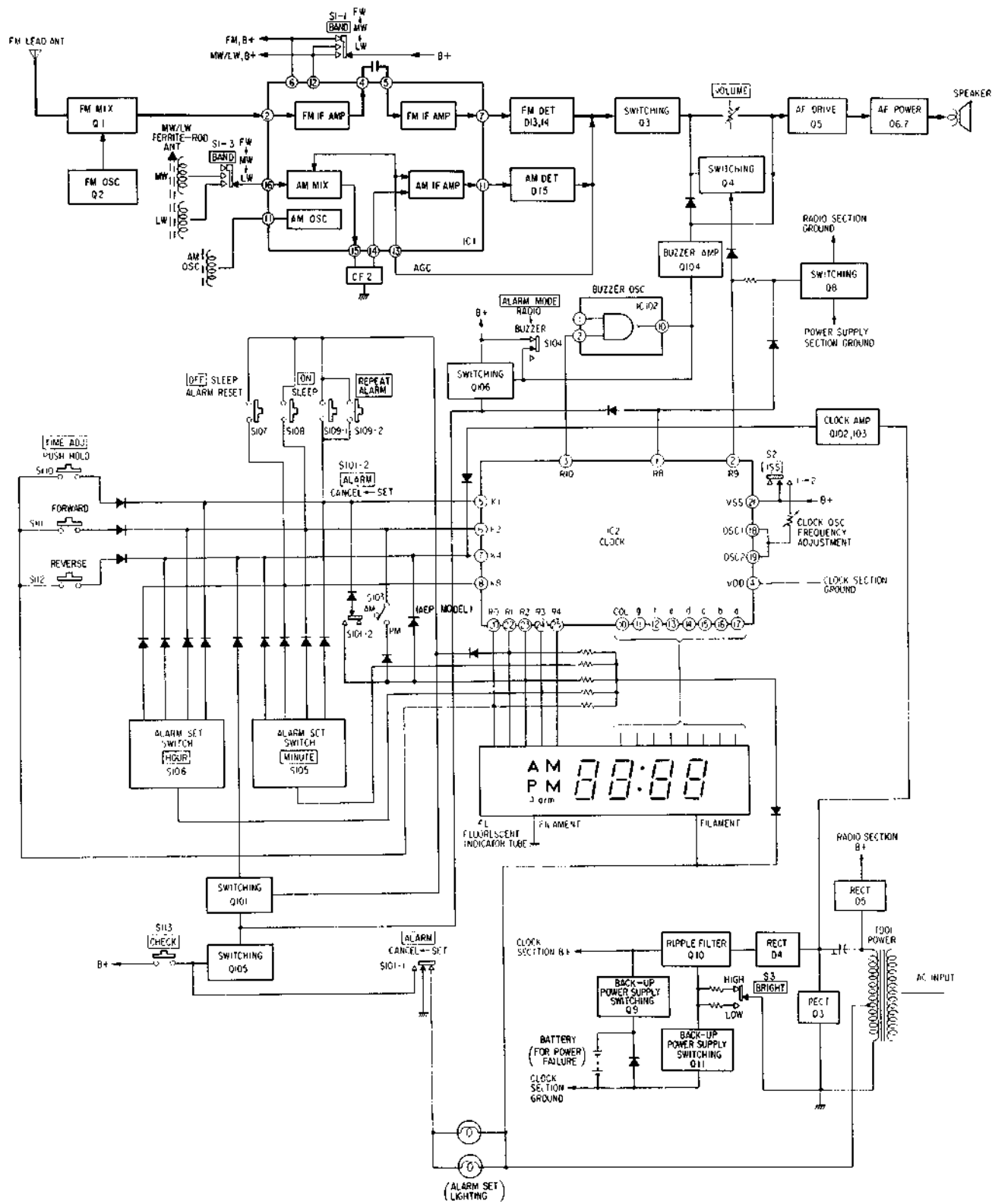


Fig. I

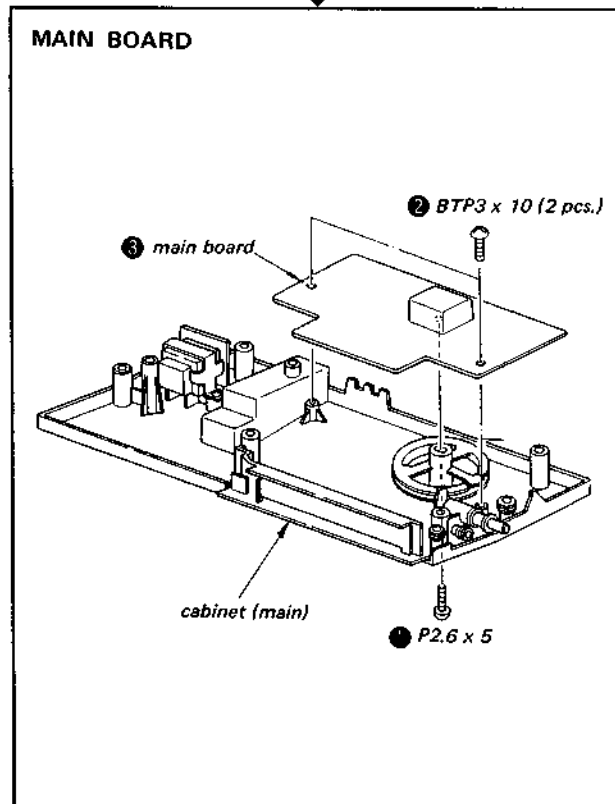
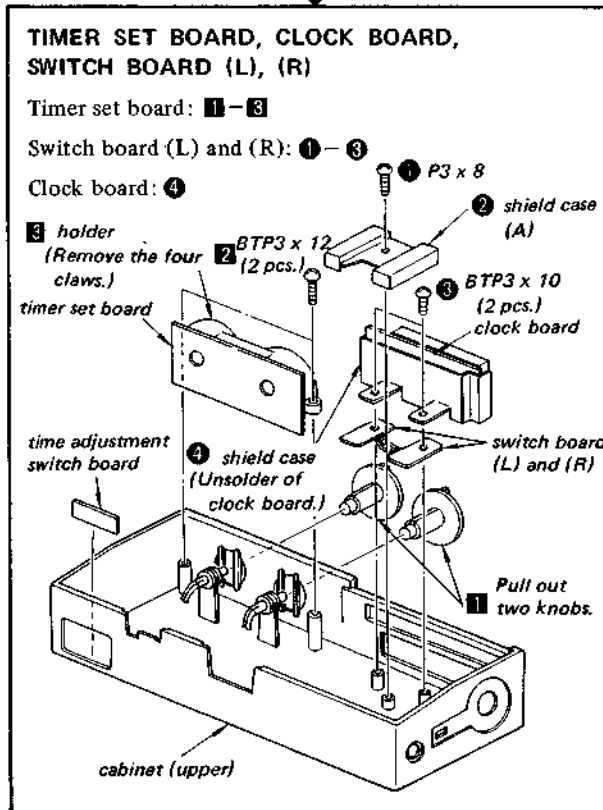
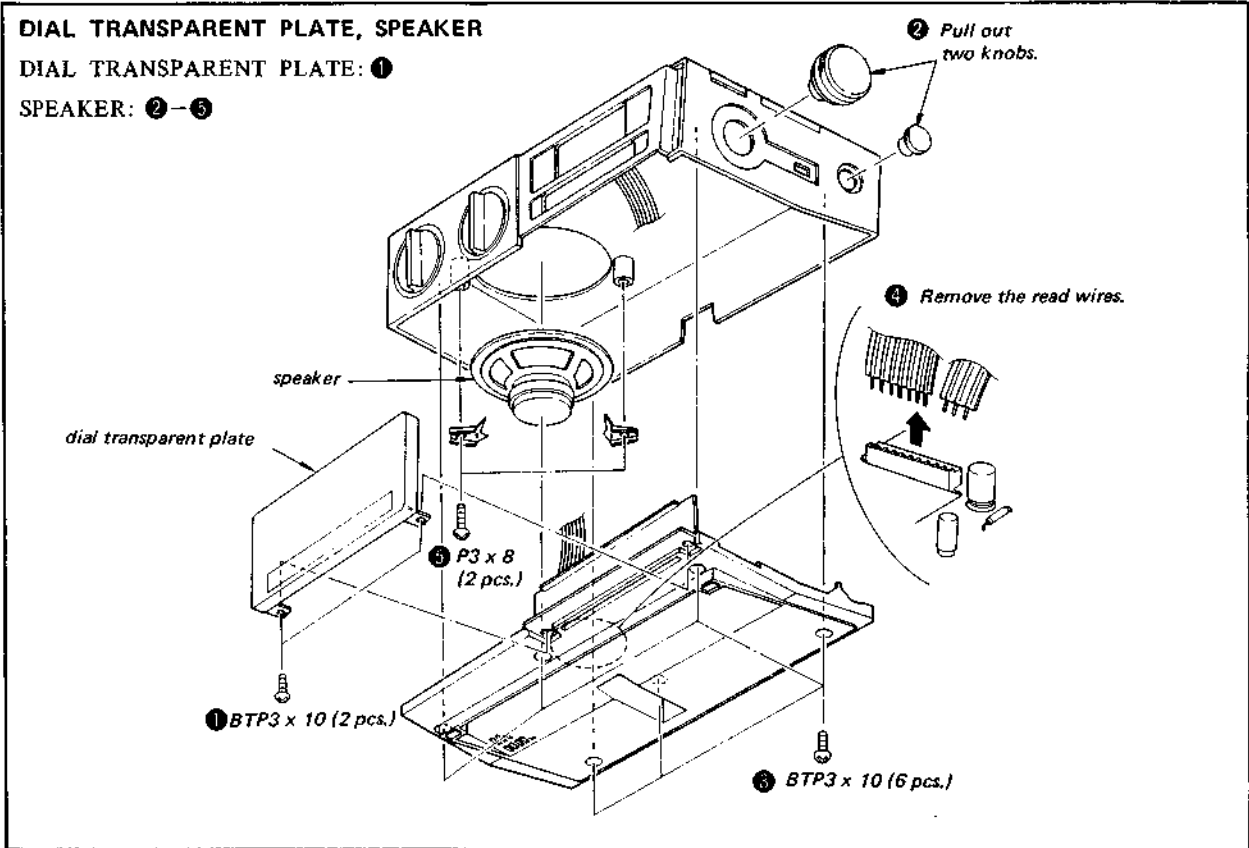
## SECTION 1 BLOCK DIAGRAM



**SECTION 2  
DISASSEMBLY**

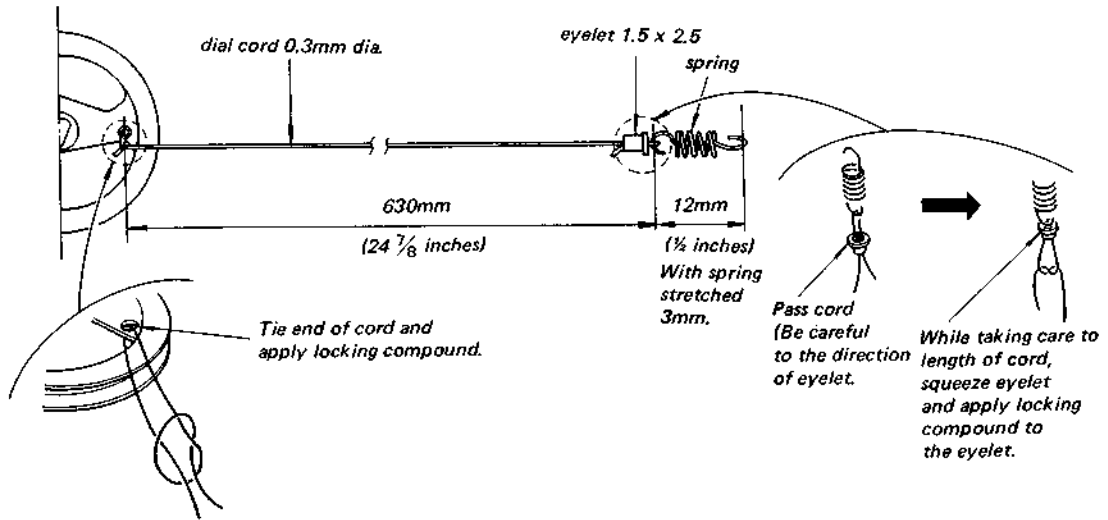
**2-1. REMOVAL**

Note: Follow the disassembly procedure in the numerical order given.



