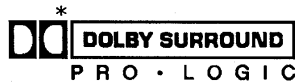


# Service Manual

AV Control Stereo Receiver



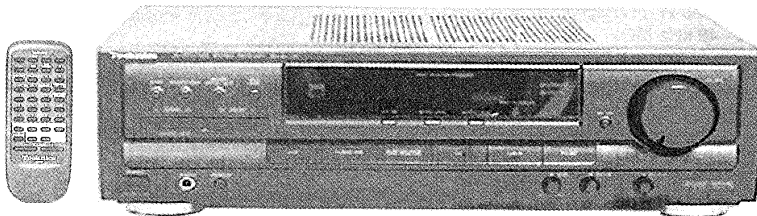
Receiver

SA-EX320

*Simplified*

Colour

(K) . . . . . Black Type



Area

Suffix for Model No.	Area	Colour
( E )	Europe	(K)
( EB )	Great Britain	
( EG )	Germany and Italy	

Please file and use this Service Manual together with the Service Manual for Model No. SA-EX310 (E, EB, EG) Order No. MD9707082C2

**Note :** This Simplified Service Manual is provided to indicate the main difference between the original Model No. SA-EX310 (E, EB EG) and the subsequent Model No. SA-EX320 (E, EB EG).

## Specifications

### FM Tuner Section

Frequency range		87.5 — 108.0 MHz
Sensitivity	S/N 30 dB	1.5 $\mu$ V / 75 $\Omega$
	S/N 26 dB	1.3 $\mu$ V / 75 $\Omega$
	S/N 20 dB	1.2 $\mu$ V / 75 $\Omega$
IHF usable sensitivity		1.5 $\mu$ V / 75 $\Omega$ (IHF '58)
IHF 46 dB stereo quieting sensitivity		22 $\mu$ V / 75 $\Omega$
Total harmonic distortion	MONO	0.2%
	STEREO	0.3%
S/N	MONO	60 dB (73 dB, IHF)
	STEREO	58 dB (67 dB, IHF)
Frequency response		20 Hz — 15 kHz (+1 dB, -2 dB)
Alternate channel selectivity $\pm$ 400kHz		65 dB
Capture ratio		1.5 dB
Image rejection at 98 MHz		40 dB
IF rejection at 98 MHz		70 dB
Spurious response rejection at 98 MHz		70 dB
AM suppression		50 dB
Stereo separation 1 kHz		40 dB

Carrier leak	19 kHz	-30 dB ( -35 dB, IHF )
	38 kHz	-50 dB ( -55 dB, IHF )
Channel balance (250 Hz- 6.3 kHz)		$\pm$ 1.5 dB
Limiting point		1.2 $\mu$ V
Bandwidth	IF amplifier	180 kHz
	FM demodulator	1000 kHz
Antenna terminal		75 $\Omega$ (unbalanced)

### AM Tuner Section

Frequency range		522 — 1611 kHz
Sensitivity		20 $\mu$ V, 330 $\mu$ V/m
Selectivity ( at 999 kHz )		55 dB
IF rejection ( at 999 kHz )		50 dB

### Video Section

Output voltage at 1 V input (unbalanced)		1 $\pm$ 0.1 Vp-p
Maximum input voltage		1.5 Vp-p
Input/output impedance		75 $\Omega$ (unbalanced)

### 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 non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired 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.

# Technics®

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■ Amplifier Section

<b>Power output</b>	
DIN 1 kHz (T.H.D 1%)	2 X 60 W (4Ω)
40 Hz-20 kHz continuous power output both channels driven	2 X 40 W (8Ω)
<b>Total harmonic distortion</b>	
Rated power at 40 Hz - 20 kHz	0.8 % (8Ω)
Half power at 1 kHz	0.07 % (8Ω)
<b>Power output at the Dolby Pro Logic operation 1 % at 1 kHz,</b>	
Front	2 X 60 W (4Ω)
Center	60 W (8Ω)
Surround	60 W (8Ω)
Power bandwidth both channel driven, -3dB	10 Hz - 40 kHz (8Ω)
Damping factor	30 (8Ω)
<b>Load impedance</b>	
Front	4 - 16 Ω
Center	8 - 16 Ω
surround	4 - 16 Ω
<b>Frequency response</b>	
PHONO	RIAA standard curve (30 Hz-15 kHz) ± 0.8 dB
CD, TAPE MONITOR, TV/DVD, VCR	10 Hz - 40 kHz, ± 3 dB
<b>Input sensitivity</b>	
PHONO	3 mV / 47 kΩ
CD, TAPE MONITOR, TV/DVD, VCR	200 mV / 22 kΩ

<b>S/N at rated power ( 8 Ω )</b>	
PHONO	70 dB ( IHF , A : 80 dB )
CD, TAPE MONITOR, TV/DVD, VCR	75 dB ( IHF , A : 85 dB )
Output voltage TAPE REC (OUT), VCR OUT	200 mV
Channel balance (250 Hz - 6.3 kHz)	± 1 dB
Channel separation	55 dB
Headphones output level and impedance	430 mV / 330 Ω
<b>Tone controls</b>	
BASS	50 Hz, +10 to -10 dB
TREBLE	20 kHz, +10 to -10 dB
Subwoofer frequency response	7 - 100 Hz, ±3 dB

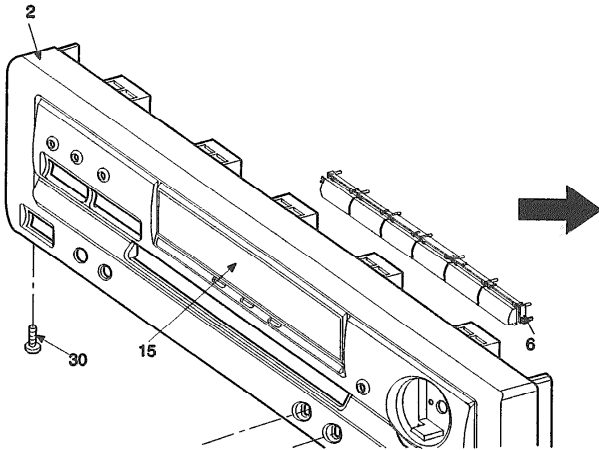
■ General

Power consumption	160 W
Power supply [E, EG]	AC 230 V, 50Hz
[EB]	AC 230 - 240 V, 50Hz
Dimensions (W x H x D)	430 x 136 x 309 mm
	(16 <sup>15</sup> / <sub>16</sub> " x 5 <sup>11</sup> / <sub>32</sub> " x 12 <sup>5</sup> / <sub>32</sub> " )
Weight	7.3 kg

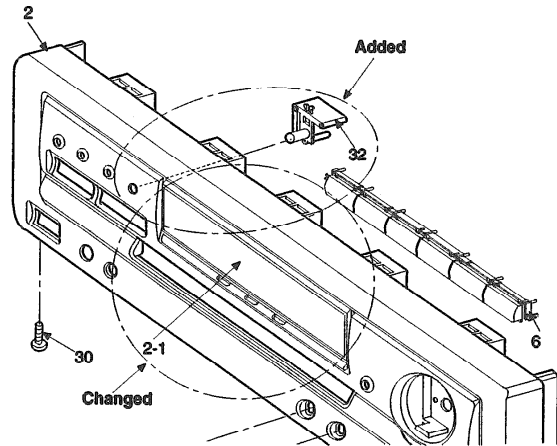
Notes :

- Specifications are subject to change without notice.  
Weight and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.

■ Cabinet Parts Location - ( Item added )



