

# Service Manual

Portable Stereo Component System

Radio Cassette

## RX-CS730



Colour

(K) ..... Black Type

Area

Suffix for Model No.	Area	Colour
(00)	Asia, Latin American, Middle East and Africa	(K)
(10)	Saudi Arabia, Kuwait, Singapore, Malaysia	

TAPE SECTION : SG20 MECHANISM SERIES

## Specifications

### RADIO

Frequency range	
FM	90 - 108 MHz
MW	530 - 1605 MHz
SW1	2.3 - 7.2 MHz
SW2	7.3 - 22.2 MHz
Intermediate frequency	
FM	10.7 MHz
Am	455 kHz
Sensitivity	
FM	17 dB: 50 mW
MW	51 dB: 50 mW
SW1	55 dB: 50 mW
SW2	17 dB: 50 mW

### TAPE RECORDER

Track system	4 x 45° 2 channels, stereo
Recording system	AC bias
Erasing system	Magnet
Monitor system	Vactrols, sound monitor
Frequency range	
Normal	60 - 14300 Hz

### GENERAL

Power requirement	
AC	100-120 V / 220-240 V, 50 / 60 Hz Power consumption: 1.7 W 12 V (eight R20 / R20 7, UM-1 batteries; ■ Do not use non-rechargeable type batteries)
Battery	15 - 18.2 V
DC IN	3.15 A (PAP)
Power output	27 W ... RMS (max.) 2 Speakers: 12 cm 2 Tweeters: 7.6 cm
Speakers	
Jacks	
Output	SPEAKERS : 8 Ω Headphones : 32 Ω 581 x 255 x 221 mm Main unit: 251 x 250 x 221 mm Speaker box: 185 x 224 x 224 mm 4.0 kg (without batteries)
Dimensions (WxHxD)	
Weight	

Notes:

Specifications are subject to change without notice.  
Weight and dimensions are approximate.

### WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise a non-technician of potential dangers in attempting to service a product. Products powered by electricity should be serviced or worked on only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

# Panasonic

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## ■ Contents

	TACL		PAGE
• BEFORE USE .....	2	• SCHEMATIC DIAGRAM .....	2 - 11
• OPERATION CHECKS .....	2 - 4	• PRINTED CIRCUIT BOARD .....	12 - 15
• MEASUREMENTS AND ADJUSTMENTS .....	5 - 7	• CABINET PARTS LOCATION .....	16 - 17
• TROUBLESHOOTING GUIDE (D-107), TRANSISTORS & DIODES .....	7	• MECHANISM PARTS LOCATION .....	18
• WIRING CONNECTION DIAGRAM .....	8	• REPLACEMENT PARTS LIST .....	19 - 20
		• RESISTORS & CAPACITORS .....	21 - 22
		• PACKAGING .....	22

## ■ BEFORE USE

### [FOR (GC) area]

Be sure to disconnect the machine cord before adjusting the voltage selector.

Use a multimeter to set the voltage selector (on the rear panel) to the voltage setting for the area in which the unit will be used. (If the power supply in your area is 117V or 120V, set to the 117V position.)

Note that if the unit will be seriously damaged if this setting is not made correctly. (There is no voltage selector for some countries; no correct voltage is already set.)

## ■ Operation Checks

" **ATTENTION SERVICER** " Some analysis component may have sharp edges. Be careful when disassembling and servicing.

1. This section describes procedures for **checking the operation** of the major printed circuit boards and **replacing the main components**.
2. For reassembly after operation checks or replacement, reverse the respective procedures. **Special reassembly procedures** are described only when required.
3. Select items from the following index when checks or replacement are required.

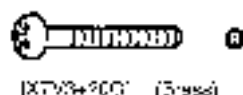
### • Contents

• Disassembly of the Front Cabinet .....	page
• Checking Procedure for Main, Panel, Mechanism, Power And Battery P.C.B. ....	2
	3 - 4

## ■ Disassembly Of The Front Cabinet

### Step 1

Remove the Battery Cover.



### Step 2

③ x 3



Battery Cover

### Step 3

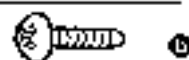
Push out the  
V-mount knob.



### Step 4

Press the Eject button and remove the front cabinet in the direction of the arrow shown.





XTCS-1200 (Basic)

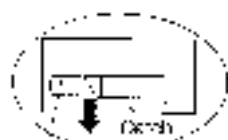
Step 14

b x c

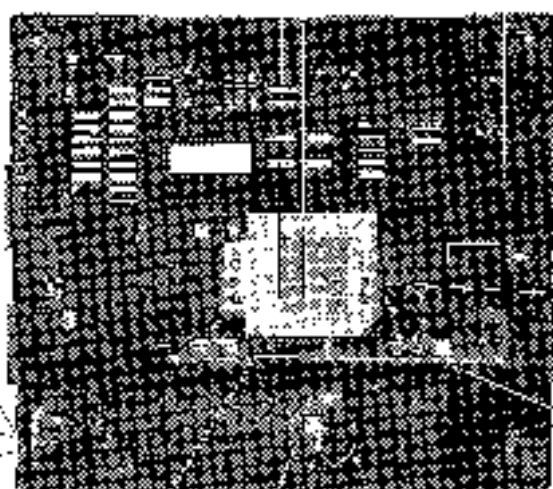
b

Step 13

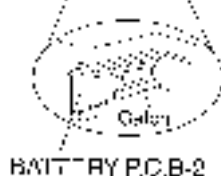
Release the catch on the bottom side of the cabinet. Pull out Battery P.C.B. 1.



BATTERY P.C.B. 1



POWER P.C.B.



BATTERY P.C.B. 2

Step 15

Release the catch and pull out the Power P.C.B.

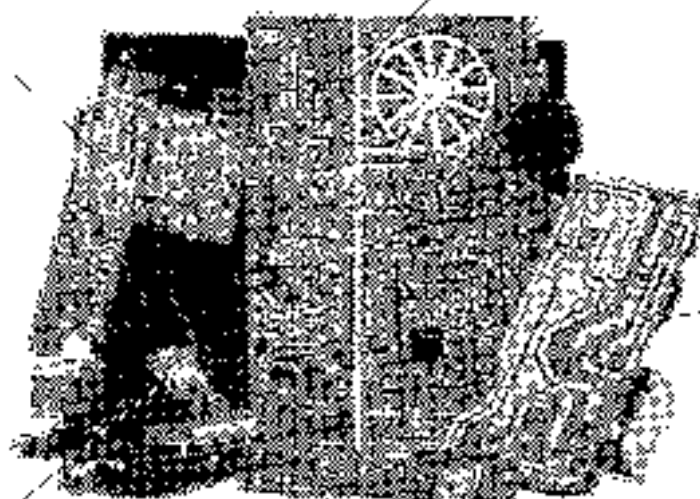


Step 12

Release the catch and pull out the Battery P.C.B.

MAIN P.C.B.  
(Solder side)

PANEL P.C.B.  
(Solder side)



POWER P.C.B.  
(Solder side)

MECHANISM P.C.B.  
(Solder side)

BATTERY P.C.B. 1  
(Solder side)

BATTERY P.C.B. 2  
(Solder side)

## ■ Measurements and Adjustments

### ● Tuner Section

#### ● ALIGNMENT INSTRUCTIONS

BE CAREFUL! BE CAREFULLY BEFORE ATTEMPTING ALIGNMENT

1. Set power switch to **OFF** to 1.5V DC.
2. Set volume control to maximum.
3. Set band switch to FM, MW, SW1 or SW2.
4. Set selector switch to RADIO.
5. Set FM WIDE/SP switch to MONO.
6. Set FINE TUNING to center.
7. Output of signal generator should be no higher than necessary to obtain an output reading.

#### ● AM - IF ALIGNMENT

SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER or OSCILLOSCOPE)	ADJUSTMENT (Shown in Fig.1)	REMARKS
CONNECTIONS	FREQUENCY				
Fasten a loop of bare wire (1/8" dia) and connect signal into loop of receiver.	455 kHz GUS Mod. at 100Hz	Point of max. interference (at about 800kHz)	Headphone Jack (3000) $\left( \begin{array}{l} \text{Turn clockwise until} \\ \text{signal is maximum} \\ \text{+ 10 dB over background} \\ \text{noise level (100 kHz)} \end{array} \right)$	LS (AM II-1)	Adjust for maximum output.

#### ● MW - RF ALIGNMENT

•	(GU) ..... 511 kHz (GC) ..... 514 kHz + 3 kHz	Tuning capacitor fully closed.	•	LS (MW OSC. Coil)	Adjust for maximum output.
•	(GL) ..... 1650 kHz (GC) ..... 1680 kHz + 3 kHz	Tuning capacitor fully opened.	•	CT2 (MW ANT. Trimmer)	Adjust for maximum output.
•	550 kHz	Tune to signal	•	PT-3 (MW ANT. Coil)	Adjust for maximum output. Adjust LS-1 by moving coil bobbin along the ferrite core.
•	1500 kHz	Tune to signal	•	CT2 (MW ANT. Trimmer)	Adjust for maximum output.

(\*) Fix antenna coil with wax after completing alignment.

#### ● SW1 - RF ALIGNMENT

•	2.245 MHz	Tuning capacitor fully closed.	•	LS (SW1 OSC. Coil)	Adjust for maximum output.
•	7.221 MHz	Tuning capacitor fully opened.	•	VC-3 (SW1 ANT. Var.)	Adjust for maximum output.
•	2.3 MHz	Tune to signal	•	PT-3 (SW1 ANT. Coil)	Adjust for maximum output. Adjust LS-2 by moving coil bobbin along the ferrite core.
•	7.0 MHz	Tune to signal	•	VC-3 (SW1 ANT. Var.)	Adjust for maximum output.

(\*) Fix antenna coil with wax after completing alignment.

### ◆ SW2 - RF ALIGNMENT

SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTINGS	INDICATOR (ELECTRONIC VOLTMETER or OSCilloscope)	ADJUSTMENT (Shown in Fig. 1)	REMARKS
CONNECTIONS	FREQUENCY				
Connect to test point <b>TP1</b> through ceramic capacitor (10pF). Negative side to test point <b>TP2</b> .	6.34 MHz	Tuning capacitor fully closed.	Headphone Jack (802)	L10 (SW2 OSC. Coil)	Adjust for maximum output.
	32.80 MHz	Tuning capacitor fully opened.	(Remove the plug as shown in Fig. 3 and the maximum level shown on the display is the tuning point.)	C-5 (SW2 OSC. Harmonic)	Adjust for maximum output.
	7.0 MHz	Tune to signal.		7 (SW2 ANT. Coil)	Adjust for maximum output.

### ◆ FM - IF ALIGNMENT

Connect to test point <b>TP3</b> through ceramic capacitor. Negative side to test point <b>TP4</b> .	10.7 MHz (Sweep)	Point of non-reference (not about 90MHz)	Connect test. amp. of scope to test point <b>TP3</b> . Negative side to test point <b>TP4</b> .	T <sub>1</sub> (FM 1st IF)	Waveform is shown in Fig. 3.
				T <sub>2</sub> (FM 2nd IF)	Waveform is shown in Fig. 4.

### ◆ FM - RF ALIGNMENT

Connect to test point <b>TP1</b> through FM dummy antenna. Negative side to test point <b>TP2</b> .	(G1).....86.2 MHz (OC).....67.00 MHz $\pm 50$ KHz	Variable capacitor fully closed.	Headphone Jack (802)	L2 (FM OSC. Coil)	Adjust for maximum output (12).
	(G1).....109.2 MHz (GC).....109.3 MHz $\pm 70$ KHz	Variable capacitor fully opened.	(Remove the plug as shown in Fig. 3 and the maximum level shown on the display is the tuning point.)	VC1-1 (FM OSC. VC)	
	96 MHz	Tune to signal.		VC1-2 (FM ANT. VC)	Adjust for maximum output.