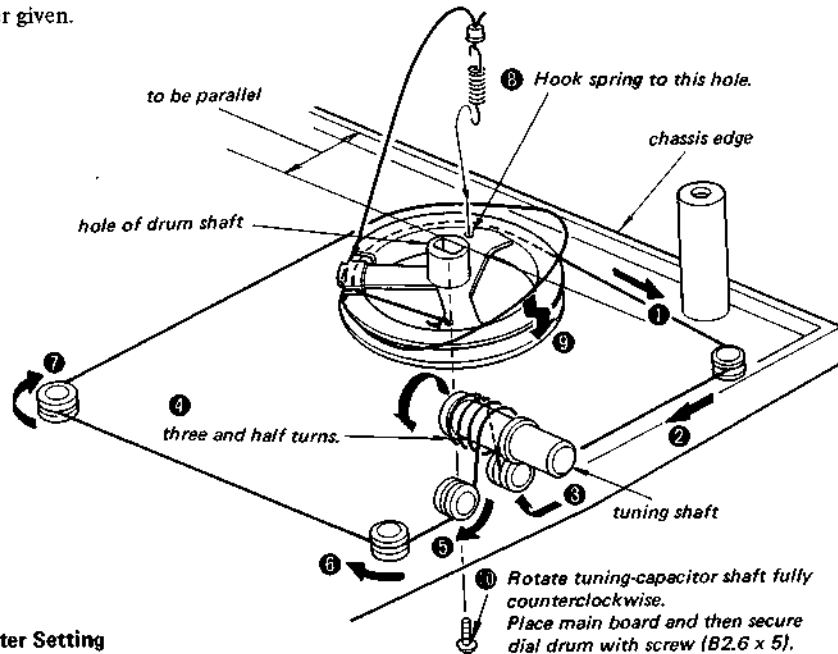
2-2. DIAL CORD STRINGING

1) Preparation



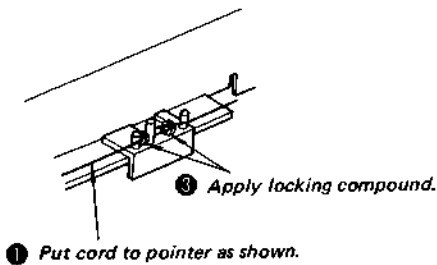
2) Stringing

Set dial drum so that hole of drum shaft is parallel with chassis edge as shown and string cord in the numerical order given.

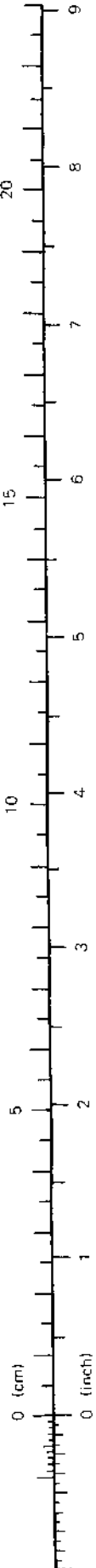


3) Dial Pointer Setting

Rotate tuning shaft fully counterclockwise.

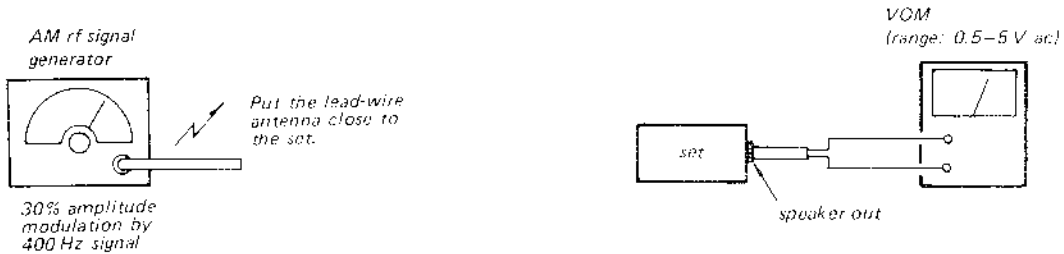


FM	88	92	96
MW	5.3	6	7
LW	150	170	200



## SECTION 3 ADJUSTMENTS

### AM SECTION

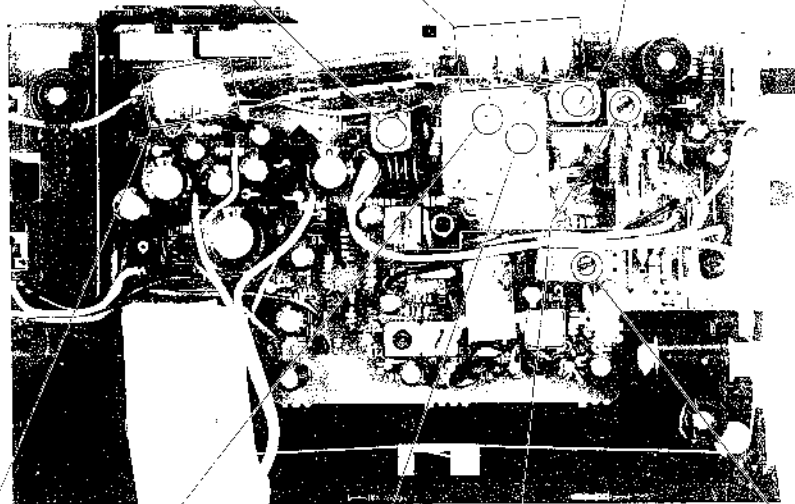


- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

LW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM.	
240kHz	160kHz
CF1	L4-1

LW FREQUENCY COVERAGE ADJUSTMENT
Adjust for a maximum reading on VOM.
263kHz
CT2

Note: LW frequency coverage adjustment should be made after MW frequency coverage adjustment.



L4-1	CT5
620kHz	1,400kHz
Adjust for a maximum reading on VOM.	
MW TRACKING ADJUSTMENT	

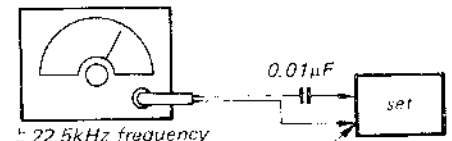
CT6	L5
1,680kHz	520kHz
Adjust for a maximum reading on VOM.	
MW FREQUENCY COVERAGE ADJUSTMENT	

CF2
450kHz
Adjust for a maximum reading on VOM.
AM IF ALIGNMENT



**FM SECTION**

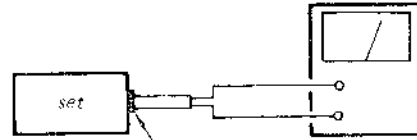
FM rf signal generator



± 22.5kHz frequency deviation by 400Hz signal (modulation turned off for IF Alignment 2.)

FM antenna terminal

VOM (1)  
(range: 0.5 - 5V ac)



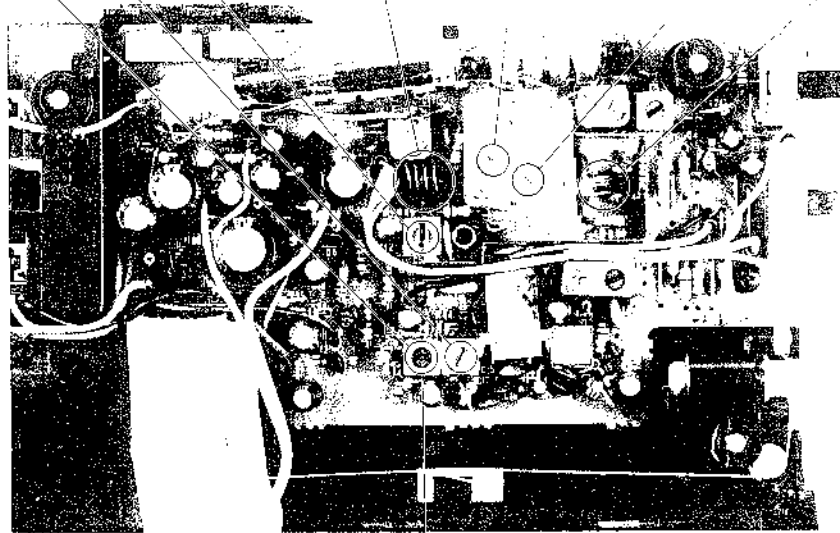
speaker out

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

FM IF ALIGNMENT 1		
Adjust for a maximum reading on VOM (1).		
10.7MHz		
T4	T3	T1

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM (1).	
86.5MHz	109.5MHz
L1	CT3

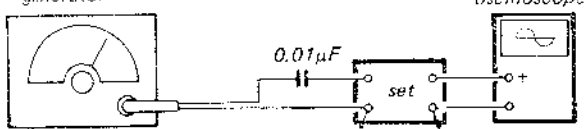
FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM (1).	
109.5MHz	86.5MHz
CT4	L3



**FM IF ALIGNMENT 2**

Procedure:

FM rf signal generator



± 22.5kHz frequency deviation by 400Hz signal  
Output level: 5.7µV (15dB)

FM antenna terminal speaker out

1. Turn T4 fully clockwise.
2. Make sure that sinewave appears three times when changing rf signal-generator frequency gradually.
3. Set rf signal-generator frequency for second sinewave, and precisely adjust rf signal-generator frequency for maximum reading on oscilloscope.
4. Adjust T4 for maximum reading and no noise on oscilloscope.