SA-EX310E/EB/EG-K

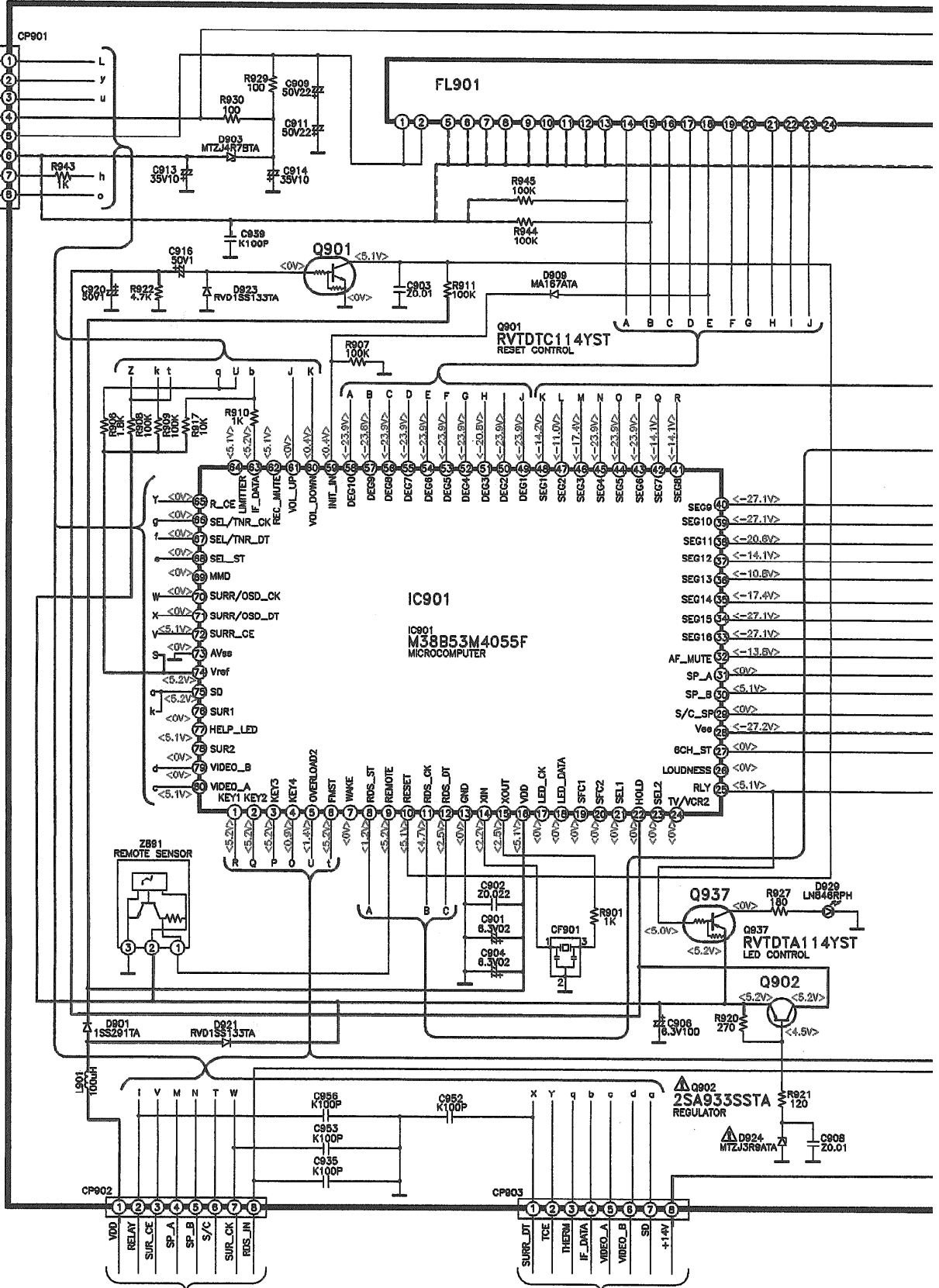


SA-EX320E/EB/EG-K

Schematic Diagram

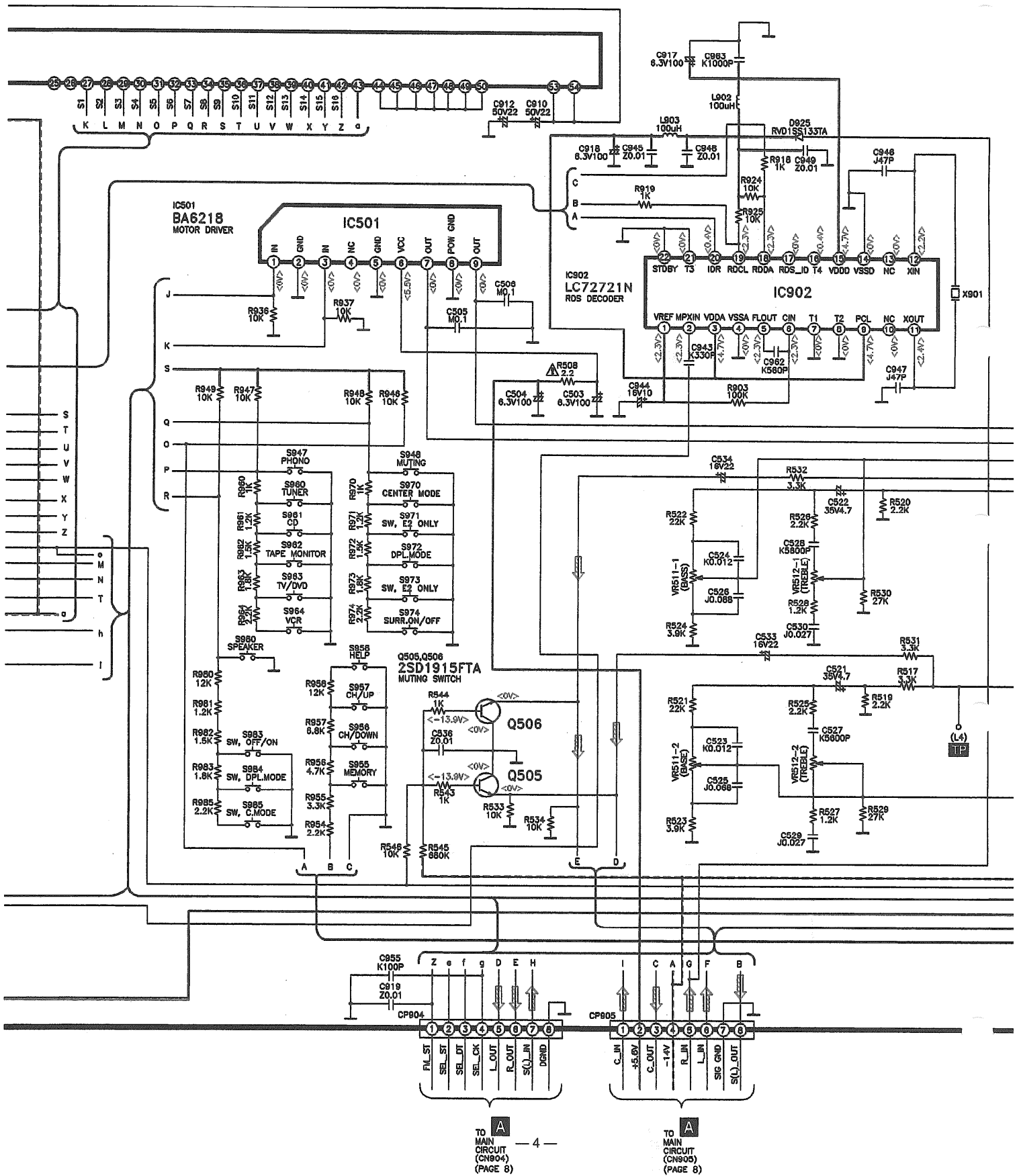
B PANEL CIRCUIT ( P.C.BOARD ON PG:14 )

TO MAIN CIRCUIT (CN801) (PAGE 8)



TO MAIN CIRCUIT (CN802) (PAGE 7)

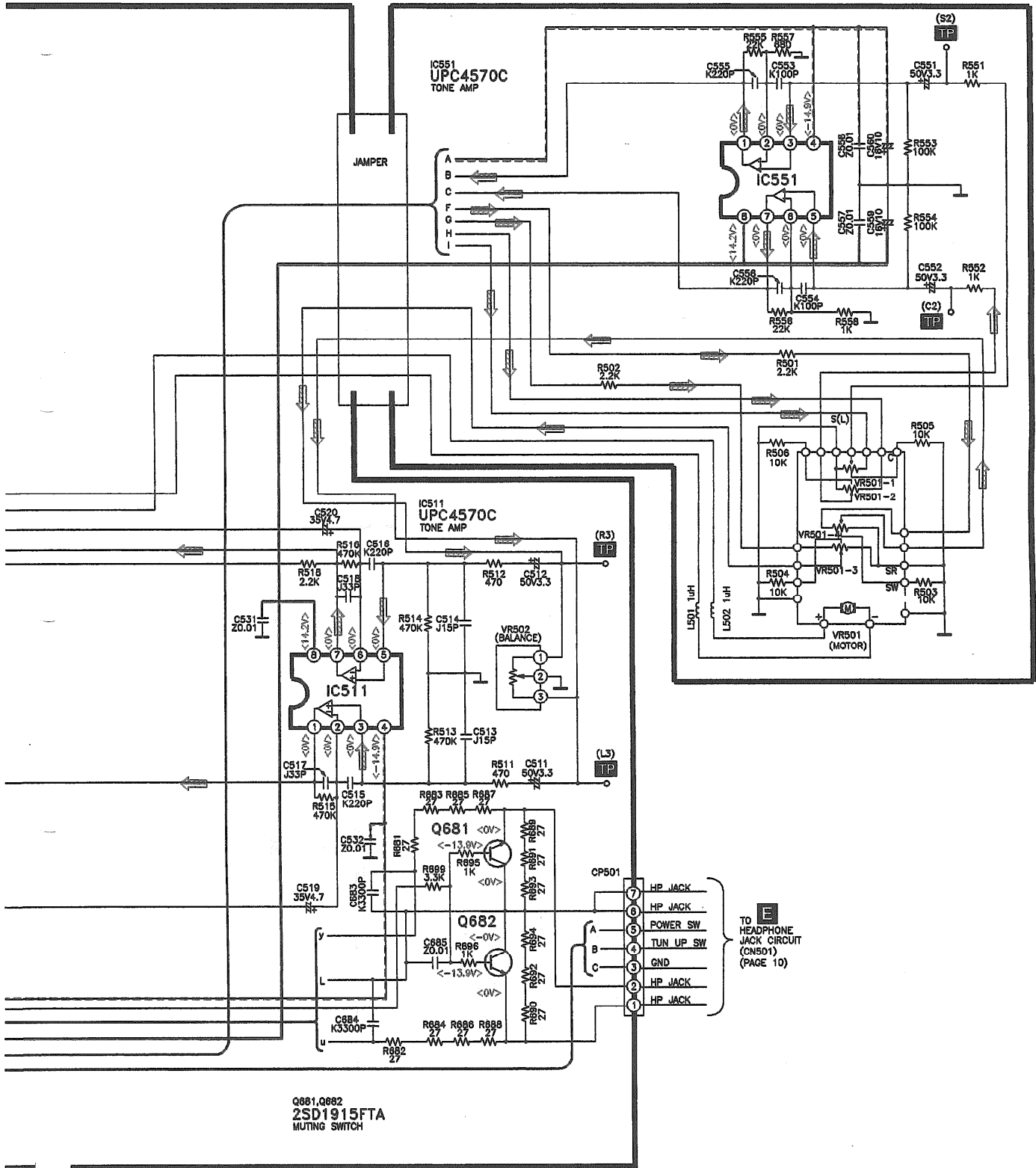
TO MAIN CIRCUIT (CN803) (PAGE 7)