[12] : three output responses will be present; proper tuning is the center maximum.

## ● Cassette Deck Section

### ◆ ALIGNMENT INSTRUCTIONS

#### READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

#### Measuring Instruments

- Digital frequency counter

#### Measuring Conditions

- Make sure the leads are clean.
- Make sure the capacitor and pressure rollers are clean.

#### Test Tape

- Tape speed adjustment: 150 Hz  $\pm 10$  dB : 0.220WAT

Note : No Azimuth Head Alignment is required, due to Aztec Head is used in the cassette mechanism.

### ◆ TAPE SPEED ALIGNMENT

TEST TAPE	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
0.220WAT	Headphone Jack (802) (Remove the plug as shown in Fig. 3 and the maximum level shown on the display is the tuning point.)	Motor VR (As shown in Fig. 6)	5000 $\pm 30$ Hz	<ol style="list-style-type: none"> <li>Set the unit to T/PH position.</li> <li>Playback the middle part of the test tape (0.220WAT).</li> <li>Adjust motor VR for output of 5000 <math>\pm 30</math> Hz shown on frequency counter.</li> </ol>

# ● ALIGNMENT POINTS

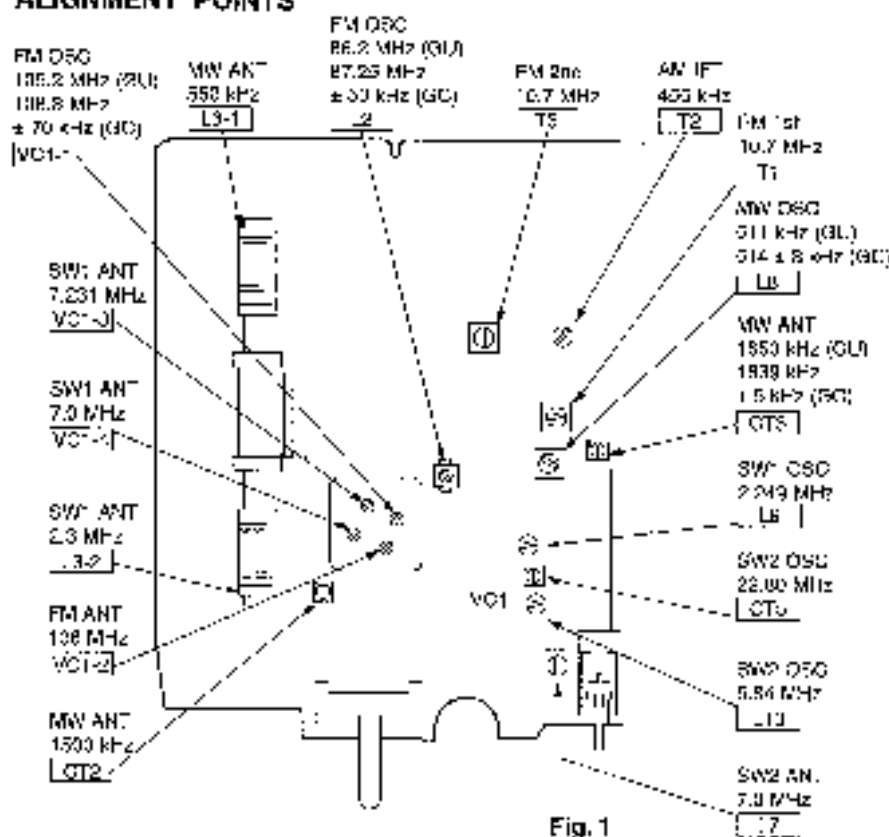


Fig. 3

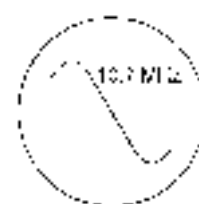
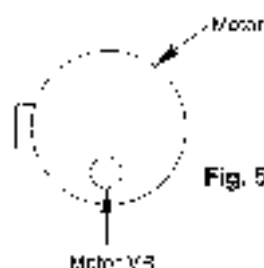


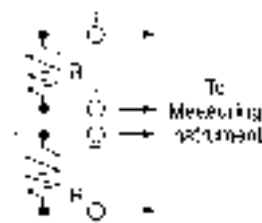
Fig. 4



To Headphone Jack

R = J212

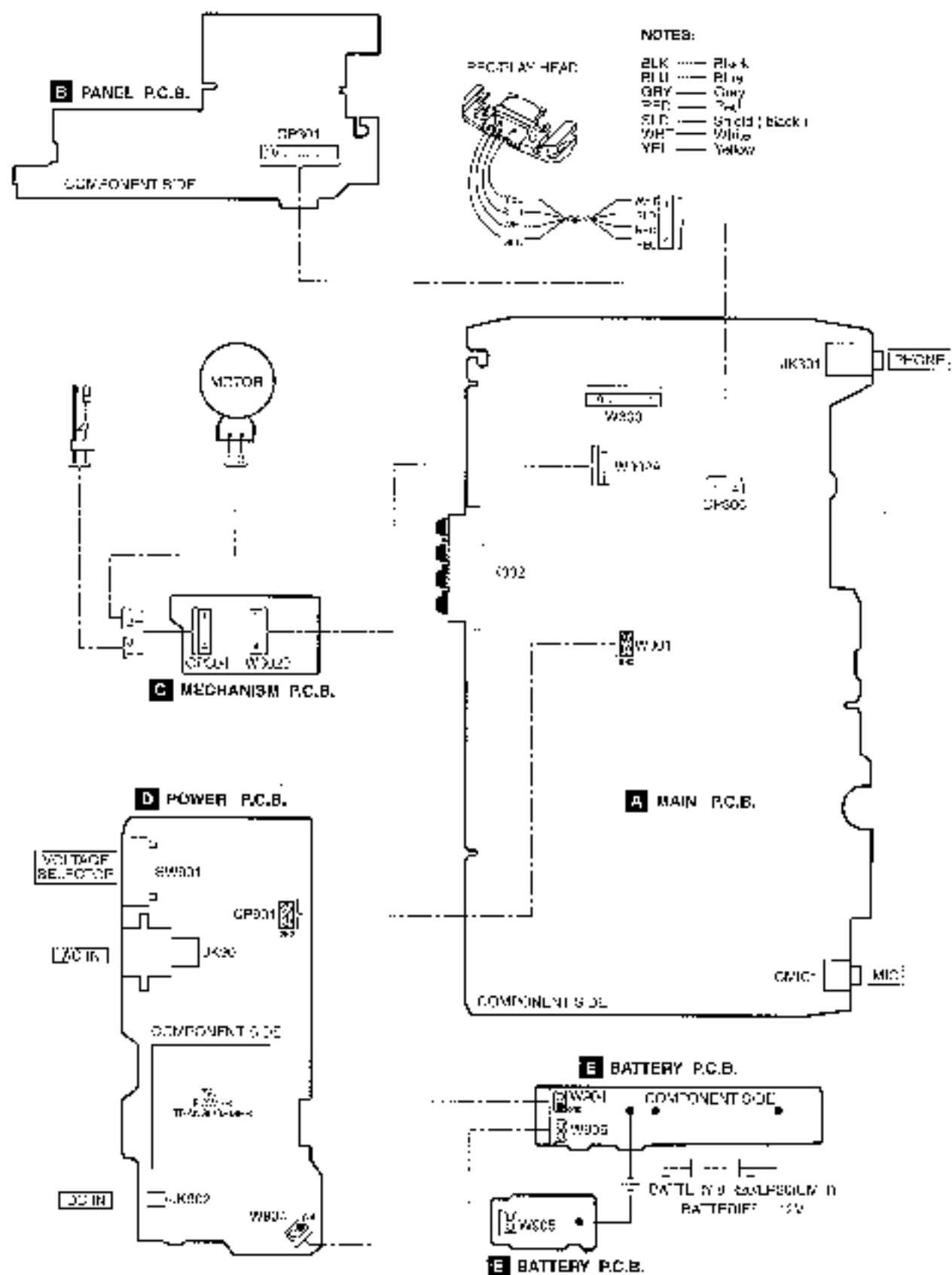
Fig. 2



## ■ Terminal Guide of IC's, Transistors and Diods

<p>BAS80GL</p> <p>28D14503TA BA1.4MTA</p>	<p>LA100U</p> <p>1K5132DM/21</p>	<p>CXA2513M</p> <p>RVD15S155TA</p>	<p>LA1025</p> <p>5/ R525VGT31 6/ R525VGT31 8/ R525MGT31</p>	<p>88A554H1A 28C1043TA 28C2031LTA 28C6293TA 28D6924GR5TA</p> <p>MTZJ3RJ8TA MTZJ6RJ8TA MTZJ8RJ8TA RB441C-77</p>
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### ■ Wiring Connection Diagram





## Schematic Diagram

(All schematic diagrams may be modified at any time with the development of new technology)

Note :

• S352	:	Preset equalizer switch (WOMAN)	• SW3	:	EAND select switch
• S353	:	Preset equalizer switch (J'LAT)	• SW4	:	T-P switch
• S354	:	Preset equalizer switch (CLEAR)	• SW5	:	FM MODE/DP switch
• S355	:	Preset equalizer switch (SOFT)	• SW901	:	Voltage selector switch
• S356	:	Preset equalizer switch (XBS)	• VR301	:	Volume control (VL)
• SW1	:	SELECTOR switch			

### Battery current :

Vol. min. .... 380 mA (FM)  
380 mA (AM)  
458 mA (TAPE)


Vol. max. .... 553 mA (FM)  
555 mA (AM)  
572 mA (TAPE)


Measurement Instruction


(AM : 74 dBm, 33% Mod.)  
(FM : 00 dBm, 33% Mod.)  
(TAPE : 315 Hz, 0 dB)

### Signal line


 : LB line


 : Main signal line

 : Record signal line

 : AM signal line

 : AM OSC signal line

 : FM/AM signal line

 : FM signal line


 : FM OSC signal line

 : Playback signal line

- The voltage value and waveforms are the reference voltage of this Unit measured by V.C.C electronic voltmeter (high impedance) and oscilloscope on the basis of chassis.  
Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

( ) .... 8M, < > ... FM No mark ... Playback position, << >> ... Record position

### Importance safety notice:

Components identified by  mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (transistors) etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