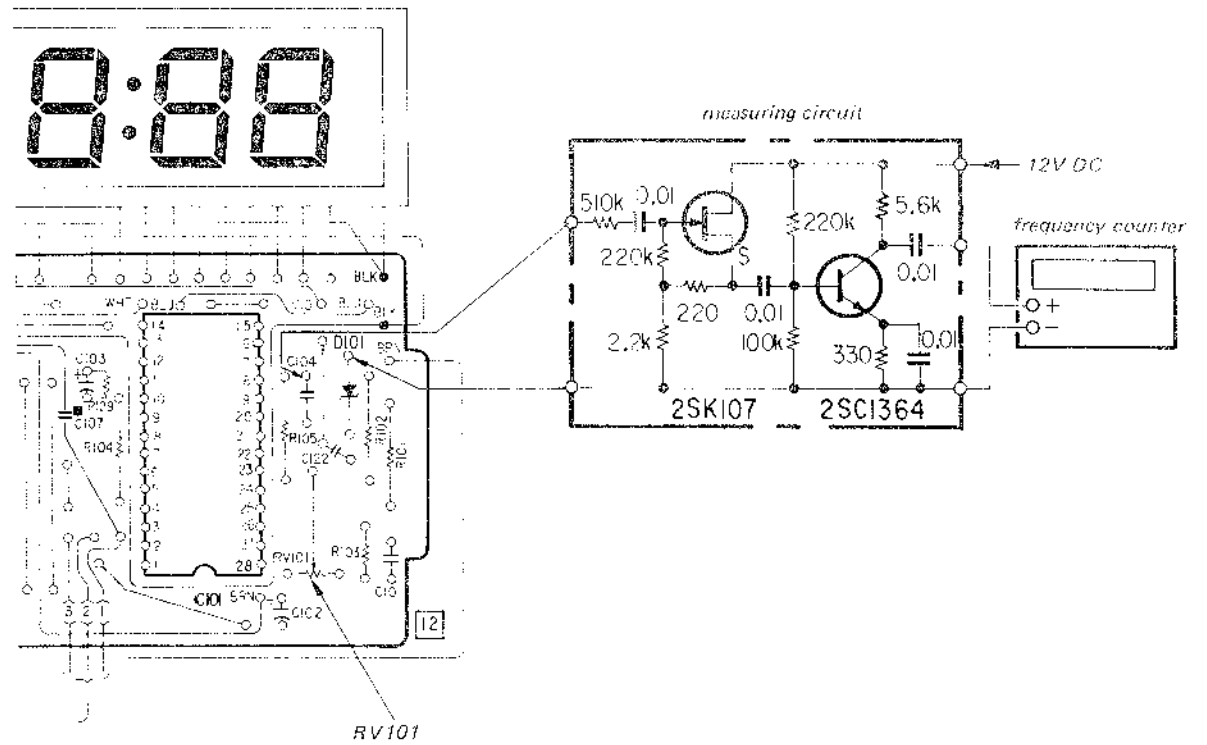
**CLOCK OSC FREQUENCY ADJUSTMENT (MICROPROCESSOR SECTION)**

Setting:

ISS switch: 1

Procedure:

Adjust RV101 for 395 -- 405kHz reading on the frequency counter.



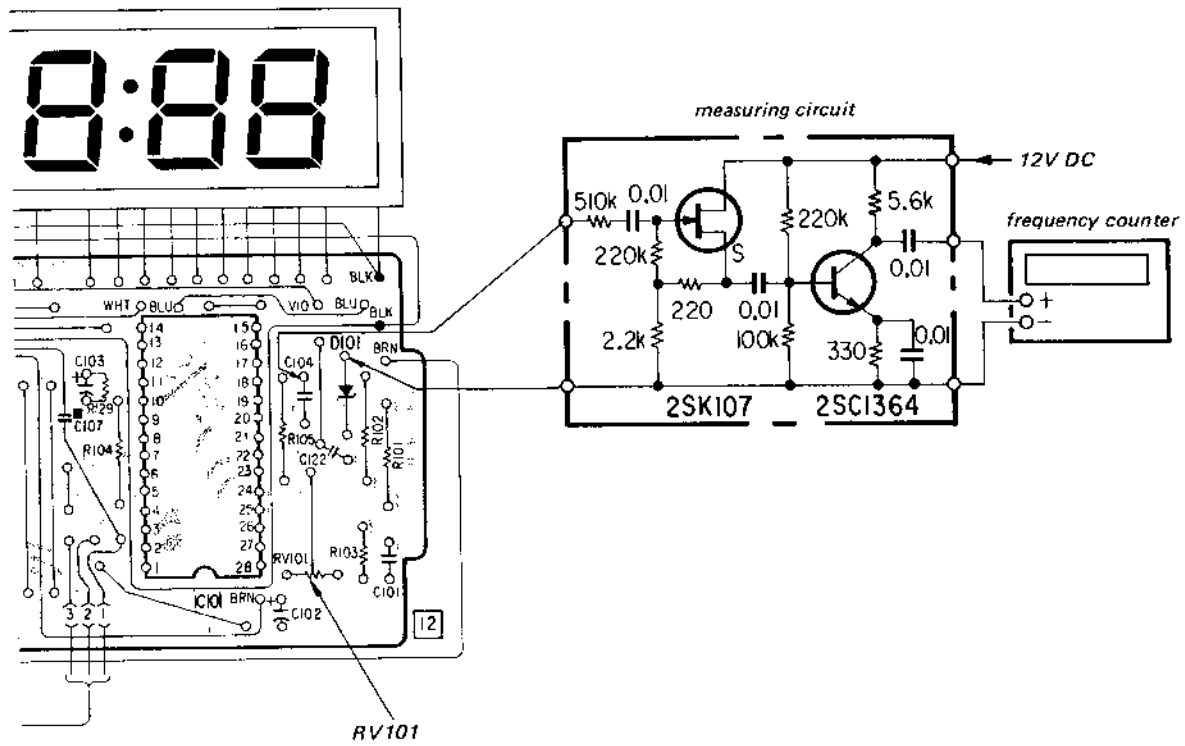
### CLOCK OSC FREQUENCY ADJUSTMENT (MICROPROCESSOR SECTION)

#### Setting:

ISS switch: 1

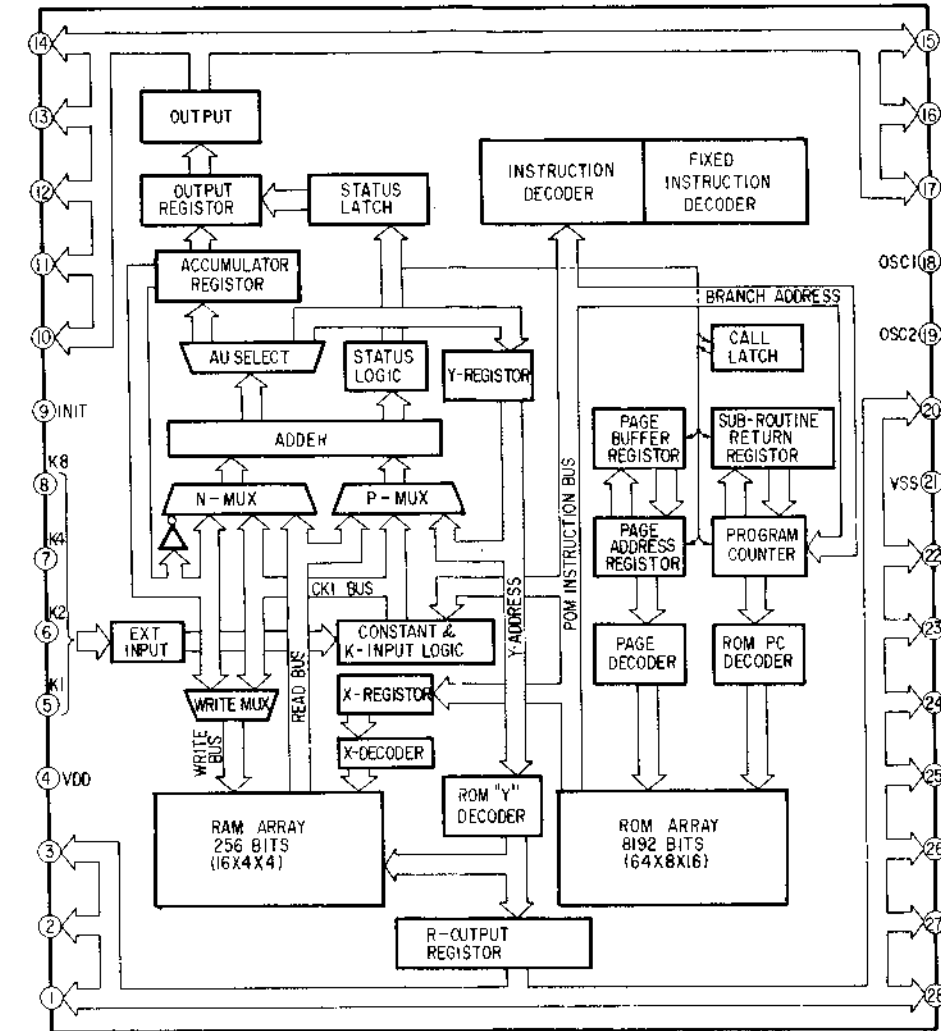
#### Procedure:

Adjust RV101 for 395 - 405kHz reading on the frequency counter.

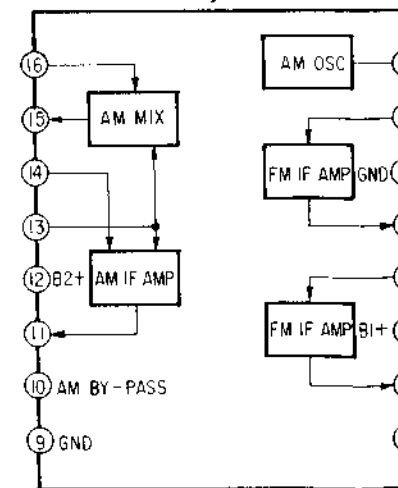


### IC BLOCK DIAGRAMS

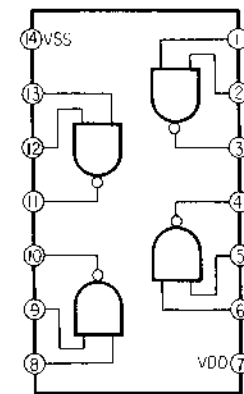
IC101  
MP2810SL



IC1 μPC1018C



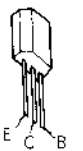
IC102  
μPD4011C



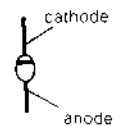
A B C D E F G H

Semiconductor Lead Layouts

2SA1027R



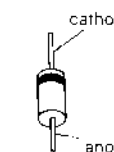
U05G



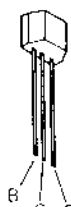
2SA1115  
2SC2786  
2SC2603



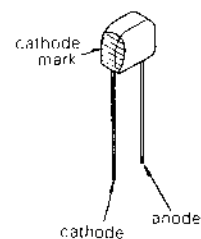
1S1555  
1T261  
RD10E-N1  
GP08B  
HP80