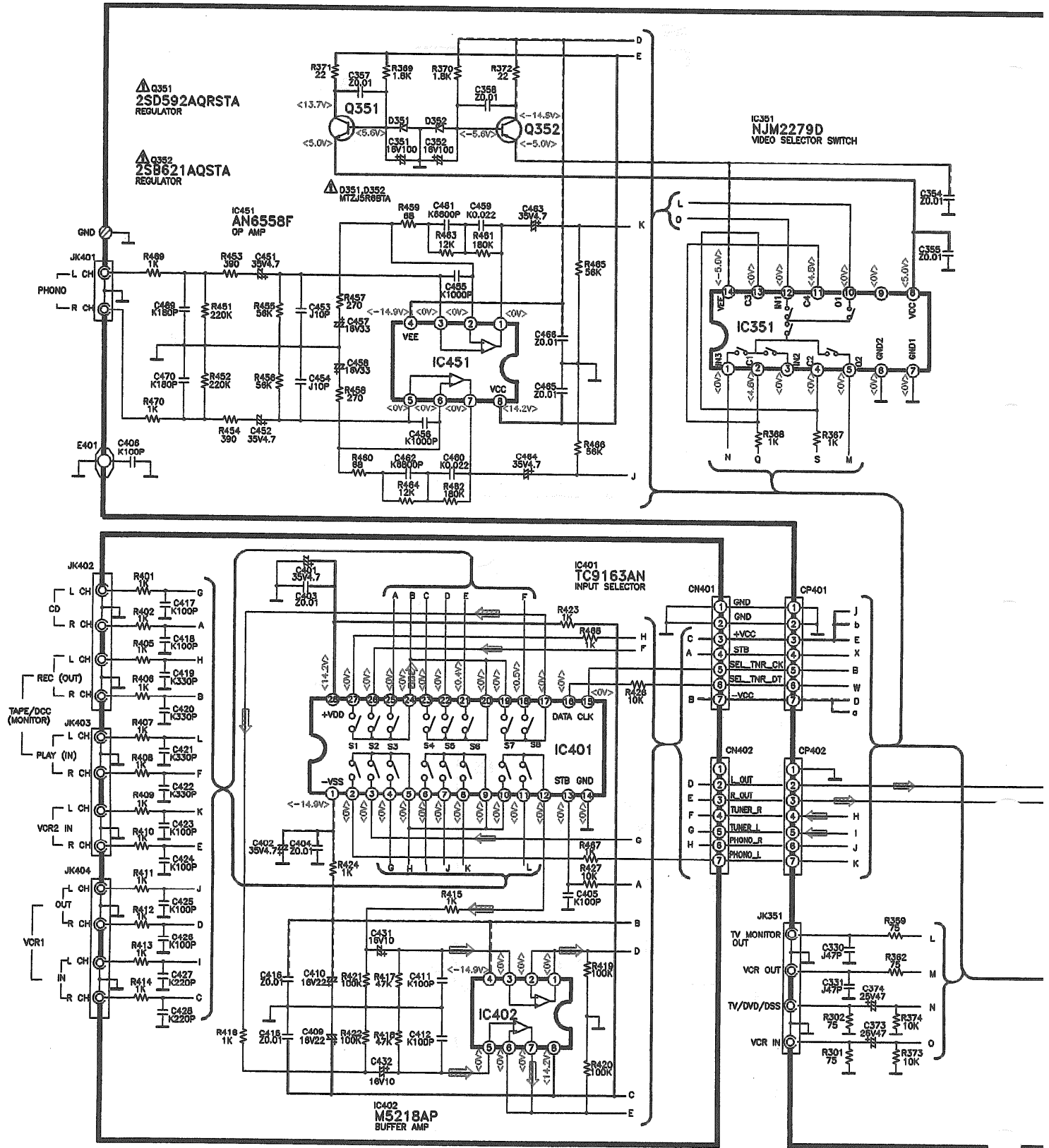
TO MAIN CIRCUIT (CN804) (PAGE 6)

TO MAIN CIRCUIT (CN808) (PAGE 8)

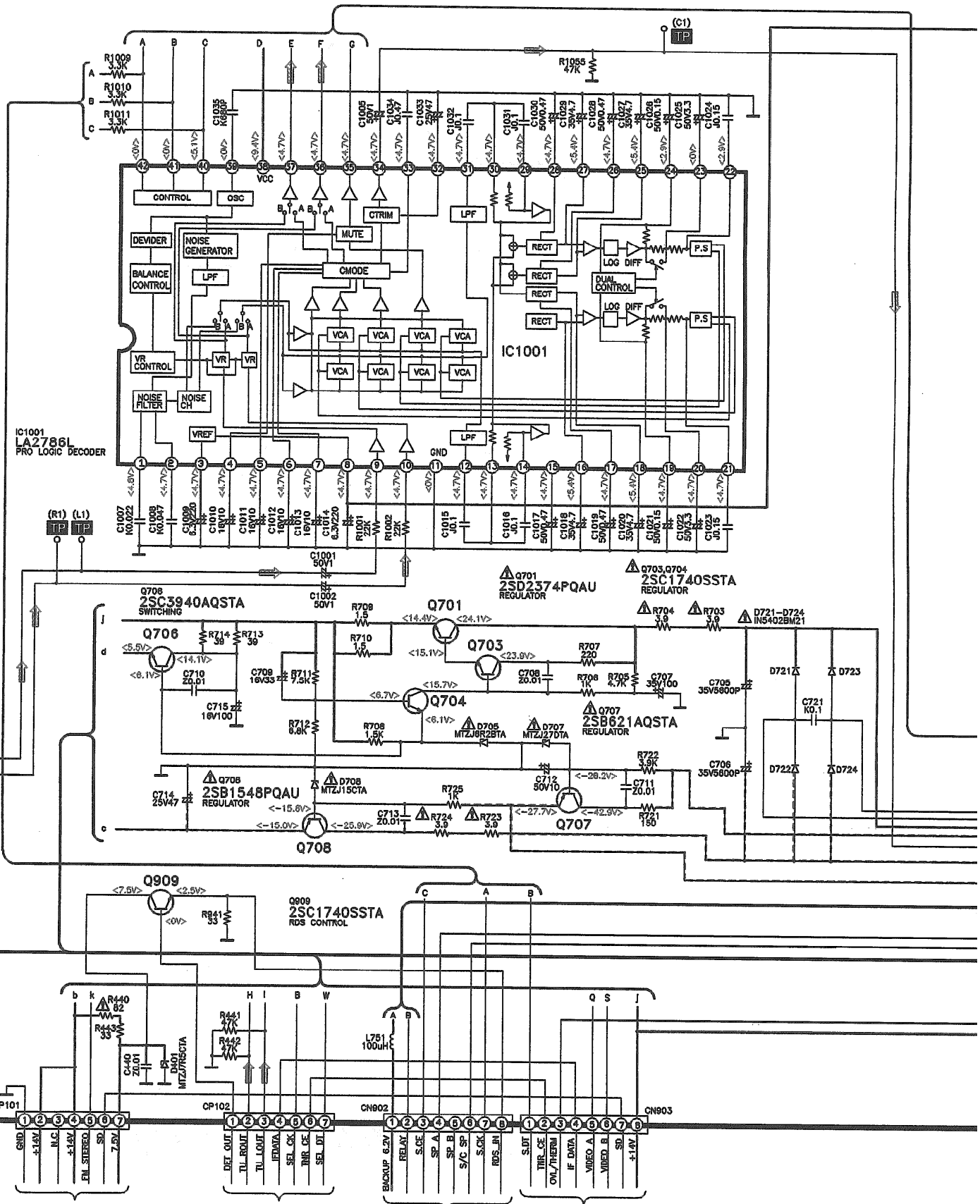
**C** MOTOR CIRCUIT ( P.C.BOARD ON PG:14 )