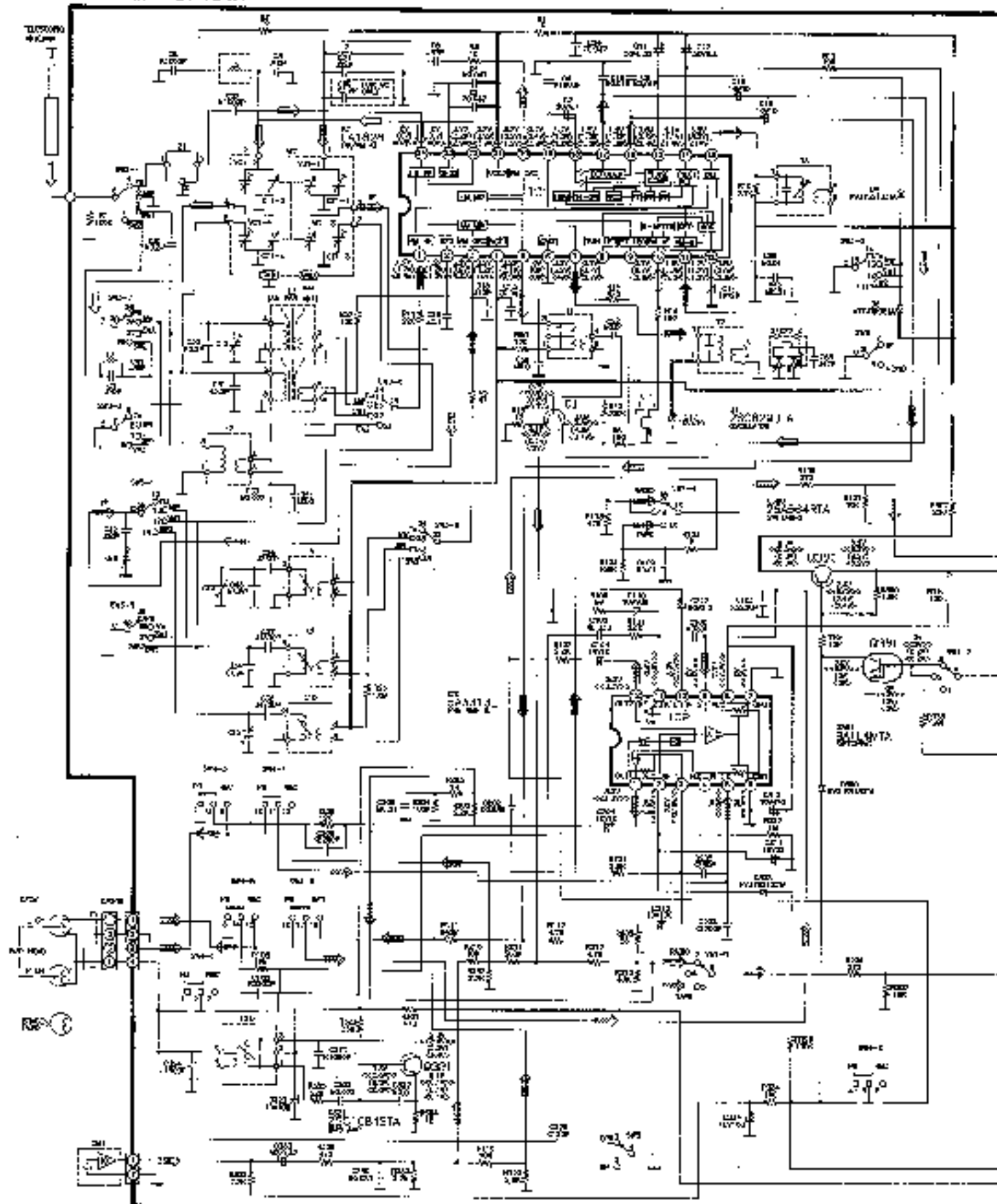
### Caution !

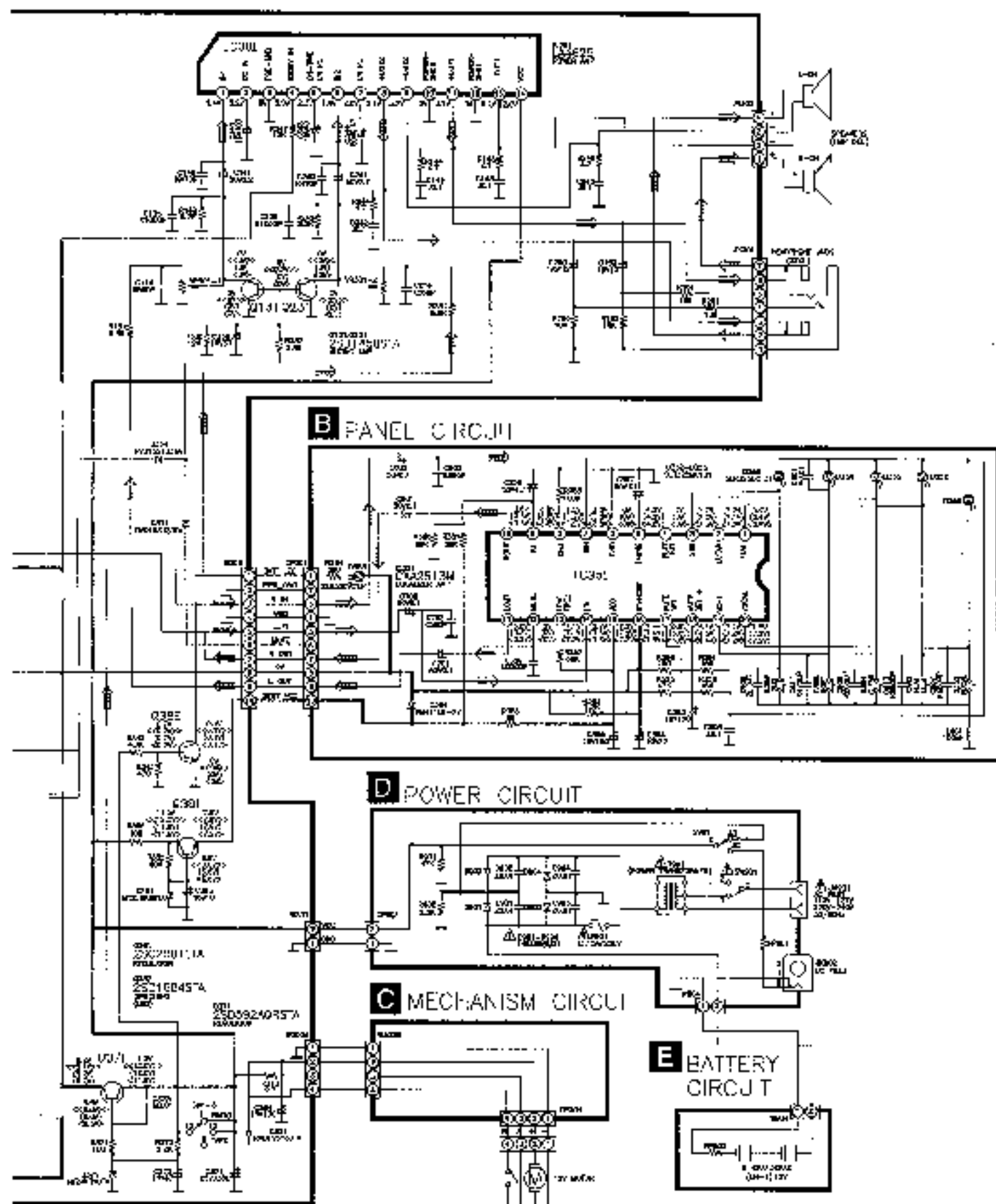
IC, LSI and VLSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastic with aluminum foil.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.
- Put a conductive mat on the work table.

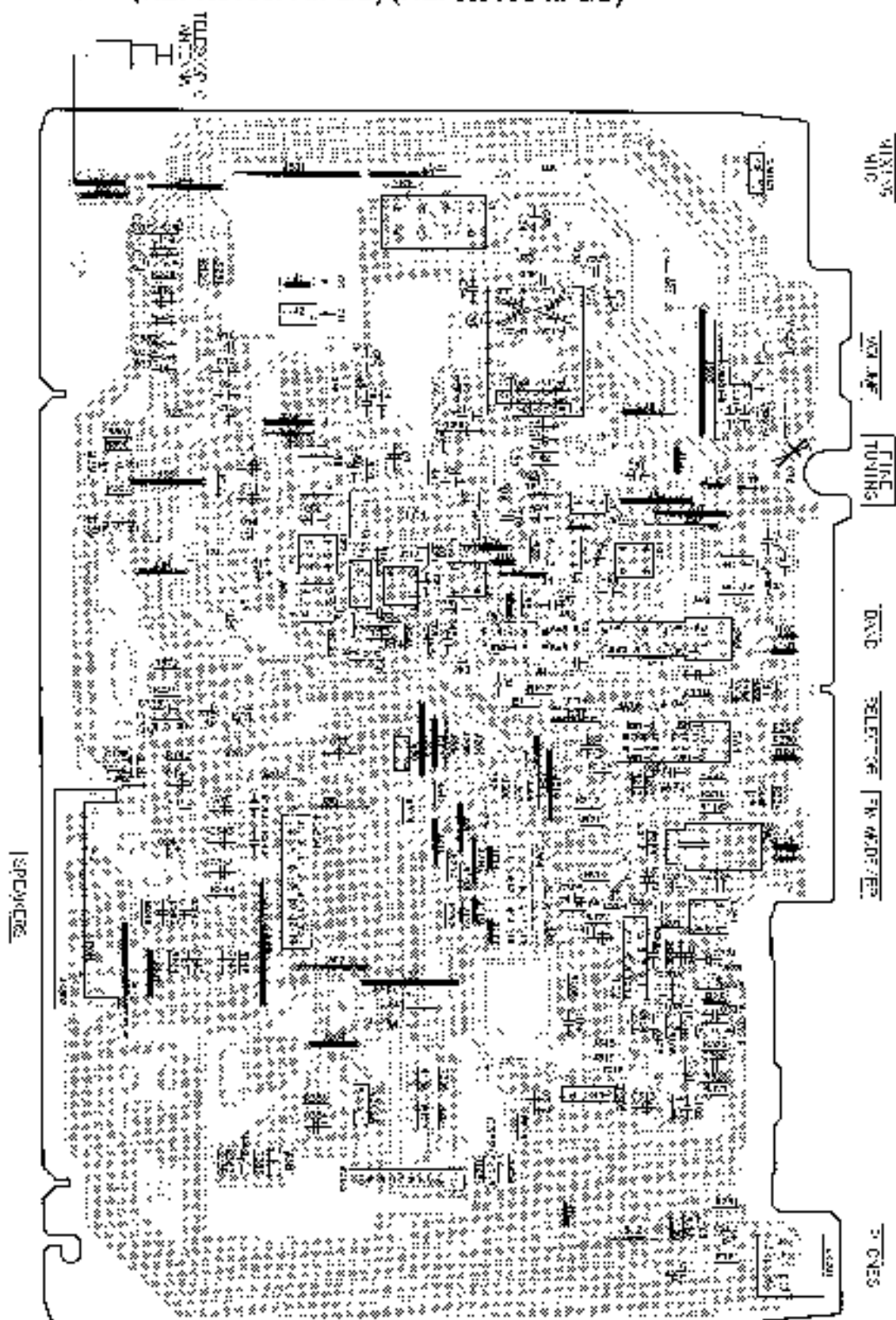
## A MAIN CIRCUIT





■ Printed Circuit Board

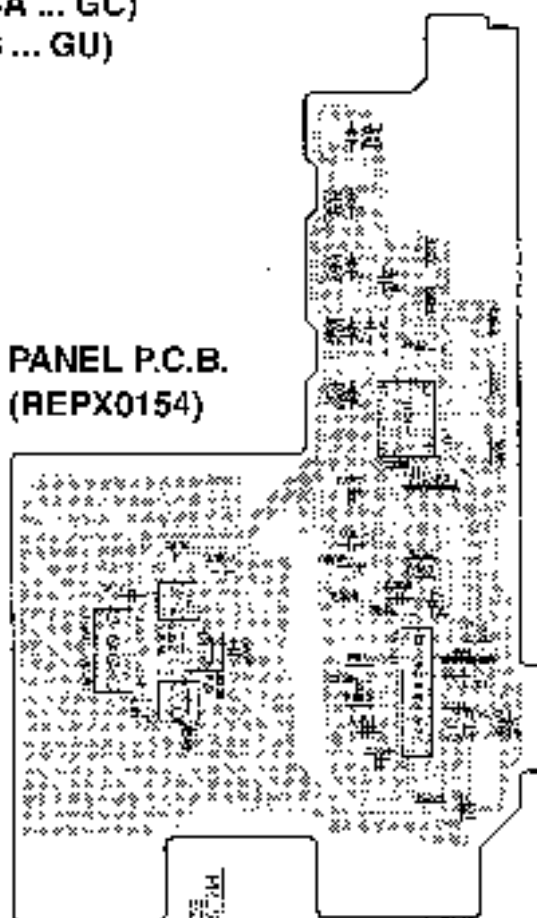
**A** MAIN P.C.B. (REPX0153A ... GC) (REPX0153 ... GU)