2SD1012  
2SB808  
2SC2839



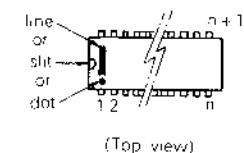
VD1220-M



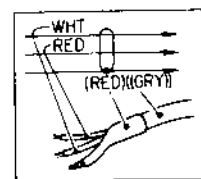
2SC1633-K  
2SC1633-P  
2SC1674  
2SC1364  
2SC1364-B



μPC1018C  
μPD4011C  
MP2810SL

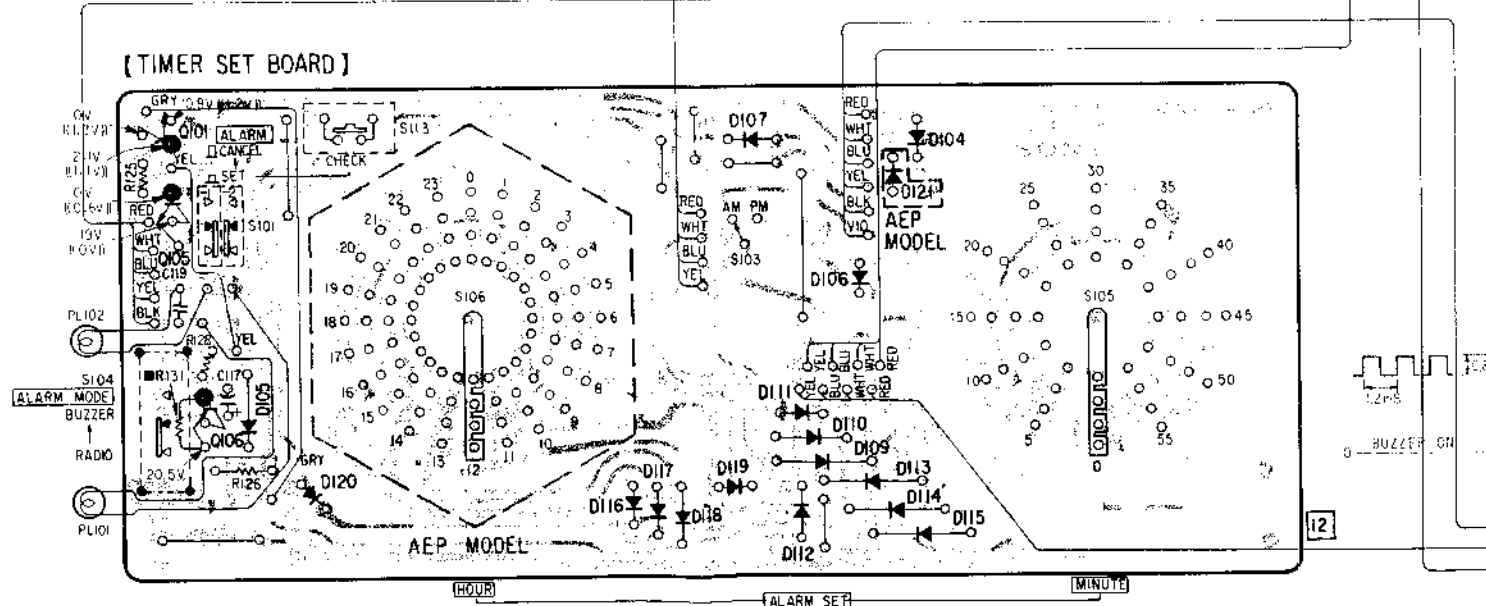
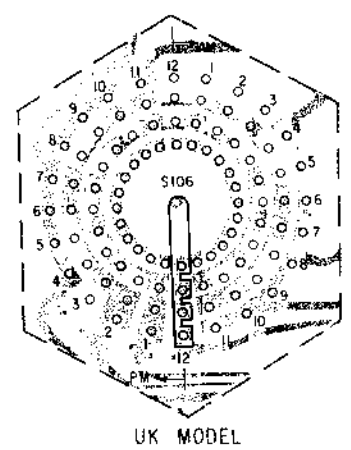
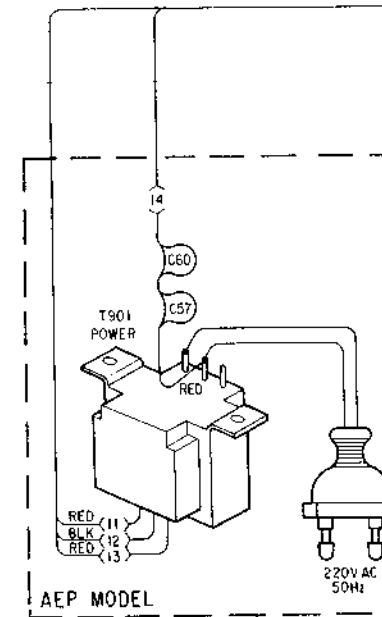
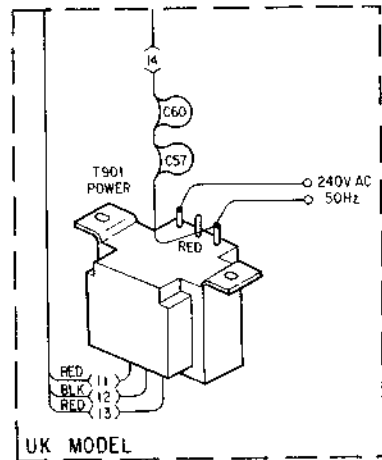
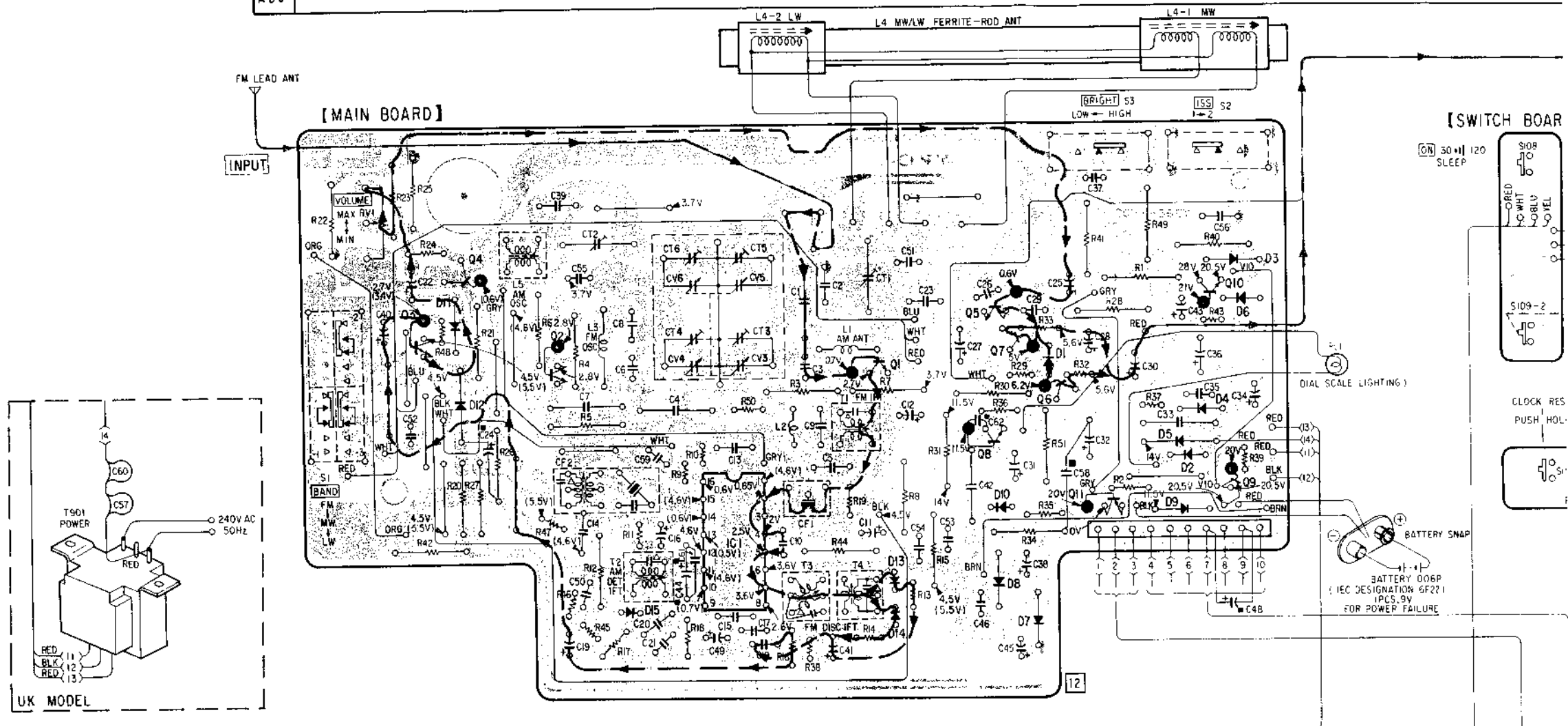


Color code of sleeving over the end of the jacket.