**A** MAIN CIRCUIT ( P.C.BOARD ON PG:12 )



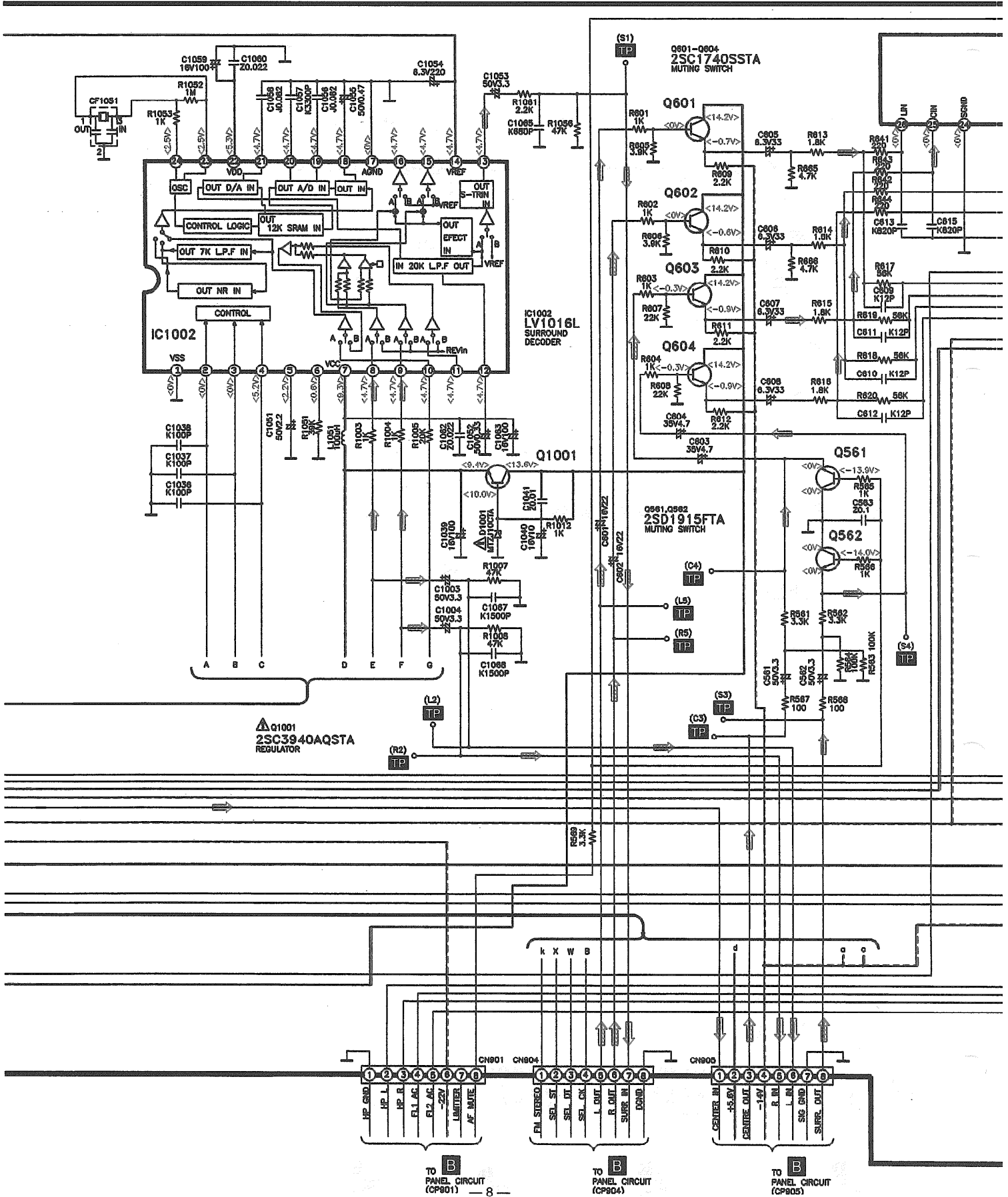
**G** IN/OUT TERMINAL CIRCUIT ( P.C.BOARD ON Pg:36 OF SA-EX310(E/EB/EG) )



TO TUNER CIRCUIT OF SA-EX310(E/EB/EG) (CN101) (PAGE 21)

TO TUNER CIRCUIT OF SA-EX310(E/EB/EG) (CN102) (PAGE 21) — 7 — TO PANEL CIRCUIT (CP802) (PAGE 3)

TO PANEL CIRCUIT (CP803) (PAGE 3)

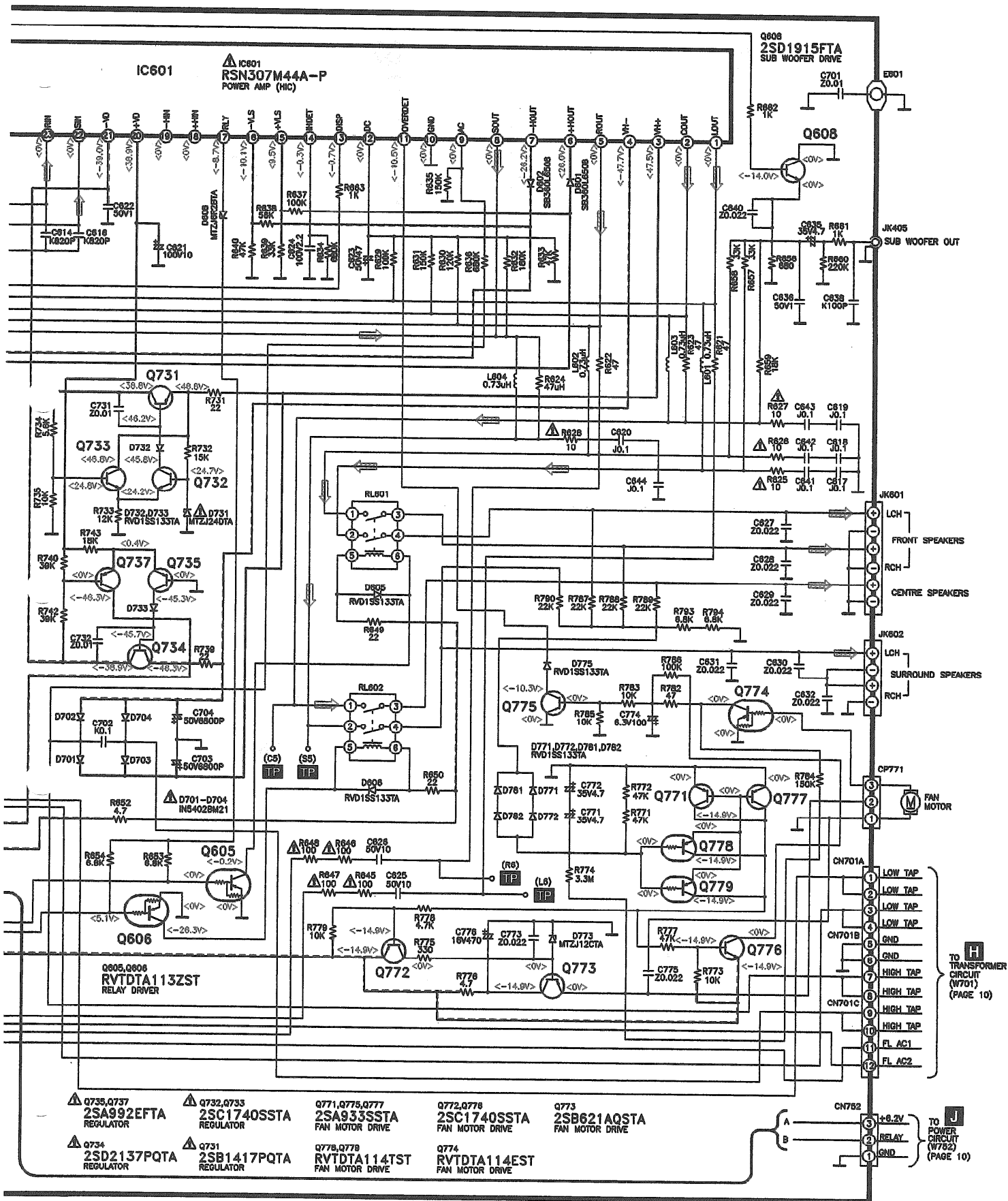


TO PANEL CIRCUIT (CP901) — 8 —

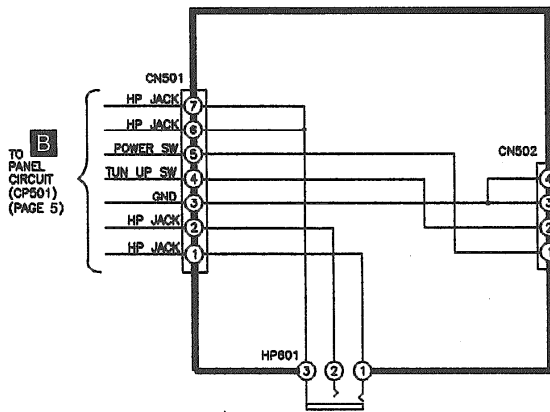
TO PANEL CIRCUIT (CP904)

TO PANEL CIRCUIT (CP905)

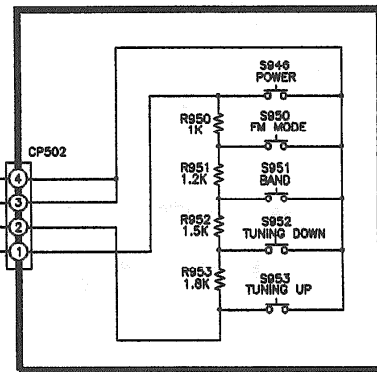




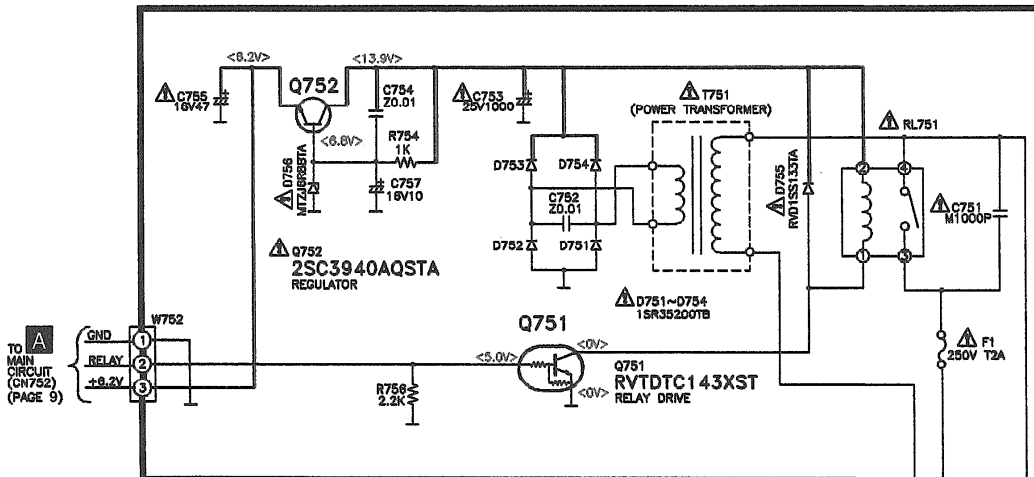
**E HEADPHONE JACK CIRCUIT**  
( P.C.BOARD ON PG:30 OF SA-EX310(E/EB/EG) )