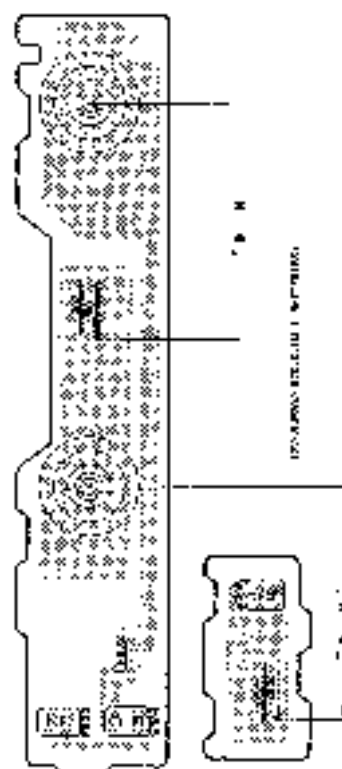
**C MECHANISM P.C.B.**  
(REPX0153A ... GC)  
(REPX0153 ... GU)



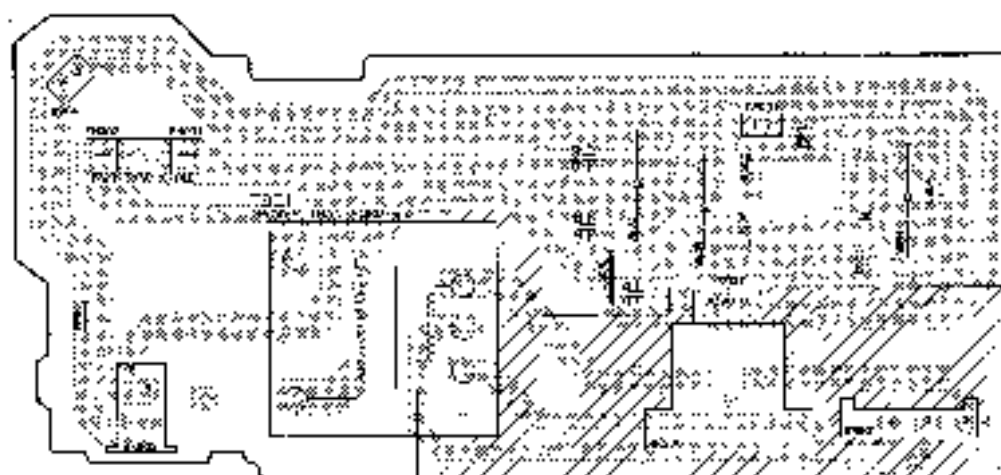
**B PANEL P.C.B.**  
(REPX0154)



**E BATTERY P.C.B.**  
(REPX0154)



**D POWER P.C.B. (REPX0154)**

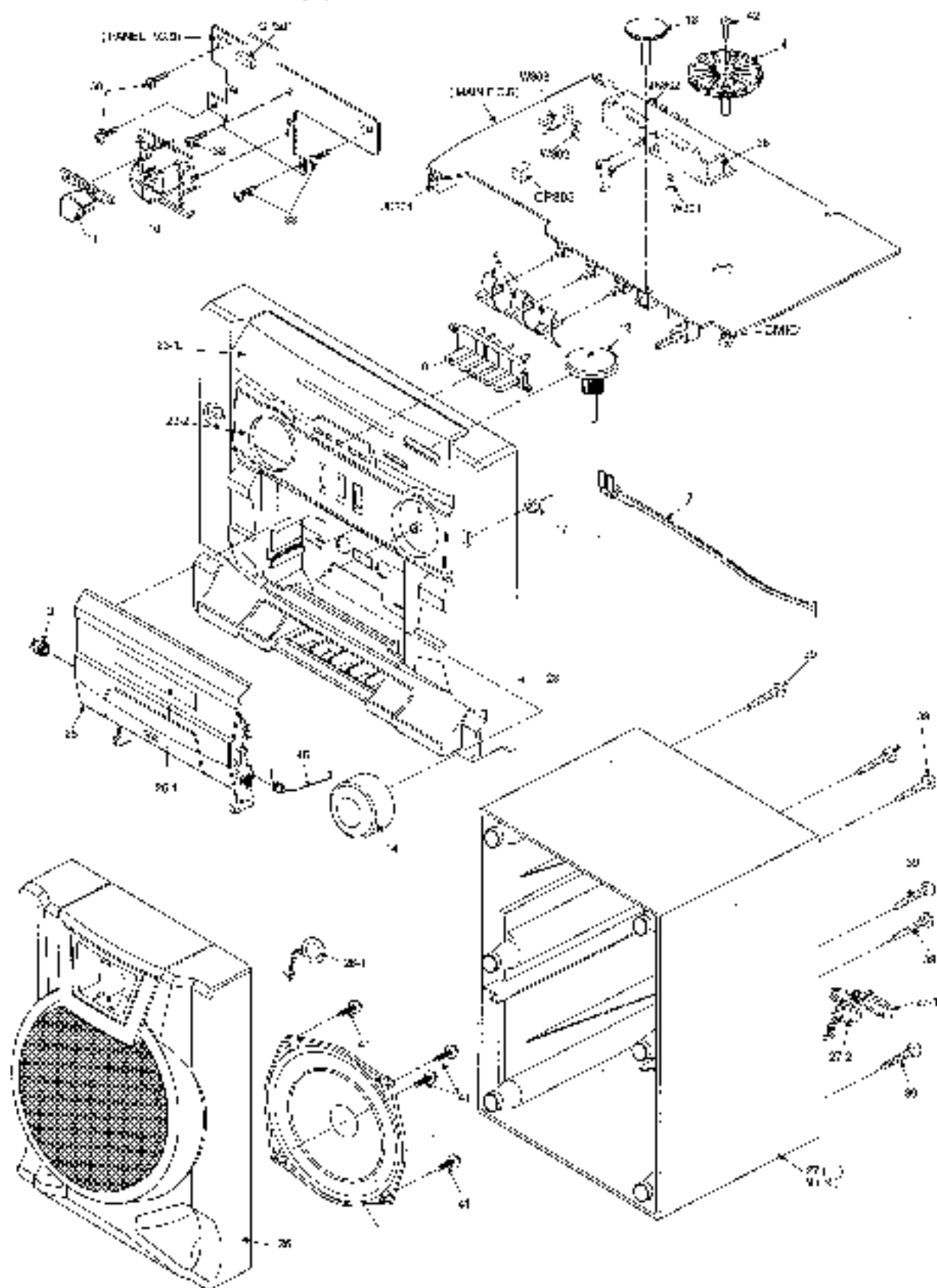


CALL ON  
RINK O. ELECTRIC S-SER  
AC VOLTAGE IN 115V 250V  
TOLCH T-15 500V

VOLTAGE  
SELECTOR

AC IN  
115V 127V  
250V 500V  
50/60Hz

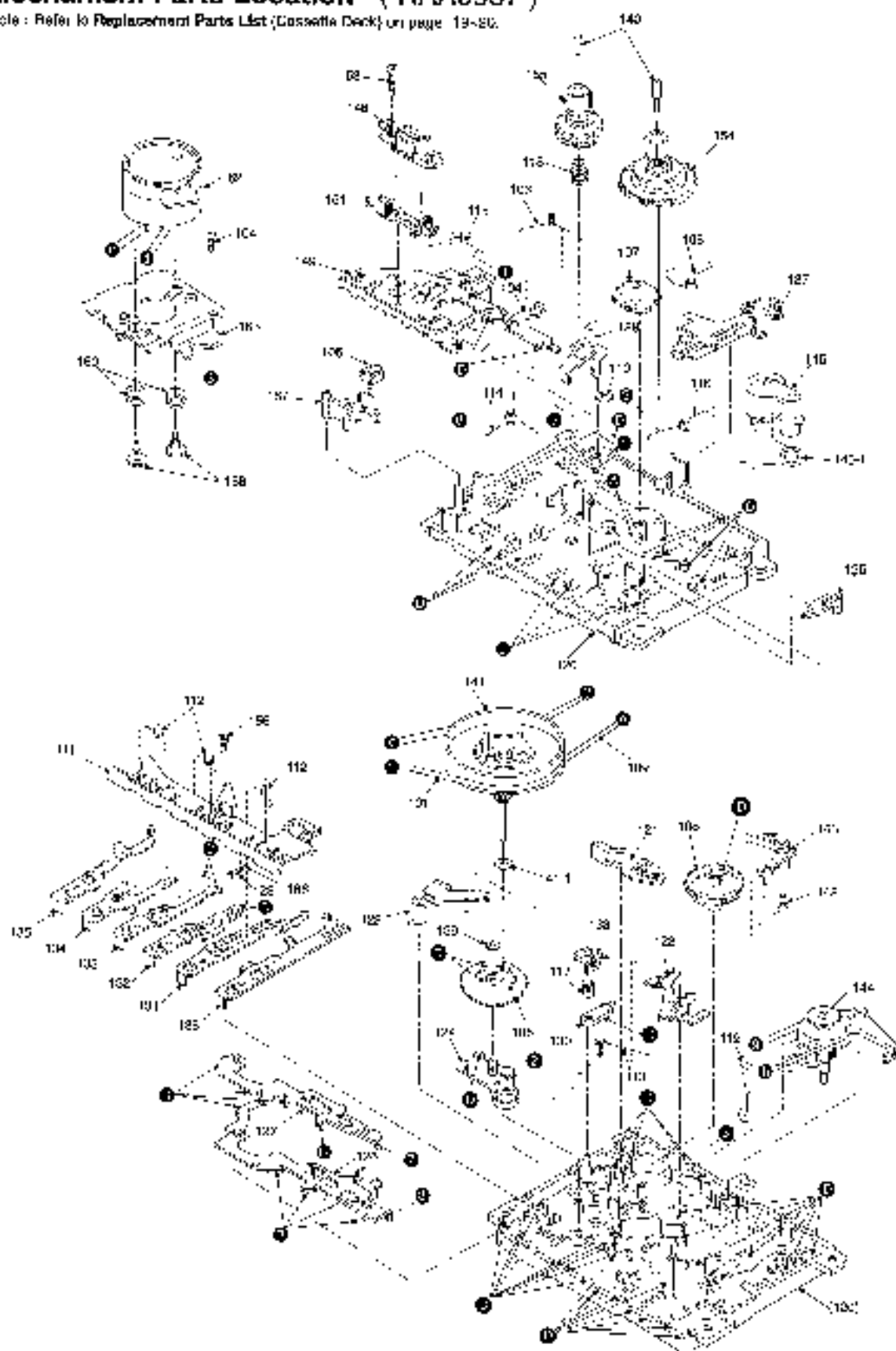
## ■ Cabinet Parts Location





# Mechanism Parts Location (RAA0937)

Note : Refer to Replacement Parts List (Cassette Deck) on page 19-20.





# Replacement Parts List

**Notes:** \* Important safety notes:

Components identified by  $\Delta$  mark have special characteristics important for safety.