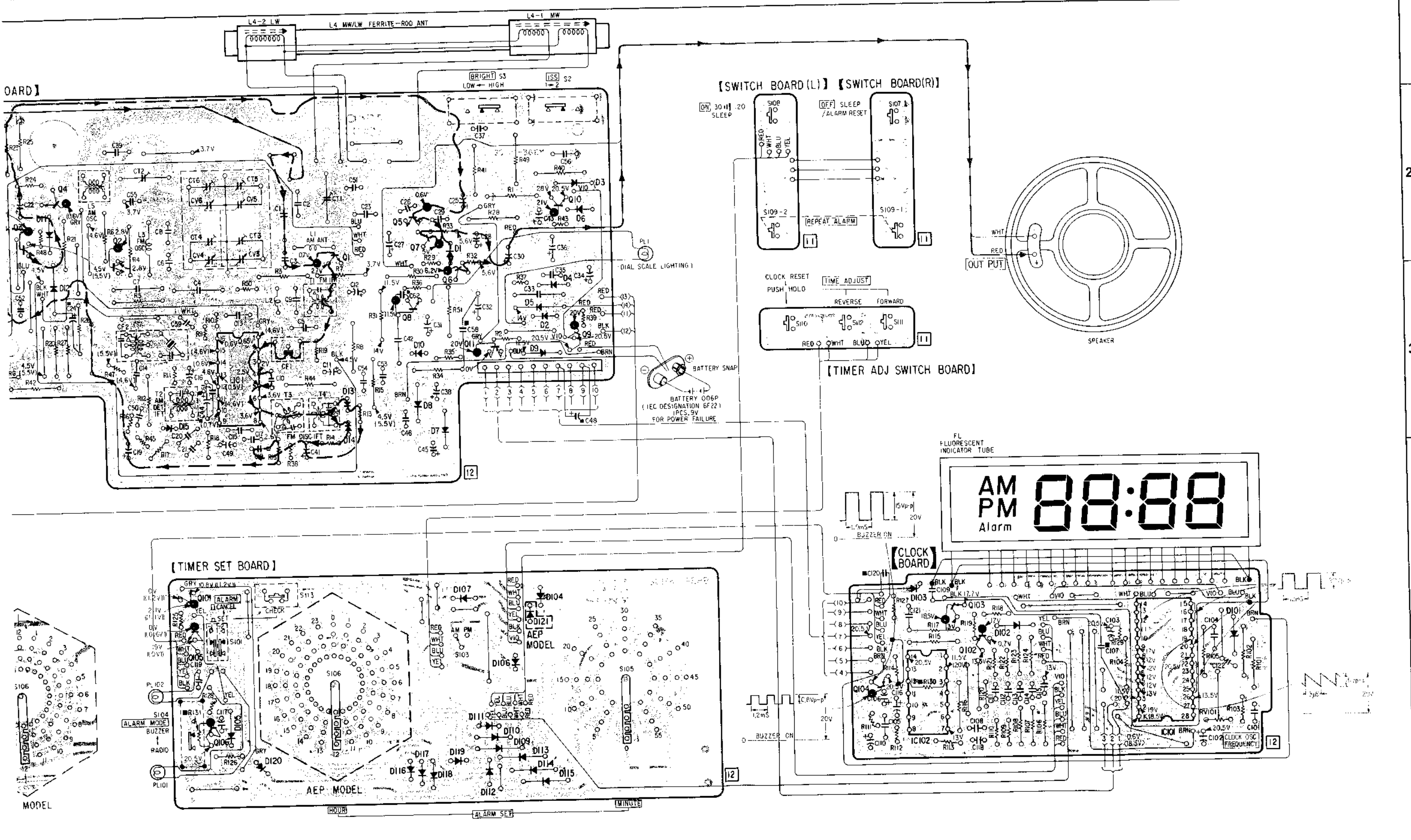


- — : parts extracted from the component side.
- ■ : part mounted on the conductor side.
- : indicates side identified with part number.
- : B+ pattern
- : signal path

Q, IC	3	4	2	101			7	6	11	10	9
D		11			105	106	101	107	111	121	104
A D J	RVI	12		15	105	120	13	8	7	109	106
							14	116	117	118	119
										112	113
										115	9
											5
											4
											3
											6



	E	F	G	H	I	J	K								
	101							104	10101	102	103	102		101	Q, IC
3	4	2	105	106	101										D
	11		105											101	
	12		15	120										RV101	ADJ



1  
2  
3  
4  
5

# ICF-C55L ICF-C55L

## 4.2. SCHEMATIC DIAGRAM

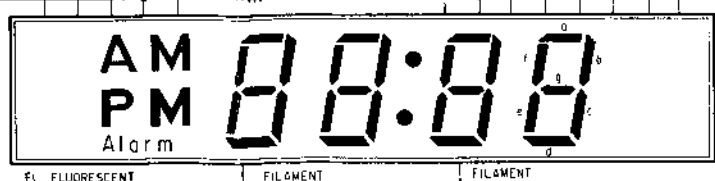
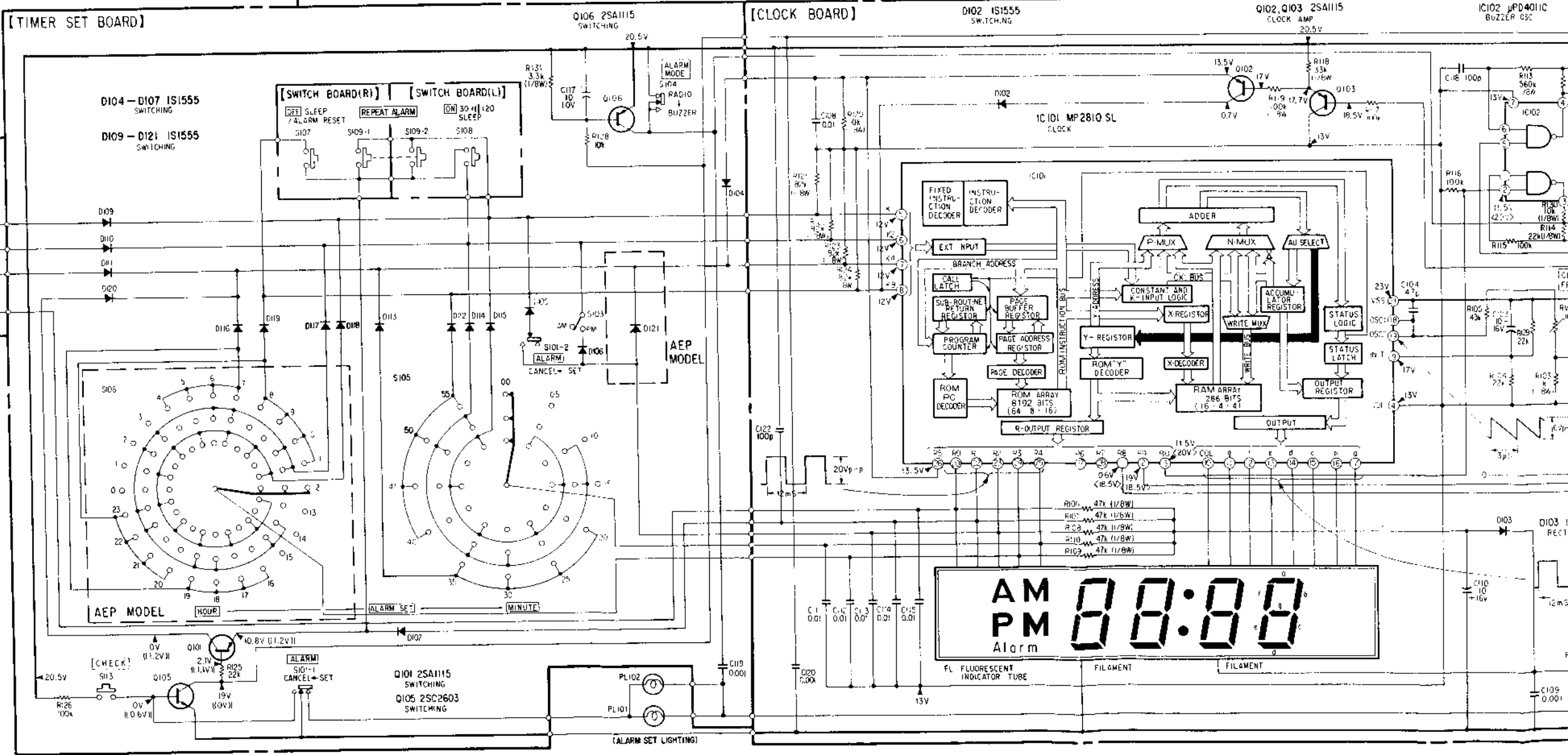
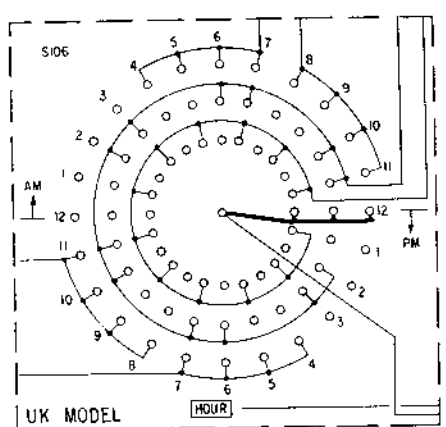
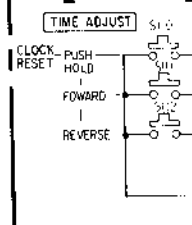
Note: The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

### Note:

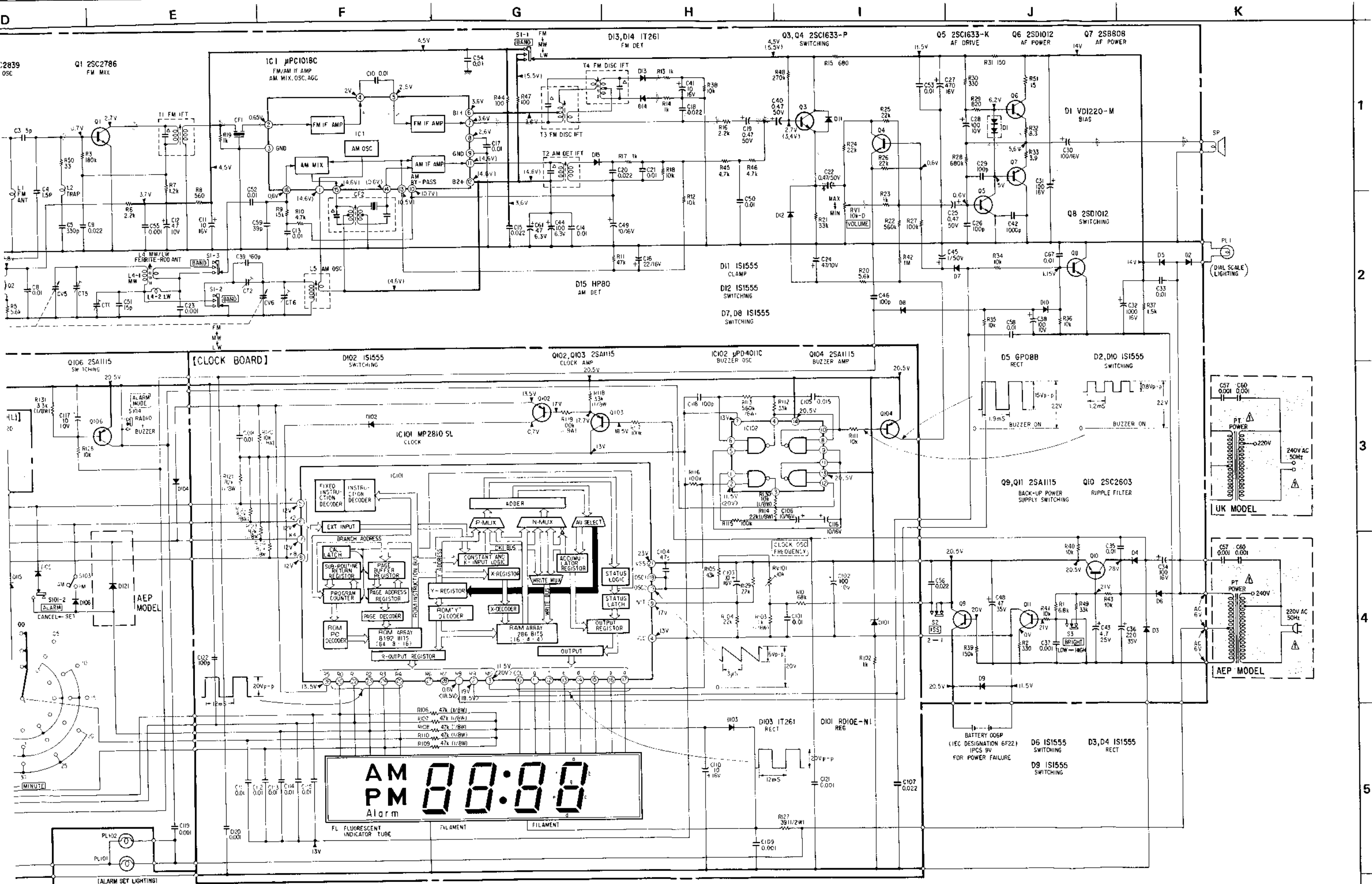
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF} : \mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms,  $\frac{1}{2}\text{W}$  unless otherwise noted.  $\text{k}\Omega : 1000\Omega$ ,  $\text{M}\Omega : 1000\text{k}\Omega$
- $\triangle$  : internal component.
- $\text{---|---}$  and  $\text{---|---}$  : electrolytics.
- $\text{---|---}$  : signal path
- $\text{---|---}$  : adjustment for repair.
- $\text{---|---}$  : B+ bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under sleep no-signal conditions. (BRIGHT switch : HIGH)
- no mark : FM
- ( ) : AM
- < > : alarm
- ( ) : When S113 is pushed with S101 set "SET" position.
- Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken by using oscilloscope.