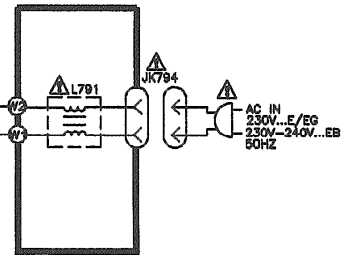
**D POWER SWITCH CIRCUIT**  
( P.C.BOARD ON PG:31 OF SA-EX310(E/EB/EG) )



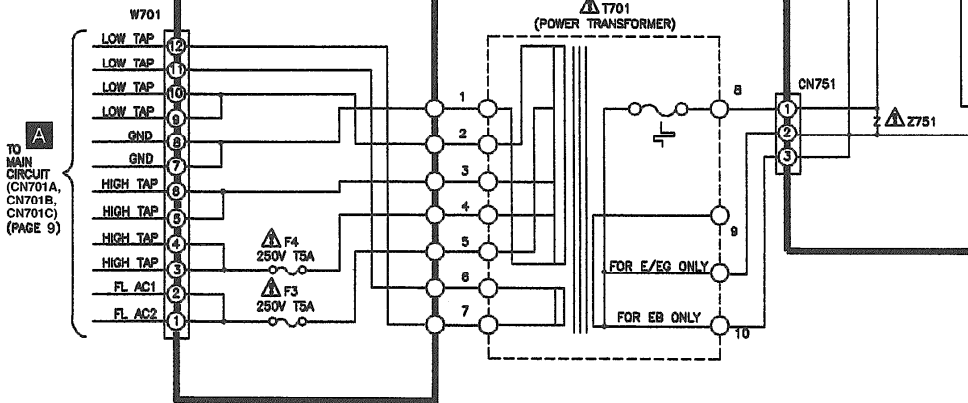
**J POWER CIRCUIT**  
( P.C.BOARD ON PG:11 )



**K AC IN/OUT CIRCUIT**  
( P.C.BOARD ON PG:38 OF SA-EX310(E/EB/EG) )



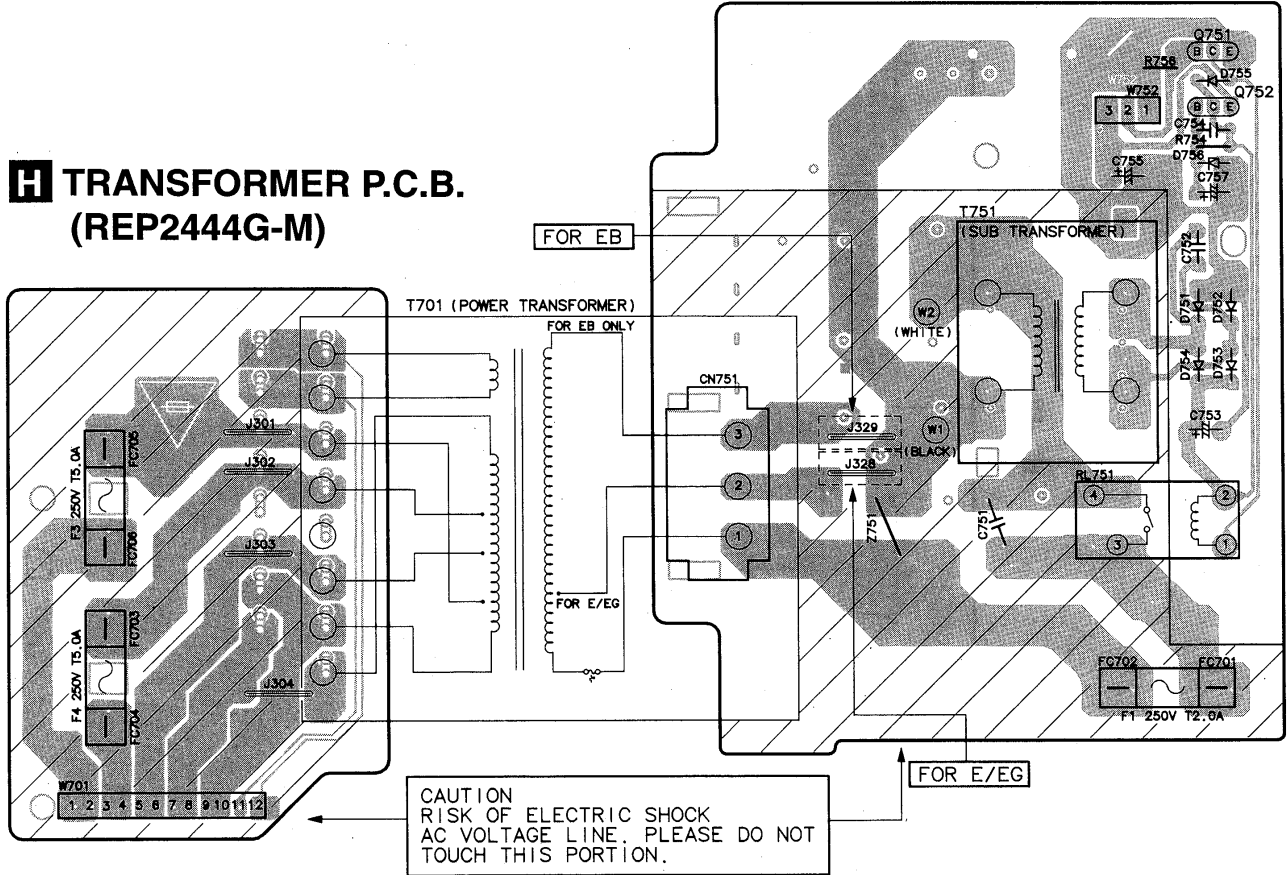
**H TRANSFORMER CIRCUIT**  
( P.C.BOARD ON PG:11 )