Further note, special parts which have purposes of fire retardant (plastic), high-quantity sound (capacitors), low noise (resistors) etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

The  $\Delta$  mark denotes the standard parts.

\* (M) in Remarks column indicates parts that are supplied by MESA.

Part No.	Part No.	Part Name & Description	Remarks	Part No.	Part No.	Part Name & Description	Remarks
CABINET CHASSIS				11	RM0001	ALUM. BRACKET	(M)
1	RM0001	SPEAKER MOCER	(M)	12	RM0002	RECORD SPRING	(M)
2	RM0002	SELECTOR KNOB	(M)	13	RM0003	RECORDING LEVER	(M)
3	RM0003	CAPTION LEVER	(M)	14	RM0004	TRAMP SPRING	(M)
4	RM0004	WARKING KNOB	(M)	15	RM0005	TRAMP SPRING	(M)
5	RM0005	ADJUSTMENT	(M)	16	RM0006	TRAMP SPRING	(M)
6	RM0006	TAP HOLE MOUNT	(M)	17	RM0007	TRAMP SPRING	(M)
7	RM0007	TRAMP SPRING	(M)	18	RM0008	TRAMP SPRING	(M)
8	RM0008	TRAMP SPRING	(M)	19	RM0009	TRAMP SPRING	(M)
9	RM0009	TRAMP SPRING	(M)	20	RM0010	TRAMP SPRING	(M)
10	RM0010	TRAMP SPRING	(M)	21	RM0011	TRAMP SPRING	(M)
11	RM0011	TRAMP SPRING	(M)	22	RM0012	TRAMP SPRING	(M)
12	RM0012	TRAMP SPRING	(M)	23	RM0013	TRAMP SPRING	(M)
13	RM0013	TRAMP SPRING	(M)	24	RM0014	TRAMP SPRING	(M)
14	RM0014	TRAMP SPRING	(M)	25	RM0015	TRAMP SPRING	(M)
15	RM0015	TRAMP SPRING	(M)	26	RM0016	TRAMP SPRING	(M)
16	RM0016	TRAMP SPRING	(M)	27	RM0017	TRAMP SPRING	(M)
17	RM0017	TRAMP SPRING	(M)	28	RM0018	TRAMP SPRING	(M)
18	RM0018	TRAMP SPRING	(M)	29	RM0019	TRAMP SPRING	(M)
19	RM0019	TRAMP SPRING	(M)	30	RM0020	TRAMP SPRING	(M)
20	RM0020	TRAMP SPRING	(M)	31	RM0021	TRAMP SPRING	(M)
21	RM0021	TRAMP SPRING	(M)	32	RM0022	TRAMP SPRING	(M)
22	RM0022	TRAMP SPRING	(M)	33	RM0023	TRAMP SPRING	(M)
23	RM0023	TRAMP SPRING	(M)	34	RM0024	TRAMP SPRING	(M)
24	RM0024	TRAMP SPRING	(M)	35	RM0025	TRAMP SPRING	(M)
25	RM0025	TRAMP SPRING	(M)	36	RM0026	TRAMP SPRING	(M)
26	RM0026	TRAMP SPRING	(M)	37	RM0027	TRAMP SPRING	(M)
27	RM0027	TRAMP SPRING	(M)	38	RM0028	TRAMP SPRING	(M)
28	RM0028	TRAMP SPRING	(M)	39	RM0029	TRAMP SPRING	(M)
29	RM0029	TRAMP SPRING	(M)	40	RM0030	TRAMP SPRING	(M)
30	RM0030	TRAMP SPRING	(M)	41	RM0031	TRAMP SPRING	(M)
31	RM0031	TRAMP SPRING	(M)	42	RM0032	TRAMP SPRING	(M)
32	RM0032	TRAMP SPRING	(M)	43	RM0033	TRAMP SPRING	(M)
33	RM0033	TRAMP SPRING	(M)	44	RM0034	TRAMP SPRING	(M)
34	RM0034	TRAMP SPRING	(M)	45	RM0035	TRAMP SPRING	(M)
35	RM0035	TRAMP SPRING	(M)	46	RM0036	TRAMP SPRING	(M)
36	RM0036	TRAMP SPRING	(M)	47	RM0037	TRAMP SPRING	(M)
37	RM0037	TRAMP SPRING	(M)	48	RM0038	TRAMP SPRING	(M)
38	RM0038	TRAMP SPRING	(M)	49	RM0039	TRAMP SPRING	(M)
39	RM0039	TRAMP SPRING	(M)	50	RM0040	TRAMP SPRING	(M)
40	RM0040	TRAMP SPRING	(M)	51	RM0041	TRAMP SPRING	(M)
41	RM0041	TRAMP SPRING	(M)	52	RM0042	TRAMP SPRING	(M)
42	RM0042	TRAMP SPRING	(M)	53	RM0043	TRAMP SPRING	(M)
43	RM0043	TRAMP SPRING	(M)	54	RM0044	TRAMP SPRING	(M)
44	RM0044	TRAMP SPRING	(M)	55	RM0045	TRAMP SPRING	(M)
45	RM0045	TRAMP SPRING	(M)	56	RM0046	TRAMP SPRING	(M)
46	RM0046	TRAMP SPRING	(M)	57	RM0047	TRAMP SPRING	(M)
47	RM0047	TRAMP SPRING	(M)	58	RM0048	TRAMP SPRING	(M)
48	RM0048	TRAMP SPRING	(M)	59	RM0049	TRAMP SPRING	(M)
49	RM0049	TRAMP SPRING	(M)	60	RM0050	TRAMP SPRING	(M)
50	RM0050	TRAMP SPRING	(M)	61	RM0051	TRAMP SPRING	(M)
51	RM0051	TRAMP SPRING	(M)	62	RM0052	TRAMP SPRING	(M)
52	RM0052	TRAMP SPRING	(M)	63	RM0053	TRAMP SPRING	(M)
53	RM0053	TRAMP SPRING	(M)	64	RM0054	TRAMP SPRING	(M)
54	RM0054	TRAMP SPRING	(M)	65	RM0055	TRAMP SPRING	(M)
55	RM0055	TRAMP SPRING	(M)	66	RM0056	TRAMP SPRING	(M)
56	RM0056	TRAMP SPRING	(M)	67	RM0057	TRAMP SPRING	(M)
57	RM0057	TRAMP SPRING	(M)	68	RM0058	TRAMP SPRING	(M)
58	RM0058	TRAMP SPRING	(M)	69	RM0059	TRAMP SPRING	(M)
59	RM0059	TRAMP SPRING	(M)	70	RM0060	TRAMP SPRING	(M)
60	RM0060	TRAMP SPRING	(M)	71	RM0061	TRAMP SPRING	(M)
61	RM0061	TRAMP SPRING	(M)	72	RM0062	TRAMP SPRING	(M)
62	RM0062	TRAMP SPRING	(M)	73	RM0063	TRAMP SPRING	(M)
63	RM0063	TRAMP SPRING	(M)	74	RM0064	TRAMP SPRING	(M)
64	RM0064	TRAMP SPRING	(M)	75	RM0065	TRAMP SPRING	(M)
65	RM0065	TRAMP SPRING	(M)	76	RM0066	TRAMP SPRING	(M)
66	RM0066	TRAMP SPRING	(M)	77	RM0067	TRAMP SPRING	(M)
67	RM0067	TRAMP SPRING	(M)	78	RM0068	TRAMP SPRING	(M)
68	RM0068	TRAMP SPRING	(M)	79	RM0069	TRAMP SPRING	(M)
69	RM0069	TRAMP SPRING	(M)	80	RM0070	TRAMP SPRING	(M)
70	RM0070	TRAMP SPRING	(M)	81	RM0071	TRAMP SPRING	(M)
71	RM0071	TRAMP SPRING	(M)	82	RM0072	TRAMP SPRING	(M)
72	RM0072	TRAMP SPRING	(M)	83	RM0073	TRAMP SPRING	(M)
73	RM0073	TRAMP SPRING	(M)	84	RM0074	TRAMP SPRING	(M)
74	RM0074	TRAMP SPRING	(M)	85	RM0075	TRAMP SPRING	(M)
75	RM0075	TRAMP SPRING	(M)	86	RM0076	TRAMP SPRING	(M)
76	RM0076	TRAMP SPRING	(M)	87	RM0077	TRAMP SPRING	(M)
77	RM0077	TRAMP SPRING	(M)	88	RM0078	TRAMP SPRING	(M)
78	RM0078	TRAMP SPRING	(M)	89	RM0079	TRAMP SPRING	(M)
79	RM0079	TRAMP SPRING	(M)	90	RM0080	TRAMP SPRING	(M)
80	RM0080	TRAMP SPRING	(M)	91	RM0081	TRAMP SPRING	(M)
81	RM0081	TRAMP SPRING	(M)	92	RM0082	TRAMP SPRING	(M)