Note: Voltages are measured with a VOM (50k $\Omega$ /V).

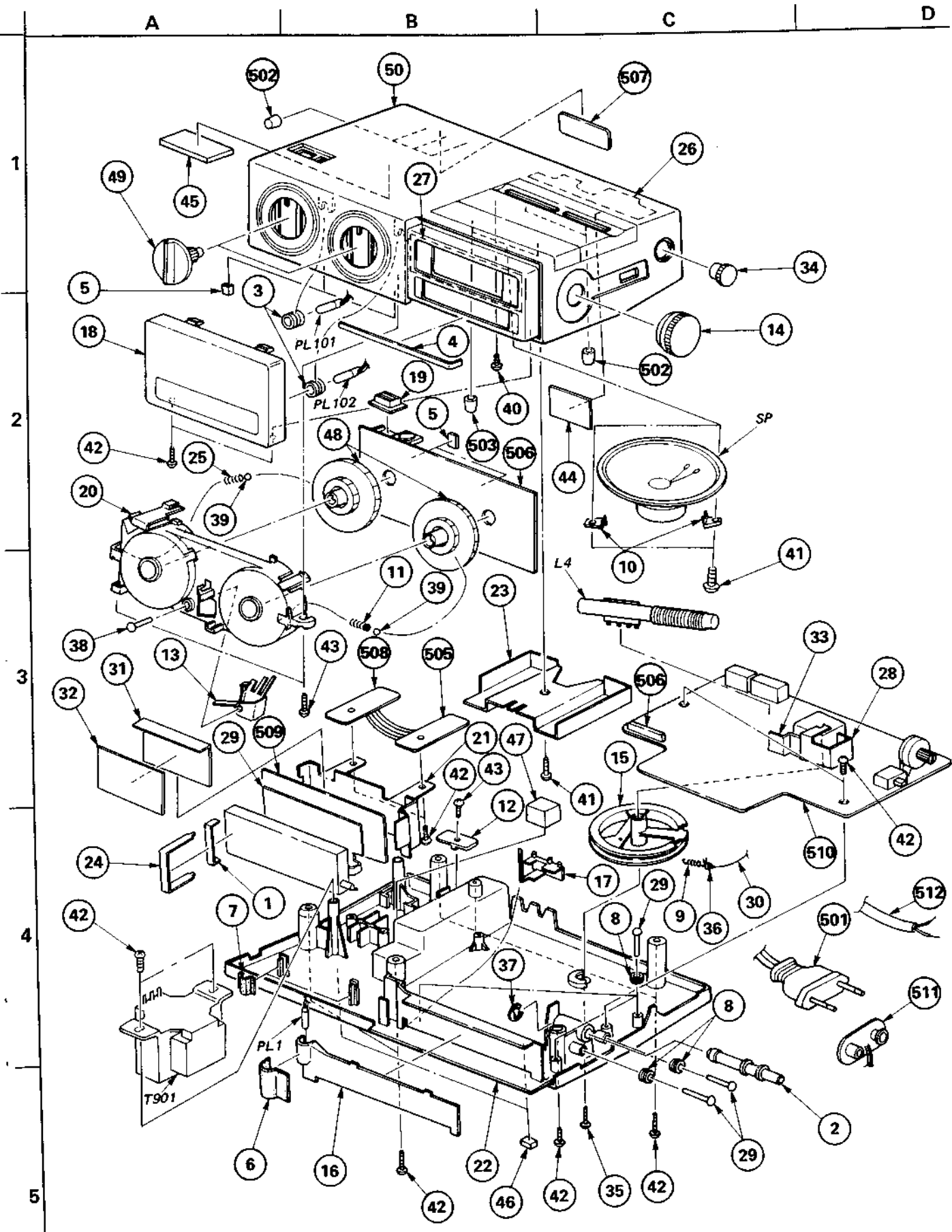
TIME ADJ SWITCH BOARD



1  
2  
3  
4  
5



SECTION 5  
EXPLODED VIEW AND PARTS LIST



GENERAL SECTION

No.	Part No.	Description
1	3-554-104-00	CUSHION, MOTOR
2	3-565-319-00	SHAFT, TUNING
3	3-583-516-00	CUSHION, MOTOR
4	3-664-467-00	CLOTH (A), INTERCEPTION
5	3-831-441-XX	SPACER, KNOB
6	3-831-441-XX	SHEET, FRICTION
7	3-831-441-XX	CUSHION
8	3-834-636-00	PULLEY
9	3-837-172-00	SPRING
10	3-840-975-00	CLAW, SPEAKER
11	3-883-473-00	SPRING, COMPRESSION
12	3-884-408-00	STOPPER, CORD
13	3-888-814-00	SPRING
14	3-888-904-00	KNOB, DIAL
15	3-888-905-00	DRUM, DIAL
16	3-888-907-21	SCALE, DIAL
17	3-888-908-00	POINTER
18	3-888-912-00	PLATE, TRANSPARENT, DIAL
19	3-888-914-00	BUTTON, SELECTION
20	3-888-915-00	HOLDER
21	3-888-917-11	CASE, SHIELD
22	3-888-919-51	(AEP)...CABINET (MAIN)
	3-888-919-61	(UK)...CABINET (MAIN)
23	3-888-922-00	CASE (A), SHIELD
24	3-888-923-00	HOLDER
25	3-888-924-00	SPRING, COMPRESSION
26	3-888-926-00	PLATE (A), SHIELD
27	3-888-927-00	PLATE (B), SHIELD
28	3-888-935-00	CASE, SHIELD (VC)
29	7-625-713-00	RIVET 2X8
30	9-911-825-52	CORD, DIAL
31	3-888-941-00	PLATE (E), SHIELD
32	3-888-942-00	INSULATOR
33	3-888-943-00	PLATE (F), SHIELD
34	4-867-103-11	KNOB, STYLUS PRESSURE
35	7-621-770-87	SCREW +P 2.6X5
36	7-623-610-00	EYELET, 1.5X2.5
37	7-624-109-04	STOP RING 5.0, TYPE -E
38	7-625-209-00	RIVET 2X10
39	7-671-114-01	BALL 4, STEEL
40	7-685-103-11	SCREW +P 2X5 TYPE2 NON-SLIT
41	7-685-146-11	SCREW +P 3X8 TYPE2 NON-SLIT
42	7-685-547-19	SCREW +BTP 3X10 TYPE2 N-S
43	7-685-548-19	SCREW +BTP 3X12 TYPE2 N-S

GENERAL SECTION

No.	Part No.	Description	Ref.No.
44	9-911-815-01	STOPPER	CF1
45	9-911-815-01	CUSHION	CF2
46	9-911-840-XX	CUSHION (CONTROL)	CT1
47	9-911-853-XX	CUSHION, (FA)	CT2
48	X-3888-906-2	KNOB SHAFT	CT3-6
49	X-3888-907-2	SET KNOB	CV3-6
50	X-3888-913-1	(AEP)...CABINET (UPPER) ASSY	D1
	X-3888-914-1	(UK)...CABINET (UPPER) ASSY	D2
			D3
			D4
			D5
			D6

ACCESSORY & PACKING MATERIAL

Part No.	Description
3-888-945-00	INDIVIDUAL CARTON
3-884-538-11	SHEET, PROTECTION
3-888-928-00	CUSHION (LEFT)
3-888-929-00	CUSHION (RIGHT)
3-995-898-11	MANUAL, INSTRUCTION

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
501	1-534-817-XX	(AEP)...POWER CORD				
502	1-552-900-00	CONTACT, RUBBER				
503	1-553-271-00	CONTACT, RUBBER				
504	1-561-449-00	SOCKET, CONNECTOR 10P				
505	1-604-838-00	PC BOARD, SWITCH (L)				
506	1-604-839-00	PC BOARD, TIMER SET				
507	1-604-840-00	PC BOARD, TIME ADJ SWITCH				
508	1-604-841-00	PC BOARD, SWITCH (R)				
509	A-3660-349-A	MOUNTED PCB, CLOCK				
510	A-3660-350-A	MOUNTED PCB (A), MAIN				
511	1-535-502-XX	SNAP BATTERY				
512	1-551-884-00	(UK)...POWER CORD				
C4	1-101-576-21	CERAMIC	1.5PF	20%	50V	
C6	1-102-642-00	CERAMIC	24PF	5%	50V	
C7	1-161-255-00	CERAMIC	4.7PF	10%	50V	
C42	1-161-323-00	CERAMIC	0.001MF	10%	50V	
C57	1-161-741-00	CERAMIC	0.001MF	10%	400V	
C60	1-161-741-00	CERAMIC	0.001MF	10%	400V	
C118	1-102-106-00	CERAMIC	100PF	10%	50V	

NOTE:  
 • Items with no part number and no description are not stocked because they are seldom required for routine service.  
 • Items marked "▲" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.  
 • Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

CAPACITORS:  
 • All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μuF.  
 RESISTORS  
 • All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

SEMICONDUCTORS  
 In each case, U : μ, for example:  
 UA...: μA...; UPA...: μPA...; UPC...: μPC...  
 UPD...: μPD...