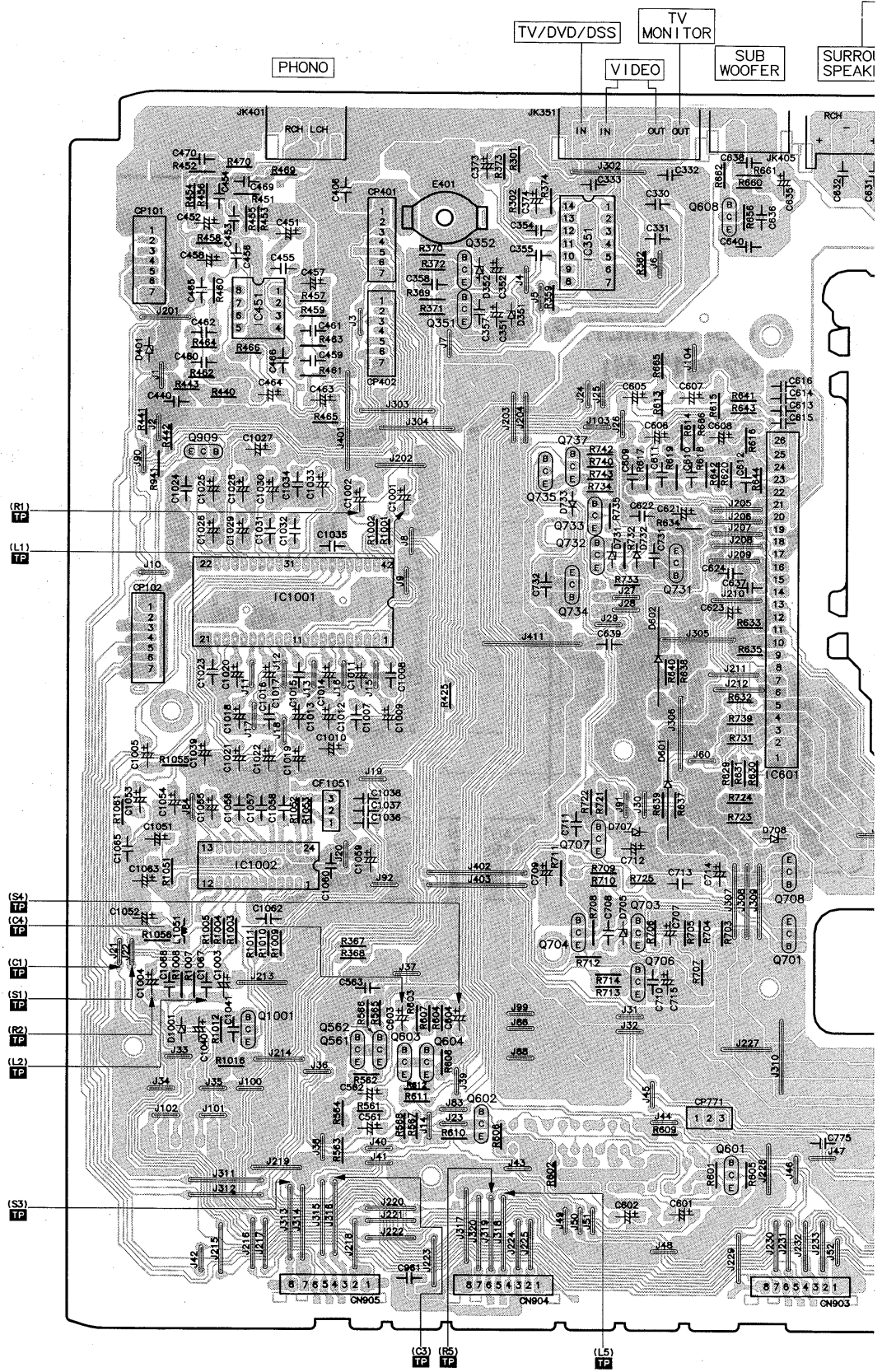
■ Printed Circuit Board

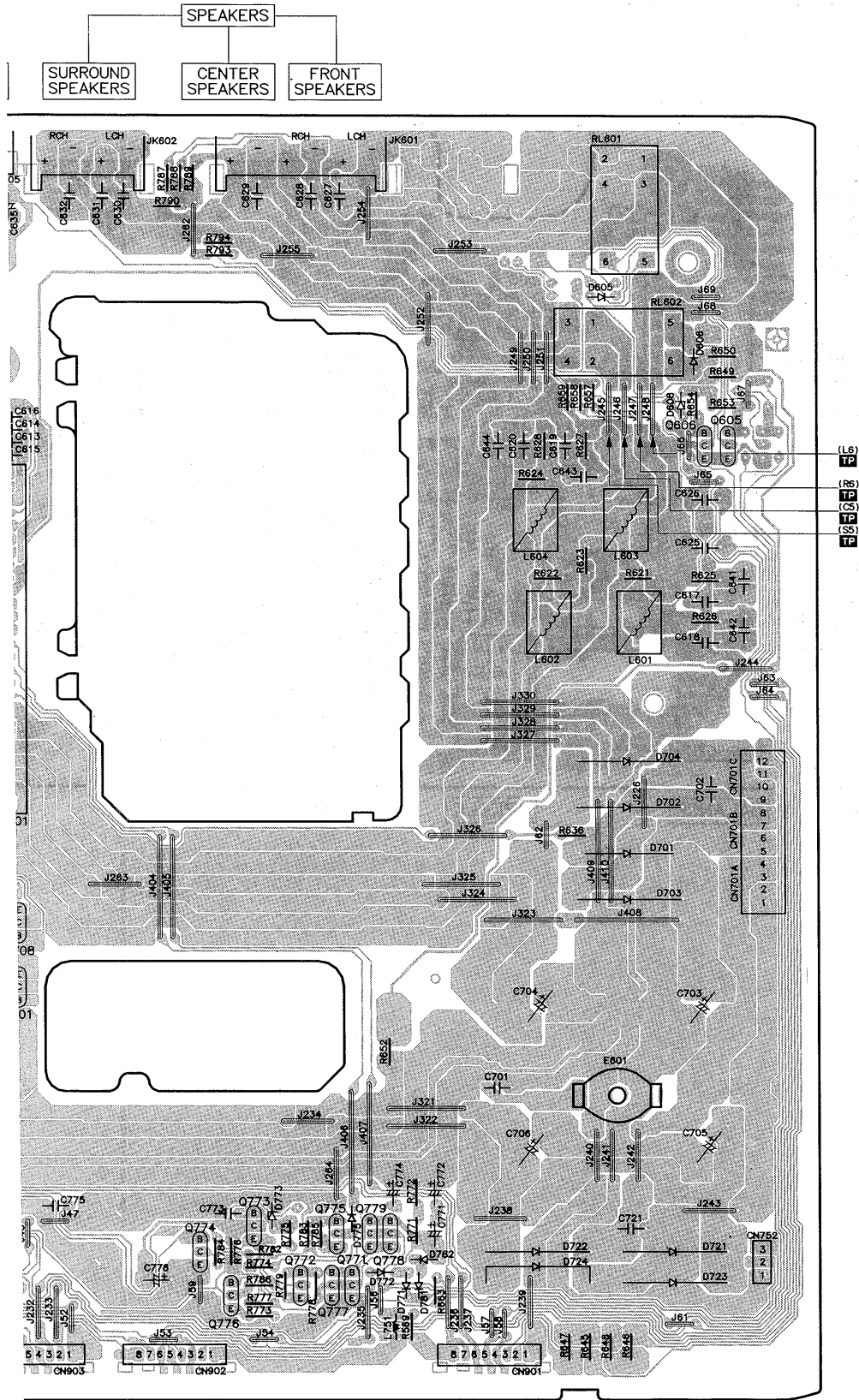
■ POWER SUPPLY P.C.B. (REP2446K-P).....EB  
(REP2446J-P).....E,EG

■ TRANSFORMER P.C.B.  
(REP2444G-M)



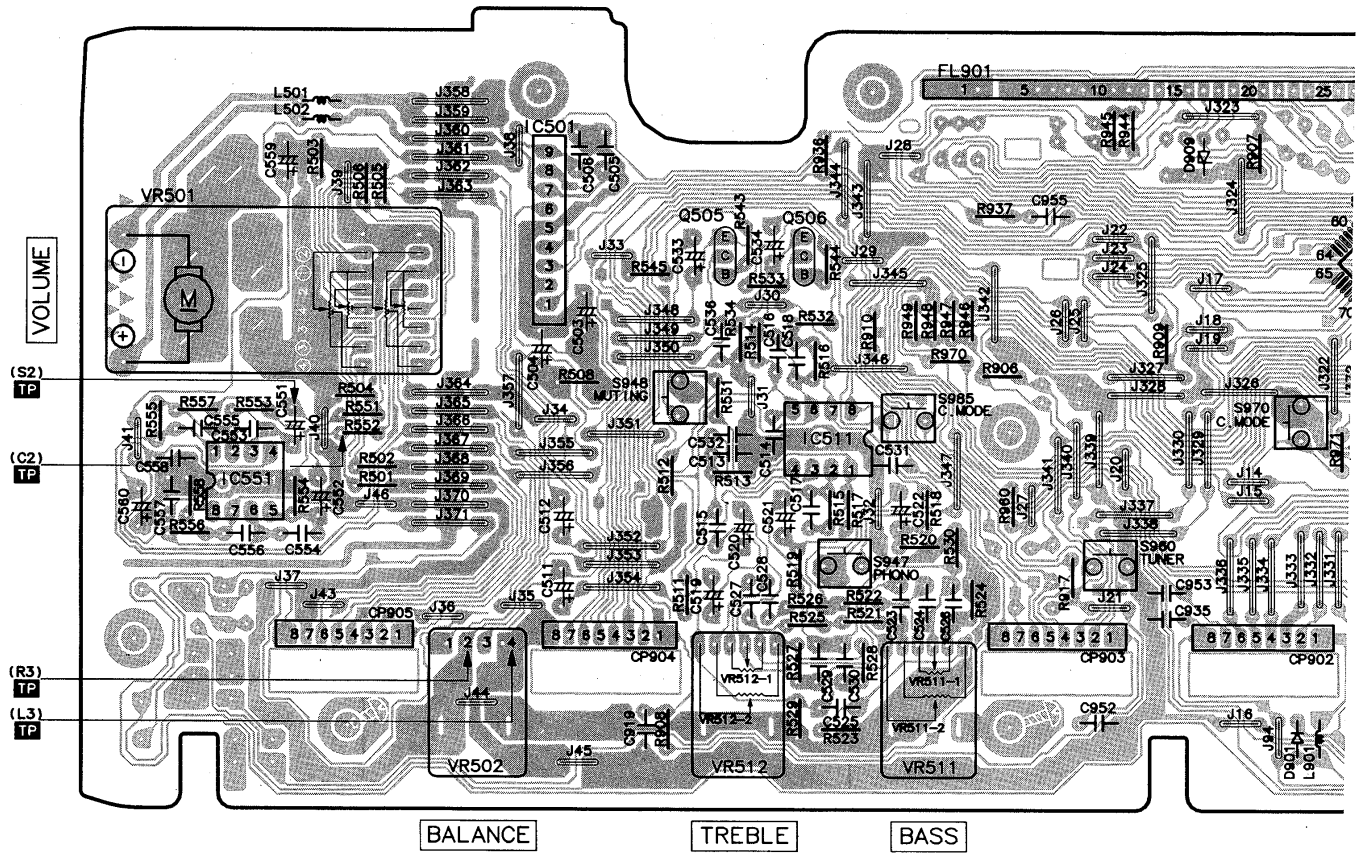
**A MAIN P.C.B. (REP2444G-M)**





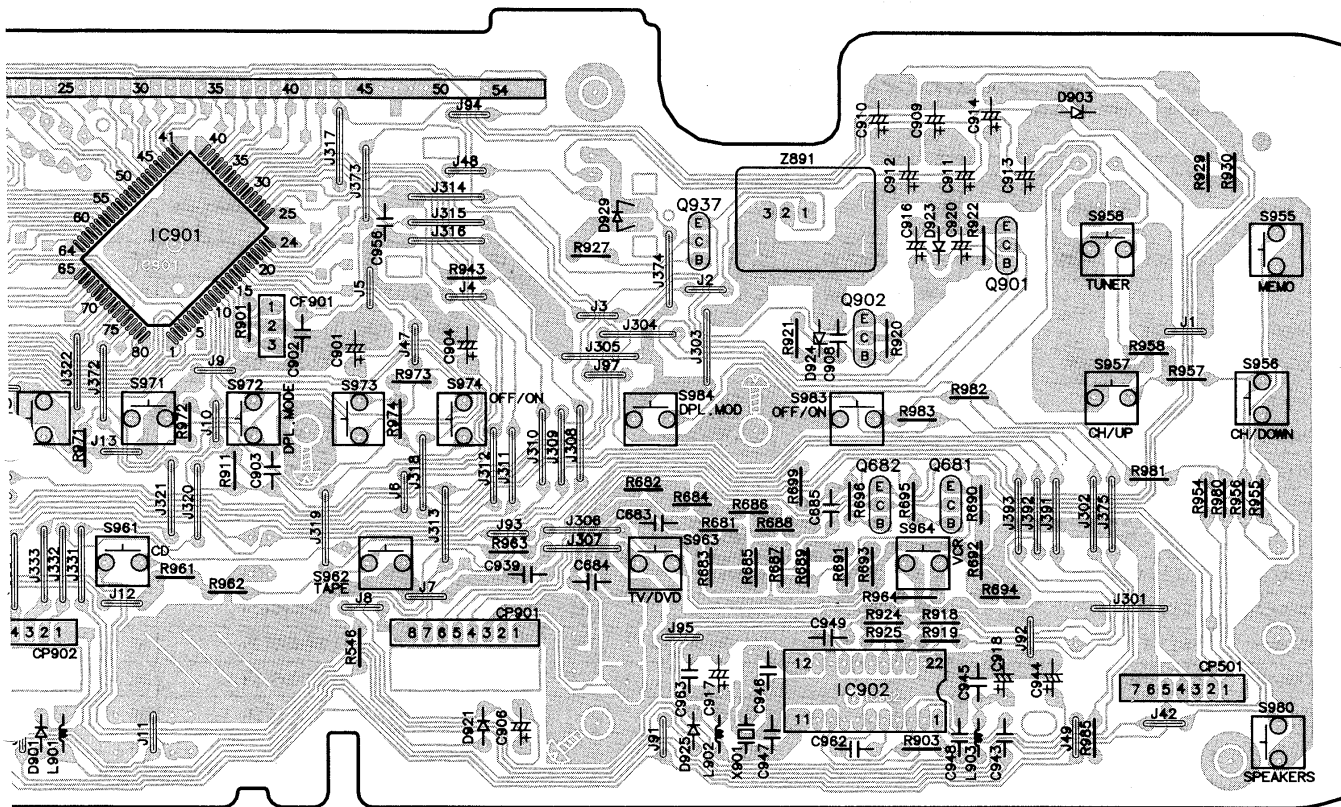
**C** VOLUME P.C.B. (REP2597C-S)