82	RM0082	TRAMP SPRING	(M)	93	RM0083	TRAMP SPRING	(M)
83	RM0083	TRAMP SPRING	(M)	94	RM0084	TRAMP SPRING	(M)
84	RM0084	TRAMP SPRING	(M)	95	RM0085	TRAMP SPRING	(M)
85	RM0085	TRAMP SPRING	(M)	96	RM0086	TRAMP SPRING	(M)
86	RM0086	TRAMP SPRING	(M)	97	RM0087	TRAMP SPRING	(M)
87	RM0087	TRAMP SPRING	(M)	98	RM0088	TRAMP SPRING	(M)
88	RM0088	TRAMP SPRING	(M)	99	RM0089	TRAMP SPRING	(M)
89	RM0089	TRAMP SPRING	(M)	100	RM0090	TRAMP SPRING	(M)
90	RM0090	TRAMP SPRING	(M)	101	RM0091	TRAMP SPRING	(M)
91	RM0091	TRAMP SPRING	(M)	102	RM0092	TRAMP SPRING	(M)
92	RM0092	TRAMP SPRING	(M)	103	RM0093	TRAMP SPRING	(M)
93	RM0093	TRAMP SPRING	(M)	104	RM0094	TRAMP SPRING	(M)
94	RM0094	TRAMP SPRING	(M)	105	RM0095	TRAMP SPRING	(M)
95	RM0095	TRAMP SPRING	(M)	106	RM0096	TRAMP SPRING	(M)
96	RM0096	TRAMP SPRING	(M)	107	RM0097	TRAMP SPRING	(M)
97	RM0097	TRAMP SPRING	(M)	108	RM0098	TRAMP SPRING	(M)
98	RM0098	TRAMP SPRING	(M)	109	RM0099	TRAMP SPRING	(M)
99	RM0099	TRAMP SPRING	(M)	110	RM0100	TRAMP SPRING	(M)
100	RM0100	TRAMP SPRING	(M)	111	RM0101	TRAMP SPRING	(M)
101	RM0101	TRAMP SPRING	(M)	112	RM0102	TRAMP SPRING	(M)
102	RM0102	TRAMP SPRING	(M)	113	RM0103	TRAMP SPRING	(M)
103	RM0103	TRAMP SPRING	(M)	114	RM0104	TRAMP SPRING	(M)
104	RM0104	TRAMP SPRING	(M)	115	RM0105	TRAMP SPRING	(M)
105	RM0105	TRAMP SPRING	(M)	116	RM0106	TRAMP SPRING	(M)
106	RM0106	TRAMP SPRING	(M)	117	RM0107	TRAMP SPRING	(M)
107	RM0107	TRAMP SPRING	(M)	118	RM0108	TRAMP SPRING	(M)
108	RM0108	TRAMP SPRING	(M)	119	RM0109	TRAMP SPRING	(M)
109	RM0109	TRAMP SPRING	(M)	120	RM0110	TRAMP SPRING	(M)
110	RM0110	TRAMP SPRING	(M)	121	RM0111	TRAMP SPRING	(M)
111	RM0111	TRAMP SPRING	(M)	122	RM0112	TRAMP SPRING	(M)
112	RM0112	TRAMP SPRING	(M)	123	RM0113	TRAMP SPRING	(M)
113	RM0113	TRAMP SPRING	(M)	124	RM0114	TRAMP SPRING	(M)
114	RM0114	TRAMP SPRING	(M)	125	RM0115	TRAMP SPRING	(M)
115	RM0115	TRAMP SPRING	(M)	126	RM0116	TRAMP SPRING	(M)
116	RM0116	TRAMP SPRING	(M)	127	RM0117	TRAMP SPRING	(M)
117	RM0117	TRAMP SPRING	(M)	128	RM0118	TRAMP SPRING	(M)
118	RM0118	TRAMP SPRING	(M)	129	RM0119	TRAMP SPRING	(M)
119	RM0119	TRAMP SPRING	(M)	130	RM0120	TRAMP SPRING	(M)
120	RM0120	TRAMP SPRING	(M)	131	RM0121	TRAMP SPRING	(M)
121	RM0121	TRAMP SPRING	(M)	132	RM0122	TRAMP SPRING	(M)
122	RM0122	TRAMP SPRING	(M)	133	RM0123	TRAMP SPRING	(M)
123	RM0123	TRAMP SPRING	(M)	134	RM0124	TRAMP SPRING	(M)
124	RM0124	TRAMP SPRING	(M)	135	RM0125	TRAMP SPRING	(M)
125	RM0125	TRAMP SPRING	(M)	136	RM0126	TRAMP SPRING	(M)
126	RM0126	TRAMP SPRING	(M)	137	RM0127	TRAMP SPRING	(M)
127	RM0127	TRAMP SPRING	(M)	138	RM0128	TRAMP SPRING	(M)
128	RM0128	TRAMP SPRING	(M)	139	RM0129	TRAMP SPRING	(M)
129	RM0129	TRAMP SPRING	(M)	140	RM0130	TRAMP SPRING	(M)
130	RM0130	TRAMP SPRING	(M)	141	RM0131	TRAMP SPRING	(M)
131	RM0131	TRAMP SPRING	(M)	142	RM0132	TRAMP SPRING	(M)
132	RM0132	TRAMP SPRING	(M)	143	RM0133	TRAMP SPRING	(M)
133	RM0133	TRAMP SPRING	(M)	144	RM0134	TRAMP SPRING	(M)
134	RM0134	TRAMP SPRING	(M)	145	RM0135	TRAMP SPRING	(M)
135	RM0135	TRAMP SPRING	(M)	146	RM0136	TRAMP SPRING	(M)
136	RM0136	TRAMP SPRING	(M)	147	RM0137	TRAMP SPRING	(M)
137	RM0137	TRAMP SPRING	(M)	148	RM0138	TRAMP SPRING	(M)
138	RM0138	TRAMP SPRING	(M)	149	RM0139	TRAMP SPRING	(M)
139	RM0139	TRAMP SPRING	(M)	150	RM0140	TRAMP SPRING	(M)
140	RM0140	TRAMP SPRING	(M)	151	RM0141	TRAMP SPRING	(M)
141	RM0141	TRAMP SPRING	(M)	152	RM0142	TRAMP SPRING	(M)
142	RM0142	TRAMP SPRING	(M)	153	RM0143	TRAMP SPRING	(M)
143	RM0143	TRAMP SPRING	(M)	154	RM0144	TRAMP SPRING	(M)
144	RM0144	TRAMP SPRING	(M)	155	RM0145	TRAMP SPRING	(M)
145	RM0145	TRAMP SPRING	(M)	156	RM0146	TRAMP SPRING	(M)
146	RM0146	TRAMP SPRING	(M)	157	RM0147	TRAMP SPRING	(M)
147	RM0147	TRAMP SPRING	(M)	158	RM0148	TRAMP SPRING	(M)
148	RM0148	TRAMP SPRING	(M)	159	RM0149	TRAMP SPRING	(M)
149	RM0149	TRAMP SPRING	(M)	160	RM0150	TRAMP SPRING	(M)
150	RM0150	TRAMP SPRING	(M)	161	RM0151	TRAMP SPRING	(M)
151	RM0151	TRAMP SPRING	(M)	162	RM0152	TRAMP SPRING	(M)
152	RM0152	TRAMP SPRING	(M)	163	RM0153	TRAMP SPRING	(M)
153	RM0153	TRAMP SPRING	(M)	164	RM0154	TRAMP SPRING	(M)
154	RM0154	TRAMP SPRING	(M)	165	RM0155	TRAMP SPRING	(M)
155	RM0155	TRAMP SPRING	(M)	166	RM0156	TRAMP SPRING	(M)
156	RM0156	TRAMP SPRING	(M)	167	RM0157	TRAMP SPRING	(M)
157	RM0157	TRAMP SPRING	(M)	168	RM0158	TRAMP SPRING	(M)
158	RM0158	TRAMP SPRING	(M)	169	RM0159	TRAMP SPRING	(M)
159	RM0159	TRAMP SPRING	(M)	170	RM0160	TRAMP SPRING	(M)
160	RM0160	TRAMP SPRING	(M)	171	RM0161	TRAMP SPRING	(M)
161	RM0161	TRAMP SPRING	(M)	172	RM0162	TRAMP SPRING	(M)
162	RM0162	TRAMP SPRING	(M)	173	RM0163	TRAMP SPRING	(M)
163	RM0163	TRAMP SPRING	(M)	174	RM0164	TRAMP SPRING	(M)
164	RM0164	TRAMP SPRING	(M)	175	RM0165	TRAMP SPRING	(M)
165	RM0165	TRAMP SPRING	(M)	176	RM0166	TRAMP SPRING	(M)
166	RM0166	TRAMP SPRING	(M)	177	RM0167	TRAMP SPRING	(M)
167	RM0167	TRAMP SPRING	(M)	178	RM0168	TRAMP SPRING	(M)</