NOTE:  
 • Items with no description are seldom required for routine service. Some delay should be anticipated when ordering these items.  
 • Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

D

GENERAL SECTION

No.	Part No.	Description
1	3-554-104-00	CUSHION, MOTOR
2	3-565-319-00	SHAFT, TUNING
3	3-583-516-00	CUSHION, MOTOR
4	3-664-467-00	CLOTH (A), INTERCEPTION
5	3-831-441-XX	SPACER, KNOB
6	3-831-441-XX	SHEET, FRICTION
7	3-831-441-XX	CUSHION
8	3-834-636-00	PULLEY
9	3-837-172-00	SPRING
10	3-840-975-00	CLAW, SPEAKER
11	3-883-473-00	SPRING, COMPRESSION
12	3-884-408-00	STOPPER, CORD
13	3-888-814-00	SPRING
14	3-888-904-00	KNOB, DIAL
15	3-888-905-00	DRUM, DIAL
16	3-888-907-21	SCALE, DIAL
17	3-888-908-00	POINTER
18	3-888-912-00	PLATE, TRANSPARENT, DIAL
19	3-888-914-00	BUTTON, SELECTION
20	3-888-915-00	HOLDER
21	3-888-917-11	CASE, SHIELD
22	3-888-919-51	(AEP)...CABINET (MAIN)
	3-888-919-61	(UK)...CABINET (MAIN)
23	3-888-922-00	CASE (A), SHIELD
24	3-888-923-00	HOLDER
25	3-888-924-00	SPRING, COMPRESSION
26	3-888-926-00	PLATE (A), SHIELD
27	3-888-927-00	PLATE (B), SHIELD
28	3-888-935-00	CASE, SHIELD (VC)
29	7-625-713-00	RIVET 2X8
30	9-911-825-52	CORD, DIAL
31	3-888-941-00	PLATE (E), SHIELD
32	3-888-942-00	INSULATOR
33	3-888-943-00	PLATE (F), SHIELD
34	4-867-103-11	KNOB, STYLUS PRESSURE
35	7-621-770-87	SCREW +P 2.6X5
36	7-623-610-00	EYELET, 1.5X2.5
37	7-624-109-04	STOP RING 5.0, TYPE -E
38	7-625-209-00	RIVET 2X10
39	7-671-114-01	BALL 4, STEEL
40	7-685-103-11	SCREW +P 2X5 TYPE2 NON-SLIT
41	7-685-146-11	SCREW +P 3X8 TYPE2 NON-SLIT
42	7-685-547-19	SCREW +BTP 3X10 TYPE2 N-S
43	7-685-548-19	SCREW +BTP 3X12 TYPE2 N-S

GENERAL SECTION

No.	Part No.	Description
44	9-911-815-01	STOPPER
45	9-911-815-01	CUSHION
46	9-911-840-XX	CUSHION (CONTROL)
47	9-911-853-XX	CUSHION, (FA)
48	X-3888-906-2	KNOB SHAFT
49	X-3888-907-2	SET KNOB
50	X-3888-913-1	(AEP)...CABINET (UPPER) ASSY
	X-3888-914-1	(UK)...CABINET (UPPER) ASSY

ACCESSORY & PACKING MATERIAL

Part No.	Description
3-888-945-00	INDIVIDUAL CARTON
3-884-538-11	SHEET, PROTECTION
3-888-928-00	CUSHION (LEFT)
3-888-929-00	CUSHION (RIGHT)
3-995-898-11	MANUAL, INSTRUCTION

ELECTRICAL PARTS

Ref.No.	Part No.	Description
501	1-534-817-XX	(AEP)...POWER CORD
502	1-552-900-00	CONTACT, RUBBER
503	1-553-271-00	CONTACT, RUBBER
504	1-561-449-00	SOCKET, CONNECTOR 10P
505	1-604-838-00	PC BOARD, SWITCH (L)
506	1-604-839-00	PC BOARD, TIMER SET
507	1-604-840-00	PC BOARD, TIME ADJ SWITCH
508	1-604-841-00	PC BOARD, SWITCH (R)
509	A-3660-349-A	MOUNTED PCB, CLOCK
510	A-3660-350-A	MOUNTED PCB (A), MAIN
511	1-535-502-XX	SNAP BATTERY
512	1-551-884-00	(UK)...POWER CORD
C4	1-101-576-21	CERAMIC 1.5PF 20% 50V
C6	1-102-642-00	CERAMIC 24PF 5% 50V
C7	1-161-255-00	CERAMIC 4.7PF 10% 50V
C42	1-161-323-00	CERAMIC 0.001MF 10% 50V
C57	1-161-741-00	CERAMIC 0.001MF 10% 400V
C60	1-161-741-00	CERAMIC 0.001MF 10% 400V
C118	1-102-106-00	CERAMIC 100PF 10% 50V

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

SEMICONDUCTORS  
In each case, U :  $\mu$ , for example:  
UA...:  $\mu$ A...; UPA...:  $\mu$ PA...; UPC...:  $\mu$ PC;  
UPD...:  $\mu$ PD...

ELECTRICAL PARTS

Ref.No.	Part No.	Description
CF1	1-527-795-71	FILTER, CERAMIC
CF2	1-403-163-21	CERAMIC FILTER
CT1	1-141-171-00	CAP, TRIMMER
CT2	1-141-171-00	CAP, TRIMMER
CT3-6 CV3-6	1-151-372-00	CAP, TUNING, POLYETHYLENE
D1	8-719-122-00	DIODE VD1220-M
D2	8-719-815-55	DIODE 1S1555
D3	8-719-815-55	DIODE 1S1555
D4	8-719-815-55	DIODE 1S1555
D5	8-719-991-55	DIODE U056
D6	8-719-815-55	DIODE 1S1555
D7	8-719-815-55	DIODE 1S1555
D8	8-719-815-55	DIODE 1S1555
D9	8-719-815-55	DIODE 1S1555
D10	8-719-815-55	DIODE 1S1555
D11	8-719-815-55	DIODE 1S1555
D12	8-719-815-55	DIODE 1S1555
D13	8-719-026-11	DIODE 1T261
D14	8-719-026-11	DIODE 1T261
D15	8-719-900-00	DIODE HP80
D101	8-719-102-89	DIODE RD10E-N1
D102	8-719-815-55	DIODE 1S1555
D103	8-719-026-11	DIODE 1T261
D104	8-719-815-55	DIODE 1S1555
D105	8-719-815-55	DIODE 1S1555
D106	8-719-815-55	DIODE 1S1555
D107	8-719-815-55	DIODE 1S1555
D109	8-719-815-55	DIODE 1S1555
D110	8-719-815-55	DIODE 1S1555
D111	8-719-815-55	DIODE 1S1555
D112	8-719-815-55	DIODE 1S1555
D113	8-719-815-55	DIODE 1S1555
D114	8-719-815-55	DIODE 1S1555
D115	8-719-815-55	DIODE 1S1555
D116	8-719-815-55	DIODE 1S1555
D117	8-719-815-55	DIODE 1S1555
D118	8-719-815-55	DIODE 1S1555
D119	8-719-815-55	DIODE 1S1555
D120	8-719-815-55	DIODE 1S1555
D121	8-719-815-55	(AEP)...DIODE 1S1555
FL	1-519-227-00	INDICATOR TUBE, FLUORESCENT
IC1	8-759-110-15	IC UPC1018C
IC101	8-759-928-10	IC MP2810SL
IC102	8-759-914-11	IC UPD4011C

NOTE:  
Items with no part number and no description are not stocked because they are seldom required for routine service.  
Items marked "  $\Delta$  " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.  
Due to standardization, parts with part numbers (A- $\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta$ -XX or A- $\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta$ -X) may be different from those used in the set.

CAPACITORS:  
All capacitors are in  $\mu$ F. Common capacitors are omitted. Refer to the following lists for their part numbers.  
MF: $\mu$ F, PF: $\mu$ Pf.  
RESISTORS  
All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.  
F : nonflammable  
COILS  
MMH : mH, UH :  $\mu$ H

ELECTRICAL PARTS

Ref.No.	Part No.	Description
L1	1-420-856-00	COIL, FM RF
L2	1-409-293-00	COIL, AIR CORE
L3	1-425-795-00	COIL, HIGH FREQ TRANSFORMER(FM)
L4	1-401-956-00	ANTENNA, FERRITE-ROD (LW/MW)
L5	1-405-685-00	COIL, MW OSC
L6	1-401-228-00	ANTENNA COIL
PL1	1-518-463-00	LAMP, PILOT
PL101	1-518-464-11	LAMP, PILOT
PL102	1-518-464-21	LAMP, PILOT
Q1	8-729-167-42	TRANSISTOR 2SC1674
Q2	8-729-671-14	TRANSISTOR 2SC2839
Q3	8-769-663-47	TRANSISTOR 2SC1364
Q4	8-769-663-47	TRANSISTOR 2SC1364
Q5	8-769-663-48	TRANSISTOR 2SC1364-8
Q6	8-729-801-22	TRANSISTOR 2SD1012
Q7	8-729-880-82	TRANSISTOR 2SB808
Q8	8-729-801-22	TRANSISTOR 2SD1012
Q9	8-729-612-77	TRANSISTOR 2SA1027R
Q10	8-729-606-32	TRANSISTOR 2SC2603
Q11	8-729-612-77	TRANSISTOR 2SA1027R
Q101	8-729-612-77	TRANSISTOR 2SA1027R
Q102	8-729-612-77	TRANSISTOR 2SA1027R
Q103	8-729-612-77	TRANSISTOR 2SA1027R
Q104	8-729-612-77	TRANSISTOR 2SA1027R
Q105	8-729-606-32	TRANSISTOR 2SC2603
Q106	8-729-612-77	TRANSISTOR 2SA1027R
R127	1-244-839-00	CARBON 39 5% 1/2W
R129	1-210-114-00	CARBON 22K 5% 1/16W
RV1	1-228-258-00	RES, VAR, CARBON 10K
RV101	1-226-236-00	RES, ADJ, CARBON 10K
S1	1-553-174-00	SWITCH, SLIDE
S2	1-552-370-00	SWITCH, SLIDE
S3	1-552-370-00	SWITCH, SLIDE
S101	1-553-504-00	SWITCH, PUSH
S104	1-552-370-00	SWITCH, SLIDE
S105	1-552-765-00	SWITCH, KEYBOARD
SP	1-503-018-11	SPEAKER (7.7CM)
T1	1-403-872-00	I.F.T
T2	1-403-960-00	I.F.T DETECTION
T3	1-404-144-00	TRANSFORMER, DISCRI (FM)
T4	1-403-953-00	TRANSFORMER, DISCRIMINATOR
T901	1-447-216-00	TRANSFORMER, POWER

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.  
SEMICONDUCTORS  
In each case, U :  $\mu$ , for example:  
UA...:  $\mu$ A...; UPA...:  $\mu$ PA...; UPC...:  $\mu$ PC;  
UPD...:  $\mu$ PD...

NOTE:  
Items with no part number and no description are not stocked because they are seldom required for routine service.  
Items marked "  $\Delta$  " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.  
Due to standardization, parts with part numbers (A- $\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta$ -XX or A- $\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta\Delta$ -X) may be different from those used in the set.