Part No.	Part No.	Part Name & Description	Quantity	Part No.	Part No.	Part Name & Description	Quantity	Part No.	Part No.	Part Name & Description	Quantity
INTEGRATED CIRCUITS				SM THINGS				SEMICONDUCTORS			
K1	IC1A	IC 1A	1	3821	3821	SM THINGS	1	3821	3821	SM THINGS	1
K2	IC1B	IC 1B	1	3822	3822	SM THINGS	1	3822	3822	SM THINGS	1
IC2A	IC2A	IC 2A	1	3823	3823	SM THINGS	1	3823	3823	SM THINGS	1
IC2B	IC2B	IC 2B	1	3824	3824	SM THINGS	1	3824	3824	SM THINGS	1
TRANSISTORS				SM THINGS				SM THINGS			
Q1	Q1	Q1	1	3825	3825	SM THINGS	1	3825	3825	SM THINGS	1
Q2	Q2	Q2	1	3826	3826	SM THINGS	1	3826	3826	SM THINGS	1
Q3	Q3	Q3	1	3827	3827	SM THINGS	1	3827	3827	SM THINGS	1
Q4	Q4	Q4	1	3828	3828	SM THINGS	1	3828	3828	SM THINGS	1
Q5	Q5	Q5	1	3829	3829	SM THINGS	1	3829	3829	SM THINGS	1
Q6	Q6	Q6	1	3830	3830	SM THINGS	1	3830	3830	SM THINGS	1
Q7	Q7	Q7	1	3831	3831	SM THINGS	1	3831	3831	SM THINGS	1
Q8	Q8	Q8	1	3832	3832	SM THINGS	1	3832	3832	SM THINGS	1
Q9	Q9	Q9	1	3833	3833	SM THINGS	1	3833	3833	SM THINGS	1
Q10	Q10	Q10	1	3834	3834	SM THINGS	1	3834	3834	SM THINGS	1
Q11	Q11	Q11	1	3835	3835	SM THINGS	1	3835	3835	SM THINGS	1
Q12	Q12	Q12	1	3836	3836	SM THINGS	1	3836	3836	SM THINGS	1
Q13	Q13	Q13	1	3837	3837	SM THINGS	1	3837	3837	SM THINGS	1
Q14	Q14	Q14	1	3838	3838	SM THINGS	1	3838	3838	SM THINGS	1
Q15	Q15	Q15	1	3839	3839	SM THINGS	1	3839	3839	SM THINGS	1
Q16	Q16	Q16	1	3840	3840	SM THINGS	1	3840	3840	SM THINGS	1
Q17	Q17	Q17	1	3841	3841	SM THINGS	1	3841	3841	SM THINGS	1
Q18	Q18	Q18	1	3842	3842	SM THINGS	1	3842	3842	SM THINGS	1
Q19	Q19	Q19	1	3843	3843	SM THINGS	1	3843	3843	SM THINGS	1
Q20	Q20	Q20	1	3844	3844	SM THINGS	1	3844	3844	SM THINGS	1
Q21	Q21	Q21	1	3845	3845	SM THINGS	1	3845	3845	SM THINGS	1
Q22	Q22	Q22	1	3846	3846	SM THINGS	1	3846	3846	SM THINGS	1
Q23	Q23	Q23	1	3847	3847	SM THINGS	1	3847	3847	SM THINGS	1
Q24	Q24	Q24	1	3848	3848	SM THINGS	1	3848	3848	SM THINGS	1
Q25	Q25	Q25	1	3849	3849	SM THINGS	1	3849	3849	SM THINGS	1
Q26	Q26	Q26	1	3850	3850	SM THINGS	1	3850	3850	SM THINGS	1
Q27	Q27	Q27	1	3851	3851	SM THINGS	1	3851	3851	SM THINGS	1
Q28	Q28	Q28	1	3852	3852	SM THINGS	1	3852	3852	SM THINGS	1
Q29	Q29	Q29	1	3853	3853	SM THINGS	1	3853	3853	SM THINGS	1
Q30	Q30	Q30	1	3854	3854	SM THINGS	1	3854	3854	SM THINGS	1
Q31	Q31	Q31	1	3855	3855	SM THINGS	1	3855	3855	SM THINGS	1
Q32	Q32	Q32	1	3856	3856	SM THINGS	1	3856	3856	SM THINGS	1
Q33	Q33	Q33	1	3857	3857	SM THINGS	1	3857	3857	SM THINGS	1
Q34	Q34	Q34	1	3858	3858	SM THINGS	1	3858	3858	SM THINGS	1
Q35	Q35	Q35	1	3859	3859	SM THINGS	1	3859	3859	SM THINGS	1
Q36	Q36	Q36	1	3860	3860	SM THINGS	1	3860	3860	SM THINGS	1
Q37	Q37	Q37	1	3861	3861	SM THINGS	1	3861	3861	SM THINGS	1
Q38	Q38	Q38	1	3862	3862	SM THINGS	1	3862	3862	SM THINGS	1
Q39	Q39	Q39	1	3863	3863	SM THINGS	1	3863	3863	SM THINGS	1
Q40	Q40	Q40	1	3864	3864	SM THINGS	1	3864	3864	SM THINGS	1
Q41	Q41	Q41	1	3865	3865	SM THINGS	1	3865	3865	SM THINGS	1
Q42	Q42	Q42	1	3866	3866	SM THINGS	1	3866	3866	SM THINGS	1
Q43	Q43	Q43	1	3867	3867	SM THINGS	1	3867	3867	SM THINGS	1
Q44	Q44	Q44	1	3868	3868	SM THINGS	1	3868	3868	SM THINGS	1
Q45	Q45	Q45	1	3869	3869	SM THINGS	1	3869	3869	SM THINGS	1
Q46	Q46	Q46	1	3870	3870	SM THINGS	1	3870	3870	SM THINGS	1
Q47	Q47	Q47	1	3871	3871	SM THINGS	1	3871	3871	SM THINGS	1
Q48	Q48	Q48	1	3872	3872	SM THINGS	1	3872	3872	SM THINGS	1
Q49	Q49	Q49	1	3873	3873	SM THINGS	1	3873	3873	SM THINGS	1
Q50	Q50	Q50	1	3874	3874	SM THINGS	1	3874	3874	SM THINGS	1
Q51	Q51	Q51	1	3875	3875	SM THINGS	1	3875	3875	SM THINGS	1
Q52	Q52	Q52	1	3876	3876	SM THINGS	1	3876	3876	SM THINGS	1
Q53	Q53	Q53	1	3877	3877	SM THINGS	1	3877	3877	SM THINGS	1
Q54	Q54	Q54	1	3878	3878	SM THINGS	1	3878	3878	SM THINGS	1
Q55	Q55	Q55	1	3879	3879	SM THINGS	1	3879	3879	SM THINGS	1
Q56	Q56	Q56	1	3880	3880	SM THINGS	1	3880	3880	SM THINGS	1
Q57	Q57	Q57	1	3881	3881	SM THINGS	1	3881	3881	SM THINGS	1
Q58	Q58	Q58	1	3882	3882	SM THINGS	1	3882	3882	SM THINGS	1
Q59	Q59	Q59	1	3883	3883	SM THINGS	1	3883	3883	SM THINGS	1
Q60	Q60	Q60	1	3884	3884	SM THINGS	1	3884	3884	SM THINGS	1
Q61	Q61	Q61	1	3885	3885	SM THINGS	1	3885	3885	SM THINGS	1
Q62	Q62	Q62	1	3886	3886	SM THINGS	1	3886	3886	SM THINGS	1
Q63	Q63	Q63	1	3887	3887	SM THINGS	1	3887	3887	SM THINGS	1
Q64	Q64	Q64	1	3888	3888	SM THINGS	1	3888	3888	SM THINGS	1
Q65	Q65	Q65	1	3889	3889	SM THINGS	1	3889	3889	SM THINGS	1
Q66	Q66	Q66	1	3890	3890	SM THINGS	1	3890	3890	SM THINGS	1
Q67	Q67	Q67	1	3891	3891	SM THINGS	1	3891	3891	SM THINGS	1
Q68	Q68	Q68	1	3892	3892	SM THINGS	1	3892	3892	SM THINGS	1
Q69	Q69	Q69	1	3893	3893	SM THINGS	1	3893	3893	SM THINGS	1
Q70	Q70	Q70	1	3894	3894	SM THINGS	1	3894	3894	SM THINGS	1
Q71	Q71	Q71	1	3895	3895	SM THINGS	1	3895	3895	SM THINGS	1
Q72	Q72	Q72	1	3896	3896	SM THINGS	1	3896	3896	SM THINGS	1
Q73	Q73	Q73	1	3897	3897	SM THINGS	1	3897	3897	SM THINGS	1
Q74	Q74	Q74	1	3898	3898	SM THINGS	1	3898	3898	SM THINGS	1
Q75	Q75	Q75	1	3899	3899	SM THINGS	1	3899	3899	SM THINGS	1
Q76	Q76	Q76	1	3900	3900	SM THINGS	1	3900	3900	SM THINGS	1
Q77	Q77	Q77	1	3901	3901	SM THINGS	1	3901	3901	SM THINGS	1
Q78	Q78	Q78	1	3902	3902	SM THINGS	1	3902	3902	SM THINGS	1
Q79	Q79	Q79	1	3903	3903	SM THINGS	1	3903	3903	SM THINGS	1
Q80	Q80	Q80	1	3904	3904	SM THINGS	1	3904	3904	SM THINGS	1
Q81	Q81	Q81	1	3905	3905	SM THINGS	1	3905	3905	SM THINGS	1
Q82	Q82	Q82	1	3906	3906	SM THINGS	1	3906	3906	SM THINGS	1
Q83	Q83	Q83	1	3907	3907	SM THINGS	1	3907	3907	SM THINGS	1
Q84	Q84	Q84	1	3908	3908	SM THINGS	1	3908	3908	SM THINGS	1
Q85	Q85	Q85	1	3909	3909	SM THINGS	1	3909	3909	SM THINGS	1
Q86	Q86	Q86	1	3910	3910	SM THINGS	1	3910	3910	SM THINGS	1
Q87	Q87	Q87	1	3911	3911	SM THINGS	1	3911	3911	SM THINGS	1
Q88	Q88	Q88	1	3912	3912	SM THINGS	1	3912	3912	SM THINGS	1
Q89	Q89	Q89	1	3913	3913	SM THINGS	1	3913	3913	SM THINGS	1
Q90	Q90	Q90	1	3914	3914	SM THINGS	1	3914	3914	SM THINGS	1
Q91	Q91	Q91	1	3915	3915	SM THINGS	1	3915	3915	SM THINGS	1
Q92	Q92	Q92	1	3916	3916	SM THINGS	1	3916	3916	SM THINGS	1
Q93	Q93	Q93	1	3917	3917	SM THINGS	1	3917	3917	SM THINGS	1
Q94	Q94	Q94	1	3918	3918	SM THINGS	1	3918	3918	SM THINGS	1
Q95	Q95	Q95	1	3919	3919	SM THINGS	1	3919	3919	SM THINGS	1
Q96	Q96	Q96	1	3920	3920	SM THINGS	1	3920	3920	SM THINGS	1
Q97	Q97	Q97	1	3921	3921	SM THINGS	1	3921	3921	SM THINGS	1
Q98	Q98	Q98	1	3922	3922	SM THINGS	1	3922	3922	SM THINGS	1
Q99	Q99	Q99	1	3923	3923	SM THINGS	1	3923	3923	SM THINGS	1
Q100	Q100	Q100	1	3924	3924	SM THINGS	1	3924	3924	SM THINGS	1
Q101	Q101	Q101	1	3925	3925	SM THINGS	1	3925	3925	SM THINGS	1
Q102	Q102	Q102	1	3926	3926	SM THINGS	1	3926	3926	SM THINGS	1
Q103	Q103	Q103	1	3927	3927	SM THINGS	1	3927	3927	SM THINGS	1
Q104	Q104	Q104	1	3928	3928	SM THINGS	1	3928	3928	SM THINGS	1
Q105	Q105	Q105	1	3929	3929	SM THINGS	1	3929	3929	SM THINGS	1
Q106	Q106	Q106	1	3930	3930	SM THINGS	1	3930	3930	SM THINGS	1
Q107	Q107	Q107	1	3931	3931	SM THINGS	1	3931	3931	SM THINGS	1
Q108	Q108	Q108	1	3932	3932	SM THINGS	1	3932	3932	SM THINGS	1
Q109	Q109	Q109	1	3933	3933	SM THINGS	1	3933	3933	SM THINGS	1
Q110	Q110	Q110	1	3934	3934	SM THINGS	1	3934	3934	SM THINGS	1
Q111	Q111	Q111	1	3935	3935	SM THINGS	1	3935	3935	SM THINGS	1
Q112	Q112	Q112	1	3936	3936	SM THINGS	1	3936	3936	SM THINGS	1
Q113	Q113	Q113	1	3937	3937	SM THINGS	1	3937	3937	SM THINGS	1
Q114	Q114	Q114	1	3938	3938	SM THINGS	1	3938	3938	SM THINGS	1
Q115	Q115	Q115	1	3939	3939	SM THINGS	1	3939	3939	SM THINGS	1
Q116	Q116	Q116	1	3940	3940	SM THINGS	1	3940	3940	SM THINGS	1
Q117	Q117	Q117	1	3941	3941	SM THINGS	1	3941	3941	SM THINGS	1
Q118	Q118	Q118	1	3942	3942	SM THINGS	1	3942	3942	SM THINGS	1
Q119	Q119	Q119	1	3943	3943	SM THINGS	1	3943	3943	SM THINGS	1
Q120	Q120	Q120	1	3944	3944	SM THINGS	1	3944	3944	SM THINGS	1
Q121	Q121										

# Resistors & Capacitors

Notes: 1. Impedance safety resistor.

Components identified by  mark have special characteristics important for safety.

Furthermore, special parts which have purposes or functions that (resistor), electrolytic capacitor, or other (resistor), are used in the replacement of components. Be sure to use only those special parts shown in the parts list.

Capacitor values are in microfarad (μF) unless specified otherwise. P=Picofarads (pF), F=Farads (F).

Resistor values are in ohms unless specified otherwise. 1K=1,000(Ohms), 1M=1,000,000(Ohms).

Part No.	Part Name	Value and Tolerance	Part No.	Part Name	Value and Tolerance	Part No.	Part Name	Value and Tolerance	Part No.	Part Name	Value and Tolerance
RESISTORS											
4	LR02TJ004T	100K 140W [W]	207	ER02TJ027T	27K 140W [W]	0001	BC02TJ0001	22K 140W [W]	C07	BC02TJ0007	100pF 140W [W]
5	LR02TJ005T	10K 140W [W]	208	ER02TJ028T	10K 140W [W]	0002	BC02TJ0002	75K 140W [W]	C08	BC02TJ0008	400pF 140W [W]
6	LR02TJ006T	10K 140W [W]	209	ER02TJ029T	10K 140W [W]	0003	BC02TJ0003	30K 140W [W]	C09	BC02TJ0009	100pF 140W [W]
7	ER02TJ007T	10K 140W [W]	210	ER02TJ030T	10K 140W [W]	0004	BC02TJ0004	22K 140W [W]	C10	BC02TJ0010	100pF 140W [W]
8	ER02TJ008T	10K 140W [W]	211	ER02TJ031T	10K 140W [W]	0005	BC02TJ0005	22K 140W [W]	C11	BC02TJ0011	100pF 140W [W]
9	ER02TJ009T	10K 140W [W]	212	ER02TJ032T	10K 140W [W]	0006	BC02TJ0006	22K 140W [W]	C12	BC02TJ0012	100pF 140W [W]
10	ER02TJ010T	10K 140W [W]	213	ER02TJ033T	10K 140W [W]	0007	BC02TJ0007	22K 140W [W]	C13	BC02TJ0013	100pF 140W [W]
11	ER02TJ011T	10K 140W [W]	214	ER02TJ034T	10K 140W [W]	0008	BC02TJ0008	22K 140W [W]	C14	BC02TJ0014	100pF 140W [W]
12	ER02TJ012T	10K 140W [W]	215	ER02TJ035T	10K 140W [W]	0009	BC02TJ0009	22K 140W [W]	C15	BC02TJ0015	100pF 140W [W]
13	ER02TJ013T	10K 140W [W]	216	ER02TJ036T	10K 140W [W]	0010	BC02TJ0010	22K 140W [W]	C16	BC02TJ0016	100pF 140W [W]
14	ER02TJ014T	10K 140W [W]	217	ER02TJ037T	10K 140W [W]	0011	BC02TJ0011	22K 140W [W]	C17	BC02TJ0017	100pF 140W [W]
15	ER02TJ015T	10K 140W [W]	218	ER02TJ038T	10K 140W [W]	0012	BC02TJ0012	22K 140W [W]	C18	BC02TJ0018	100pF 140W [W]
16	ER02TJ016T	10K 140W [W]	219	ER02TJ039T	10K 140W [W]	0013	BC02TJ0013	22K 140W [W]	C19	BC02TJ0019	100pF 140W [W]
17	ER02TJ017T	10K 140W [W]	220	ER02TJ040T	10K 140W [W]	0014	BC02TJ0014	22K 140W [W]	C20	BC02TJ0020	100pF 140W [W]
18	ER02TJ018T	10K 140W [W]	221	ER02TJ041T	10K 140W [W]	0015	BC02TJ0015	22K 140W [W]	C21	BC02TJ0021	100pF 140W [W]
19	ER02TJ019T	10K 140W [W]	222	ER02TJ042T	10K 140W [W]	0016	BC02TJ0016	22K 140W [W]	C22	BC02TJ0022	100pF 140W [W]
20	ER02TJ020T	10K 140W [W]	223	ER02TJ043T	10K 140W [W]	0017	BC02TJ0017	22K 140W [W]	C23	BC02TJ0023	100pF 140W [W]
21	ER02TJ021T	10K 140W [W]	224	ER02TJ044T	10K 140W [W]	0018	BC02TJ0018	22K 140W [W]	C24	BC02TJ0024	100pF 140W [W]
22	ER02TJ022T	10K 140W [W]	225	ER02TJ045T	10K 140W [W]	0019	BC02TJ0019	22K 140W [W]	C25	BC02TJ0025	100pF 140W [W]
23	ER02TJ023T	10K 140W [W]	226	ER02TJ046T	10K 140W [W]	0020	BC02TJ0020	22K 140W [W]	C26	BC02TJ0026	100pF 140W [W]
24	ER02TJ024T	10K 140W [W]	227	ER02TJ047T	10K 140W [W]	0021	BC02TJ0021	22K 140W [W]	C27	BC02TJ0027	100pF 140W [W]
25	ER02TJ025T	10K 140W [W]	228	ER02TJ048T	10K 140W [W]	0022	BC02TJ0022	22K 140W [W]	C28	BC02TJ0028	100pF 140W [W]
26	ER02TJ026T	10K 140W [W]	229	ER02TJ049T	10K 140W [W]	0023	BC02TJ0023	22K 140W [W]	C29	BC02TJ0029	100pF 140W [W]
27	ER02TJ027T	10K 140W [W]	230	ER02TJ050T	10K 140W [W]	0024	BC02TJ0024	22K 140W [W]	C30	BC02TJ0030	100pF 140W [W]
28	ER02TJ028T	10K 140W [W]	231	ER02TJ051T	10K 140W [W]	0025	BC02TJ0025	22K 140W [W]	C31	BC02TJ0031	100pF 140W [W]
29	ER02TJ029T	10K 140W [W]	232	ER02TJ052T	10K 140W [W]	0026	BC02TJ0026	22K 140W [W]	C32	BC02TJ0032	100pF 140W [W]
30	ER02TJ030T	10K 140W [W]	233	ER02TJ053T	10K 140W [W]	0027	BC02TJ0027	22K 140W [W]	C33	BC02TJ0033	100pF 140W [W]
31	ER02TJ031T	10K 140W [W]	234	ER02TJ054T	10K 140W [W]	0028	BC02TJ0028	22K 140W [W]	C34	BC02TJ0034	100pF 140W [W]
32	ER02TJ032T	10K 140W [W]	235	ER02TJ055T	10K 140W [W]	0029	BC02TJ0029	22K 140W [W]	C35	BC02TJ0035	100pF 140W [W]
33	ER02TJ033T	10K 140W [W]	236	ER02TJ056T	10K 140W [W]	0030	BC02TJ0030	22K 140W [W]	C36	BC02TJ0036	100pF 140W [W]
34	ER02TJ034T	10K 140W [W]	237	ER02TJ057T	10K 140W [W]	0031	BC02TJ0031	22K 140W [W]	C37	BC02TJ0037	100pF 140W [W]
35	ER02TJ035T	10K 140W [W]	238	ER02TJ058T	10K 140W [W]	0032	BC02TJ0032	22K 140W [W]	C38	BC02TJ0038	100pF 140W [W]
36	ER02TJ036T	10K 140W [W]	239	ER02TJ059T	10K 140W [W]	0033	BC02TJ0033	22K 140W [W]	C39	BC02TJ0039	100pF 140W [W]
37	ER02TJ037T	10K 140W [W]	240	ER02TJ060T	10K 140W [W]	0034	BC02TJ0034	22K 140W [W]	C40	BC02TJ0040	100pF 140W [W]
38	ER02TJ038T	10K 140W [W]	241	ER02TJ061T	10K 140W [W]	0035	BC02TJ0035	22K 140W [W]	C41	BC02TJ0041	100pF 140W [W]
39	ER02TJ039T	10K 140W [W]	242	ER02TJ062T	10K 140W [W]	0036	BC02TJ0036	22K 140W [W]	C42	BC02TJ0042	100pF 140W [W]
40	ER02TJ040T	10K 140W [W]	243	ER02TJ063T	10K 140W [W]	0037	BC02TJ0037	22K 140W [W]	C43	BC02TJ0043	100pF 140W [W]
41	ER02TJ041T	10K 140W [W]	244	ER02TJ064T	10K 140W [W]	0038	BC02TJ0038	22K 140W [W]	C44	BC02TJ0044	100pF 140W [W]
42	ER02TJ042T	10K 140W [W]	245	ER02TJ065T	10K 140W [W]	0039	BC02TJ0039	22K 140W [W]	C45	BC02TJ0045	100pF 140W [W]
43	ER02TJ043T	10K 140W [W]	246	ER02TJ066T	10K 140W [W]	0040	BC02TJ0040	22K 140W [W]	C46	BC02TJ0046	100pF 140W [W]
44	ER02TJ044T	10K 140W [W]	247	ER02TJ067T	10K 140W [W]	0041	BC02TJ0041	22K 140W [W]	C47	BC02TJ0047	100pF 140W [W]
45	ER02TJ045T	10K 140W [W]	248	ER02TJ068T	10K 140W [W]	0042	BC02TJ0042	22K 140W [W]	C48	BC02TJ0048	100pF 140W [W]
46	ER02TJ046T	10K 140W [W]	249	ER02TJ069T	10K 140W [W]	0043	BC02TJ0043	22K 140W [W]	C49	BC02TJ0049	100pF 140W [W]
47	ER02TJ047T	10K 140W [W]	250	ER02TJ070T	10K 140W [W]	0044	BC02TJ0044	22K 140W [W]	C50	BC02TJ0050	100pF 140W [W]
48	ER02TJ048T	10K 140W [W]	251	ER02TJ071T	10K 140W [W]	0045	BC02TJ0045	22K 140W [W]	C51	BC02TJ0051	100pF 140W [W]
49	ER02TJ049T	10K 140W [W]	252	ER02TJ072T	10K 140W [W]	0046	BC02TJ0046	22K 140W [W]	C52	BC02TJ0052	100pF 140W [W]
50	ER02TJ050T	10K 140W [W]	253	ER02TJ073T	10K 140W [W]	0047	BC02TJ0047	22K 140W [W]	C53	BC02TJ0053	100pF 140W [W]
51	ER02TJ051T	10K 140W [W]	254	ER02TJ074T	10K 140W [W]	0048	BC02TJ0048	22K 140W [W]	C54	BC02TJ0054	100pF 140W [W]
52	ER02TJ052T	10K 140W [W]	255	ER02TJ075T	10K 140W [W]	0049	BC02TJ0049	22K 140W [W]	C55	BC02TJ0055	100pF 140W [W]
53	ER02TJ053T	10K 140W [W]	256	ER02TJ076T	10K 140W [W]	0050	BC02TJ0050	22K 140W [W]	C56	BC02TJ0056	100pF 140W [W]
54	ER02TJ054T	10K 140W [W]	257	ER02TJ077T	10K 140W [W]	0051	BC02TJ0051	22K 140W [W]	C57	BC02TJ0057	100pF 140W [W]
55	ER02TJ055T	10K 140W [W]	258	ER02TJ078T	10K 140W [W]	0052	BC02TJ0052	22K 140W [W]	C58	BC02TJ0058	100pF 140W [W]
56	ER02TJ056T	10K 140W [W]	259	ER02TJ079T	10K 140W [W]	0053	BC02TJ0053	22K 140W [W]	C59	BC02TJ0059	100pF 140W [W]
57	ER02TJ057T	10K 140W [W]	260	ER02TJ080T	10K 140W [W]	0054	BC02TJ0054	22K 140W [W]	C60	BC02TJ0060	100pF 140W [W]
58	ER02TJ058T	10K 140W [W]	261	ER02TJ081T	10K 140W [W]	0055	BC02TJ0055	22K 140W [W]	C61	BC02TJ0061	100pF 140W [W]
59	ER02TJ059T	10K 140W [W]	262	ER02TJ082T	10K 140W [W]	0056	BC02TJ0056	22K 140W [W]	C62	BC02TJ0062	100pF 140W [W]
60	ER02TJ060T	10K 140W [W]	263	ER02TJ083T	10K 140W [W]	0057	BC02TJ0057	22K 140W [W]	C63	BC02TJ0063	100pF 140W [W]
61	ER02TJ061T	10K 140W [W]	264	ER02TJ084T	10K 140W [W]	0058	BC02TJ0058	22K 140W [W]	C64	BC02TJ0064	100pF 140W [W]
62	ER02TJ062T	10K 140W [W]	265	ER02TJ085T	10K 140W [W]	0059	BC02TJ0059	22K 140W [W]	C65	BC02TJ0065	100pF 140W [W]
63	ER02TJ063T	10K 140W [W]	266	ER02TJ086T	10K 140W [W]	0060	BC02TJ0060	22K 140W [W]	C66	BC02TJ0066	100pF 140W [W]
64	ER02TJ064T	10K 140W [W]	267	ER02TJ087T	10K 140W [W]	0061	BC02TJ0061	22K 140W [W]	C67	BC02TJ0067	100pF 140W [W]
65	ER02TJ065T	10K 140W [W]	268	ER02TJ088T	10K 140W [W]	0062	BC02TJ0062	22K 140W [W]	C68	BC02TJ0068	100pF 140W [W]
66	ER02TJ066T	10K 140W [W]	269	ER02TJ089T	10K 140W [W]	0063	BC02TJ0063	22K 140W [W]	C69	BC02TJ0069	100pF 140W [W]
67	ER02TJ067T	10K 140W [W]	270	ER02TJ090T	10K 140W [W]	0064	BC02TJ0064	22K 140W [W]	C70	BC02TJ0070	100pF 140W [W]
68	ER02TJ068T	10K 140W [W]	271	ER02TJ091T	10K 140W [W]	0065	BC02TJ0065	22K 140W [W]	C71	BC02TJ0071	100pF 140W [W]
69	ER02TJ069T	10K 140W [W]	272	ER02TJ092T	10K 140W [W]	0066	BC02TJ0066	22K 140W [W]	C72	BC02TJ0072	100pF 140W [W]
70	ER02TJ070T	10K 140W [W]	273	ER02TJ093T	10K 140W [W]	0067	BC02TJ0067	22K 140W [W]	C73	BC02TJ0073	100pF 140W [W]
71	ER02TJ071T	10K 140W [W]	274	ER02TJ094T	10K 140W [W]	0068	BC02TJ0068	22K 140W [W]	C74	BC02TJ0074	100pF 140W [W]
72	ER02TJ072T	10K 140W [W]	275	ER02TJ095T	10K 140W [W]	0069	BC02TJ0069	22K 140W [W]	C75	BC02TJ0075	100pF 140W [W]
73											