CAPACITORS:  
All capacitors are in  $\mu$ F. Common capacitors are omitted. Refer to the following lists for their part numbers.  
MF: $\mu$ F, PF: $\mu$ Pf.  
RESISTORS  
All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.  
F : nonflammable  
COILS  
MMH : mH, UH :  $\mu$ H



## ELECTROLYTIC CAPACITORS

CAP. (μF)	RATING → : Use the high voltage rated one.					
	6.3 VOLT. PART No.	10 VOLT. PART No.	16 VOLT. PART No.	25 VOLT. PART No.	35 VOLT. PART No.	50 VOLT. PART No.
0.47						1-121-726-00
1.0						1-121-391-00
2.2						1-121-450-00
3.3	→	→	→	1-121-392-00	→	1-121-393-00
4.7	→	→	→	1-121-395-00	→	1-121-396-00
10	→	→	1-121-651-00	1-121-398-00	→	1-121-738-00
22	→	→	1-121-479-00	1-121-480-00	1-121-662-00	1-121-152-00
33	→	→	1-121-403-00	1-121-404-00	1-121-652-00	1-121-405-00
47	→	1-121-352-00	1-121-409-00	1-121-410-00	1-121-653-00	1-121-411-00
100	→	1-121-414-00	1-121-415-00	1-121-416-00	1-121-357-00	1-121-417-00
220	1-121-417-00	1-121-420-00	1-121-421-00	1-121-422-00	1-121-261-00	1-121-423-00
330	1-121-751-00	1-121-805-00	1-121-521-00	1-121-654-00	1-121-655-00	1-121-656-00
470	1-121-424-00	1-121-425-00	1-121-426-00	1-121-733-00	1-121-361-00	1-121-810-00
1000		1-121-736-00	1-121-245-00	1-121-657-00	1-121-388-00	1-123-061-00
2200	1-121-658-00	1-121-659-00	1-121-660-00	1-123-067-00	1-121-984-00	
3300	1-121-661-00	1-123-075-00	1-123-071-00			

CAP. (μF)	100 VOLT.	160 VOLT.	250 VOLT.	350 VOLT.
	PART No.	PART No.	PART No.	PART No.
0.47				
1.0	1-123-249-00	1-123-252-00	1-123-003-00	1-121-168-00
2.2	1-123-250-00	1-123-026-00		1-123-028-00
3.3	1-121-995-00		1-123-004-00	1-123-006-00
4.7	1-123-255-00	1-121-246-00	1-121-759-00	1-123-007-00
10	1-121-126-00	1-121-999-00	1-123-254-00	1-123-008-00
22	1-121-996-00	1-123-253-00	1-123-005-00	1-123-022-00
33	1-121-997-00	1-121-757-00		
47	1-123-251-00	1-121-919-00		
100	1-123-084-00			

## CERAMIC CAPACITORS

RATING							
CAP. (pF)	50 VOLT. PART No.	CAP. (pF)	50 VOLT. PART No.	CAP. (pF)	50 VOLT. PART No.	CAP. (pF)	50 VOLT. PART No.
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001	1-102-074-00
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012	1-102-118-00
1.0	1-102-934-00	27	1-102-961-00	180	1-102-976-00	0.0015	1-102-119-00
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018	1-102-120-00
2.0	1-102-935-00	33	1-102-963-00	220	1-102-978-00	0.0022	1-102-121-00
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027	1-102-122-00
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033	1-102-123-00
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039	1-102-124-00
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047	1-102-125-00
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056	1-102-126-00
8	1-102-945-00	56	1-101-884-00	390	1-102-822-00	0.0068	1-102-127-00
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082	1-102-128-00
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01	1-102-129-00
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.022	1-101-005-00
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047	1-101-006-00
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00		
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00		
16	1-102-952-00	110	1-102-815-00				
18	1-102-953-00	120	1-102-816-00				
20	1-102-958-00	130	1-101-081-00				

0.001μF = 1,000pF

## CERAMIC (SEMICONDUCTOR) CAPACITORS

RATING → : Use the high voltage rated one.					
CAP. (μF)	25 VOLT.	50 VOLT.	CAP. (μF)	25 VOLT.	50 VOLT.
	PART No.	PART No.		PART No.	PART No.
0.001	→	1-161-039-00	0.018	1-161-016-00	1-161-054-00
0.0012	→	1-161-040-00	0.022	1-161-017-00	1-161-055-00
0.0015		1-161-041-00	0.027	1-161-018-00	1-161-056-00
0.0018		1-161-042-00	0.033	1-161-019-00	1-161-057-00
0.0022		1-161-043-00	0.039	1-161-010-00	1-161-058-00
0.0027	→	1-161-044-00	0.047	1-161-021-00	1-161-059-00
0.0033	→	1-161-045-00	0.056	→	1-161-060-00
0.0039	→	1-161-046-00	0.068	→	1-161-061-00
0.0047	→	1-161-047-00	0.082	1-161-024-00	1-161-062-00
0.0056	→	1-161-048-00	0.1	1-161-025-00	1-161-063-00
0.0068	→	1-161-049-00			
0.0082	1-161-013-00	1-161-050-00			
0.01	1-161-013-00	1-161-051-00			
0.012	→	1-161-052-00			
0.015	1-161-015-00	1-161-053-00			

# ICF-C55L

## MYLAR CAPACITORS

CAP. (μF)	RATING																		
	50 VOLT.			100 VOLT.			200 VOLT.			CAP. (μF)	50 VOLT.			100 VOLT.			200 VOLT.		
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.		PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	
0.001	1-108-227-00	1-108-365-00	1-108-409-00	0.01	1-108-239-00	1-108-377-00	1-108-421-00	0.1	1-108-251-00	1-108-389-00	1-108-433-00								
0.0012	1-108-351-00	1-108-366-00	1-108-410-00	0.012	1-108-357-00	1-108-378-00	1-108-422-00	0.12	1-108-363-00	1-108-390-00	1-108-434-00								
0.0015	1-108-238-00	1-108-367-00	1-108-411-00	0.015	1-108-240-00	1-108-379-00	1-108-423-00	0.15	1-108-252-00	1-108-391-00	1-108-435-00								
0.0018	1-108-352-00	1-108-368-00	1-108-412-00	0.018	1-108-358-00	1-108-380-00	1-108-424-00	0.18	1-108-364-00	1-108-392-00	1-108-436-00								
0.0022	1-108-230-00	1-108-369-00	1-108-413-00	0.022	1-108-242-00	1-108-381-00	1-108-425-00	0.22	1-108-254-00	1-108-393-00	1-108-437-00								
0.0027	1-108-353-00	1-108-370-00	1-108-414-00	0.027	1-108-359-00	1-108-382-00	1-108-426-00	0.27	1-108-854-00	-	-								
0.0033	1-108-232-00	1-108-371-00	1-108-415-00	0.033	1-108-244-00	1-108-383-00	1-108-427-00	0.33	1-108-855-00	-	-								
0.0039	1-108-354-00	1-108-372-00	1-108-416-00	0.039	1-108-360-00	1-108-384-00	1-108-428-00	0.39	1-108-856-00	-	-								
0.0047	1-108-234-00	1-108-373-00	1-108-417-00	0.047	1-108-246-00	1-108-385-00	1-108-429-00	0.47	1-108-857-00	-	-								
0.0056	1-108-355-00	1-108-374-00	1-108-418-00	0.056	1-108-361-00	1-108-386-00	1-108-430-00	-	-	-	-								
0.0068	1-108-237-00	1-108-375-00	1-108-419-00	0.068	1-108-249-00	1-108-387-00	1-108-431-00	-	-	-	-								
0.0082	1-108-356-00	1-108-376-00	1-108-420-00	0.082	1-108-362-00	1-108-388-00	1-108-432-00	-	-	-	-								



## TANTALUM CAPACITORS

CAP. (μF)	RATING						
	3.15 VOLT.	6.3 VOLT.	10 VOLT.	16 VOLT.	20 VOLT.	25 VOLT.	35 VOLT.
0.01							1-131-396-00
0.015							1-131-397-00
0.022							1-131-398-00
0.033							1-131-399-00
0.047							1-131-400-00
0.068							1-131-401-00
0.1							1-131-402-00
0.15							1-131-403-00
0.22							1-131-404-00
0.33						1-131-409-00	1-131-405-00
0.47					1-131-412-00		1-131-406-00
0.68				1-131-415-00		1-131-410-00	1-131-407-00
1.0			1-131-418-00		1-131-413-00		1-131-408-00
1.5		1-131-421-00		1-131-416-00		1-131-411-00	1-131-348-00
2.2	1-131-424-00		1-131-419-00		1-131-414-00	1-131-355-00	1-131-349-00
3.3		1-131-422-00		1-131-417-00	1-131-362-00	1-131-356-00	1-131-350-00
4.7	1-131-425-00		1-131-420-00	1-131-369-00	1-131-363-00	1-131-357-00	1-131-351-00
6.8		1-131-423-00	1-131-376-00	1-131-370-00	1-131-364-00	1-131-358-00	1-131-352-00
10	1-131-426-00	1-131-383-00	1-131-377-00	1-131-371-00	1-131-365-00	1-131-359-00	1-131-353-00
15	1-131-390-00	1-131-384-00	1-131-378-00	1-131-372-00	1-131-366-00	1-131-360-00	
22	1-131-391-00	1-131-385-00	1-131-379-00	1-131-373-00	1-131-367-00		
33	1-131-392-00	1-131-386-00	1-131-380-00	1-131-374-00			
47	1-131-393-00	1-131-387-00	1-131-381-00				
68	1-131-394-00	1-131-388-00					
100	1-131-395-00						



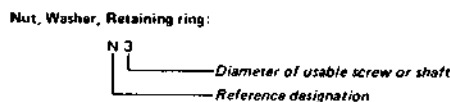
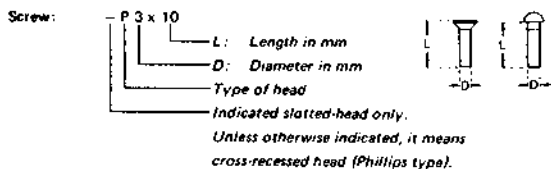
## TANTALUM CAPACITORS













CAP. (μF)	RATING					
	3 VOLT.	6.3 VOLT.	10 VOLT.	16 VOLT.	20 VOLT.	35 VOLT.
0.033						1-131-273-00
0.047						1-131-274-00
0.068						1-131-275-00
0.1						1-131-276-00
0.15						1-131-277-00
0.22					1-131-262-00	1-131-278-00
0.33					1-131-263-00	1-131-279-00
0.47			1-131-169-00		1-131-264-00	1-131-280-00
0.68				1-131-258-00	1-131-265-00	1-131-281-00
1.0			1-131-254-00		1-131-266-00	1-131-282-00
1.5		1-131-250-00			1-131-267-00	1-131-283-00
2.2				1-131-259-00	1-131-268-00	1-131-284-00
3.3			1-131-255-00		1-131-269-00	
4.7		1-131-251-00	1-131-171-00		1-131-270-00	
6.8				1-131-260-00	1-131-271-00	
10			1-131-256-00		1-131-272-00	
15		1-131-252-00		1-131-261-00		
22			1-131-257-00			
33	1-131-176-00	1-131-253-00	1-131-173-00			
47	1-131-288-00	1-131-174-00				
100	1-131-177-00					














1/4 WATT CARBON RESISTORS

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-476-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-477-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-478-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-479-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-480-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-481-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-482-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-483-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-484-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-485-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-486-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-487-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

HARDWARE NOMENCLATURE



Reference Designation	Shape	Description	Remarks
<b>SCREWS</b>			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-filister-head screw	
RF		fillister-head screw	
BV		brazer-head screw	

Reference Designation	Shape	Description	Remarks
<b>SELF-TAPPING SCREWS</b>			
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self-tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
<b>SET SCREWS</b>			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
<b>NUT</b>			
N		nut	
<b>WASHERS</b>			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex. LW3, internal
LW		external-tooth lock washer	ex. LW3, external
<b>RETAINING RINGS</b>			
E		retaining ring	
G		grip-type retaining ring	