**B** PANEL P.C.B. (REP2597C-S)





SENSOR



## ■ Replacement Parts List

**Notes:** \* Important safety notice :  
 Components identified by  $\triangle$  mark have special characteristics important for safety.  
 Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality 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 parenthesized in the Remarks columns specify the areas. (Refer to the cover page for area.)  
 Parts without these indication can be used for all areas.  
 \* [M] in Remarks column indicates parts that are supplied by MESA.

Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks
		<b>CABINET AND CHASSIS</b>		IC351	NJM2279D	IC, VIDEO SELECTOR S	[M]	Q706	2SC3940AQSTA	TRANSISTOR	[M]
				IC401	TC9163AN	IC, SELECTOR	[M]	Q707	2SB621AQSTA	TRANSISTOR	[M] $\triangle$
1	REM0069	FAN UNIT	[M]	IC402	M5218AP	IC, BUFFER AMP	[M]	Q708	2SB1548PQAU	TRANSISTOR	[M] $\triangle$
2	RFKGEX320EBK	FRONT PANEL ASS'Y	[M]	IC451	AN6558F	IC, OP AMP	[M]	Q731	2SB1417PQTA	TRANSISTOR	[M] $\triangle$
2-1	RKW0436E-Q	FL WINDOW	[M]	IC501	BA6218	IC, MOTOR DRIVER	[M]	Q732	2SC1740SSSTA	TRANSISTOR	[M] $\triangle$
3	RGR0251B-E	REAR PANEL	[M]E G E	IC511	UPC4570C	IC, TONE CONTROL	[M]	Q733	2SC1740SSSTA	TRANSISTOR	[M] $\triangle$
3	RGR0251B-F	REAR PANEL	[M]E B	IC551	UPC4570C	IC, TONE CONTROL	[M]	Q734	2SD2137PQTA	TRANSISTOR	[M] $\triangle$
4	RGU1350-K	MODE BUTTON	[M]	IC601	RSN307M44A-P	IC, HIC	[M] $\triangle$	Q735	2SA992EFTA	TRANSISTOR	[M] $\triangle$
5	RGU1352M-K	DOLBY BUTTON	[M]	IC901	M38B53M4055F	IC, MICOM	[M]	Q737	2SA992EFTA	TRANSISTOR	[M] $\triangle$
6	RGU1493-K	SELECTOR BUTTON	[M]	IC902	LC72721N	IC, RDS	[M]	Q751	RVTDC143XST	TRANSISTOR	[M]
7	RGW0243A-K	VOLUME KNOB	[M]	IC1001	LA2786L	IC, DPL	[M]	Q752	2SC3940AQSTA	TRANSISTOR	[M] $\triangle$
8	RGW0244-K1	BASS TREBLE KNOB	[M]	IC1002	LV1016L	IC, SURR DECODER	[M]	Q771	2SA933SSSTA	TRANSISTOR	[M]
9	RHD26016	SCREW (HEAD PHONE)	[M]					Q772	2SC1740SSSTA	TRANSISTOR	[M]
10	RHN90001	M9 NUT	[M]			<b>TRANSISTORS</b>		Q773	2SB621AQSTA	TRANSISTOR	[M]
12	RKA0079-A	LEG	[M]	Q101	2SC2787LTA	TRANSISTOR	[M]	Q774	RVTDTA114EST	TRANSISTOR	[M]
13	RKM0374-K	TOP CABINET	[M]	Q103	2SC2785FETA	TRANSISTOR	[M]	Q775	2SA933SSSTA	TRANSISTOR	[M]
14	RKQ0089-J	PCB HOLDER	[M]	Q104	2SC2785FETA	TRANSISTOR	[M]	Q776	2SC1740SSSTA	TRANSISTOR	[M]
16	RMC0158-S	TRANSISTOR HOLDER	[M]	Q106	RVTDTA143XST	TRANSISTOR	[M]	Q777	2SA933SSSTA	TRANSISTOR	[M]
17	RMG0270-K	LEG CUSHION	[M]	Q107	2SC3311ARTA	TRANSISTOR	[M]	Q778	RVTDTA114TST	TRANSISTOR	[M]
18	RMK0350	BOTTOM CHASSIS	[M]	Q107	2SC3311ARTA	TRANSISTOR	[M]	Q779	RVTDTA114TST	TRANSISTOR	[M]
19	RMN0372	FL HOLDER	[M]	Q108	2SC3311ARTA	TRANSISTOR	[M]	Q901	RVTDC114YST	TRANSISTOR	[M]
20	RMQ0709	TUNER PCB BRACKET	[M]	Q351	2SD592AQRSTA	TRANSISTOR	[M] $\triangle$	Q902	2SA933SSSTA	TRANSISTOR	[M] $\triangle$
21	RMZ0339	ZNR COVER	[M]	Q352	2SB621AQSTA	TRANSISTOR	[M] $\triangle$	Q909	2SC1740SSSTA	TRANSISTOR	[M]
22	RXX0186	HEAT SINK UNIT	[M]	Q505	2SD1915FTA	TRANSISTOR	[M]	Q937	RVTDTA114YST	TRANSISTOR	[M]
23	SJS9231A	A/C INLET COVER	[M]	Q506	2SD1915FTA	TRANSISTOR	[M]	Q1001	2SC3940AQSTA	TRANSISTOR	[M] $\triangle$
24	SNE2123	EARTH TERMINAL	[M]	Q561	2SD1915FTA	TRANSISTOR	[M]				
25	SNE2129-1	SCREW (CABINET)	[M]	Q562	2SD1915FTA	TRANSISTOR	[M]			<b>DIODES</b>	
26	XTB3+20JFZ	SCREW (MAIN PCB)	[M]	Q601	2SC1740SSSTA	TRANSISTOR	[M]				
27	XTB3+30J	SCREW	[M]	Q602	2SC1740SSSTA	TRANSISTOR	[M]	D101	MTZJ5R1BTA	DIODE	[M]
28	XTB3+8FFZ	SCREW (TRNFM H/SINK)	[M]	Q603	2SC1740SSSTA	TRANSISTOR	[M]	D102	MA165TA	DIODE	[M]
29	XTBS26+10J	SCREW (FRONT PANEL)	[M]	Q604	2SC1740SSSTA	TRANSISTOR	[M]	D351	MTZJ5R6BTA	DIODE	[M] $\triangle$
30	XTBS3+8JFZ1	SCREW (REAR PANEL)	[M]	Q605	RVTDTA113ZST	TRANSISTOR	[M]	D352	MTZJ5R6BTA	DIODE	[M] $\triangle$
31	XTW3+15T	SCREW (HIC/FIXTURE)	[M]	Q606	RVTDTA113ZST	TRANSISTOR	[M]	D401	MTZJ7R5CTA	DIODE	[M]
32	RGU1398-K	HELP BUTTON	[M]	Q608	2SD1915FTA	TRANSISTOR	[M]	D601	SB360L6508	DIODE	[M]
				Q681	2SD1915FTA	TRANSISTOR	[M]	D602	SB360L6508	DIODE	[M]
		<b>INTEGRATED CIRCUITS</b>		Q682	2SD1915FTA	TRANSISTOR	[M]	D605	RVD1SS133TA	DIODE	[M]
				Q701	2SD2374PQAU	TRANSISTOR	[M] $\triangle$	D606	RVD1SS133TA	DIODE	[M]
IC101	LA1832A	IC, IF/MPX	[M]	Q703	2SC1740SSSTA	TRANSISTOR	[M] $\triangle$	D608	MTZJ6R2BTA	DIODE	[M]
IC102	LC7218	IC, PLL	[M]	Q704	2SC1740SSSTA	TRANSISTOR	[M] $\triangle$	D701	1N5402BM21	DIODE	[M] $\triangle$



Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks
D702	1N5402BM21	DIODE	[M] ▲	S951	EVQ21405R	SW, BAND	[M]	CP901	RJT003K008M1	8P CONNECTOR	[M]
D703	1N5402BM21	DIODE	[M] ▲	S952	EVQ21405R	SW, TUNING DOWN	[M]	CP902	RJT003K008M1	8P CONNECTOR	[M]
D704	1N5402BM21	DIODE	[M] ▲	S953	EVQ21405R	SW, TUNING UP	[M]	CP903	RJT003K008M1	8P CONNECTOR	[M]
D705	MTZJ6R2BTA	DIODE	[M] ▲	S955	EVQ21405R	SW, MEMO	[M]	CP904	RJT003K008M1	8P CONNECTOR	[M]
D707	MTZJ27DTA	DIODE	[M] ▲	S956	EVQ21405R	SW, CH/DOWN	[M]	CP905	RJT003K008M1	8P CONNECTOR	[M]
D708	MTZJ15CTA	DIODE	[M] ▲	S957	EVQ21405R	SW, CH/UP	[M]				
D721	1N5402BM21	DIODE	[M] ▲	S958	EVQ21405R	SW, HELP	[M]			<b>COILS &amp; TRANSFORMERS</b>	
D722	1N5402BM21	DIODE	[M] ▲	S960	EVQ21405R	SW, TUNER	[M]				
D723	1N5402BM21	DIODE	[M] ▲	S961	EVQ21405R	SW, CD	[M]	L101	ELESN1R0MA	CHOKE COIL	[M]
D724	1N5402BM21	DIODE	[M] ▲	S962	EVQ21405R	SW, TAPE	[M]	L105	RLQZB822KT-D	TAPING COIL	[M]
D731	MTZJ24DTA	DIODE	[M] ▲	S963	EVQ21405R	SW, TV/DVD	[M]	L106	RLQZB822KT-D	TAPING COIL	[M]
D732	RVD1SS133TA	DIODE	[M]	S964	EVQ21405R	SW, VCR	[M]	L151	SLM1B10-1M	A.B. FILTER	[M]
D733	RVD1SS133TA	DIODE	[M]	S970	EVQ21405R	SW, CENTER MODE	[M]	L191	ELESNR56MA	CHOKE COIL	[M]
D751	1SR35200TB	DIODE	[M] ▲	S971	EVQ21405R	SW,	[M]	L501	RLQZP1R0KT-Y	AXIAL COIL	[M]
D752	1SR35200TB	DIODE	[M] ▲	S972	EVQ21405R	SW, DPL.MODE	[M]	L502	RLQZP1R0KT-Y	AXIAL COIL	[M]
D753	1SR35200TB	DIODE	[M] ▲	S973	EVQ21405R	SW,	[M]	L601	RLQYR73MW-E	CHOKE COIL	[M]
D754	1SR35200TB	DIODE	[M] ▲	S974	EVQ21405R	SW, SURR.ON/OFF	[M]	L602	RLQYR73MW-E	CHOKE COIL	[M]
D755	RVD1SS133TA	DIODE	[M] ▲	S980	EVQ21405R	SW, SPEAKER	[M]	L603	RLQYR73MW-E	CHOKE COIL	[M]
D756	MTZJ6R8BTA	DIODE	[M] ▲	S983	EVQ21405R	SW	[M]	L604	RLQYR73MW-E	CHOKE COIL	[M]
D771	RVD1SS133TA	DIODE	[M]	S984	EVQ21405R	SW	[M]	L751	ELESN101KA	CHOKE COIL	[M]
D772	RVD1SS133TA	DIODE	[M]	S985	EVQ21405R	SW	[M]	L791	SLQZ650MH49	AC LINE COIL	[M] ▲
D773	MTZJ12CTA	DIODE	[M]					L901	RLQB101KTA-Y	CHOKE COIL	[M]
D775	RVD1SS133TA	DIODE	[M]			<b>CONNECTORS</b>		L902	RLQZP101KT-Y	AXIAL COIL	[M]
D781	RVD1SS133TA	DIODE	[M]					L903	RLQZP101KT-Y	AXIAL COIL	[M]
D782	RVD1SS133TA	DIODE	[M]	CN101	RJU057W007	7P CONNECTOR	[M]	L1051	ELESN101KA	CHOKE COIL	[M]
D901	1SS291TA	DIODE	[M]	CN102	RJU057W007	7P CONNECTOR	[M]	T701	RTP1N5B025-X	POWER TRANSFORMER	[M] ▲
D903	MTZJ4R7BTA	DIODE	[M]	CN401	RJU100W07	7P CONNECTOR	[M]	T751	RTP115E006	POWER TRANSFORMER	[M] ▲
D909	MA167ATA	DIODE	[M]	CN402	RJU100W07	7P CONNECTOR	[M]				
D921	RVD1SS133TA	DIODE	[M]	CN501	RJU100W07	7P CONNECTOR	[M]			<b>COMPONENT COMBINATION</b>	
D923	RVD1SS133TA	DIODE	[M]	CN502	RJU100W04	4P CONNECTOR	[M]				
D924	MTZJ3R9ATA	DIODE	[M] ▲	CN701A	RJS1A6604T1	4P TAPING CONNECTOR	[M]	Z101	RLA2Z002M-T	AM ANT. COIL	[M]
D925	RVD1SS133TA	DIODE	[M]	CN701B	RJS1A6604T1	4P TAPING CONNECTOR	[M]	Z102	RLJ2Z006M-T	AM IFT	[M]
D929	LN846RPH	DIODE	[M]	CN701C	RJS1A6604T1	4P TAPING CONNECTOR	[M]	Z120	ENV17290G1R	FM TUNER PACK	[M]
D1001	MTZJ10CTA	DIODE	[M] ▲	CN751	SJS305-1	3P CONNECTOR	[M]	Z751	ERZV10V511CS	ZNR	[M] ▲
				CN752	RJS1A6603T1	3P TAPING CONNECTOR	[M]	Z891	RCDSPS4242N	REMOTE SENSOR	[M]
		<b>VARIABLE RESISTORS</b>		CN901	RJU003K008M1	BOAD IN CONNECTOR	[M]			<b>CERAMIC FILTERS</b>	
				CN902	RJU003K008M1	BOAD IN CONNECTOR	[M]				
VR501	EUWMRH026B15	VR, MOTOR	[M]	CN903	RJU003K008M1	BOAD IN CONNECTOR	[M]				
VR502	EVJ02QF01G15	VR, BALANCE CONTROL	[M]	CN904	RJU003K008M1	BOAD IN CONNECTOR	[M]	CF201	RLFFETNGD01L	CERAMIC CAPACITOR	[M]
VR511	EVJYA1F01C15	VR, TONE CONTROL	[M]	CN905	RJU003K008M1	BOAD IN CONNECTOR	[M]	CF202	RLFFETMGD01L	CERAMIC FILTER	[M]
VR512	EVJYA1F01C15	VR, TONE CONTROL	[M]	CP101	RJT057W007-1	7P CONNECTOR	[M]	CF901	RVBCST4R00MT	CERAMIC OSCILLATOR	[M]
				CP102	RJT057W007-1	7P CONNECTOR	[M]	CF1051	EF0EC8004T4	CERAMIC OSCILLATOR	[M]
		<b>SWITCHES</b>		CP401	RJT100W07	7P CONNECTOR	[M]				
				CP402	RJT100W07	7P CONNECTOR	[M]			<b>RELAYS</b>	
S946	EVQ21405R	SW, POWER	[M]	CP501	RJT100W07	7P CONNECTOR	[M]				
S947	EVQ21405R	SW, PHONO	[M]	CP502	RJT100W04	4P CONNECTOR	[M]	RL601	RSY0013M-0	RELAY	[M]
S948	EVQ21405R	SW, MUTING	[M]	CP771	RJP3G4YA	CONNECTOR	[M]	RL602	RSY0013M-0	RELAY	[M]
S950	EVQ21405R	SW, FM MODE	[M]	CP771	SJT3319	CONNECTOR	[M]	RL751	RSY0019M-0	12V TV-5 RELAY	[M] ▲

Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks	Ref No.	Part No.	Part Name & Description	Remarks
		<b>OSCILLATORS</b>				<b>PACKING MATERIALS</b>					
X101	RSXZ456KM07M	CERAMIC OSCILLATOR	[M]								
X102	RLFDGTD01I	FM RESONATOR	[M]	P2	RPG3657	PACKING CASE	[M]E				
X103	SVQ49U722T-S	CRYSTAL 7.2MHZ	[M]	P2	RPG3658	PACKING CASE	[M]EB EG				
X901	RSXC4M33S02T	CRYSTAL 4.33 MHZ	[M]	P3	RPN0865	POLYFOAM	[M]				
				P4	RPF0005	MIRAMAT BAG	[M]				
		<b>DISPLAY TUBE</b>		P5	SPB1061	BAG	[M]				
FL901	RSL0233-F	FL	[M]			<b>ACCESSORIES</b>					
		<b>FUSES</b>		A1	EUR644859	REMOTE CONTROL	[M]				
				A1-1	UR64EC1822	R/C BATTERY COVER	[M]				
F1	XBA2C20TB0	FUSE	[M] △	A2	RSA0010	LOOP ANT UNIT	[M]				
F3	XBA2C50TB0	FUSE	[M] △	A3	RJA0019-2K	AC CORD (SF)	△ [M]EG E				
F4	XBA2C50TB0	FUSE	[M] △	A3	RJA0053-1X	AC CORD (SF)	△ [M]EB				
				A4	RQT4380-B	O/I BOOK	[M]				
		<b>FUSE CLIPS</b>		A4	RQT4381-E	O/I BOOK	[M]E				
				A4	RQT4382-D	O/I BOOK	[M]EG				
FC701	RJR0169T	FUSE HOLDER	[M]	A4	RQT4383-R	O/I BOOK	[M]E				
FC702	RJR0169T	FUSE HOLDER	[M]	A4	RQT4384-H	O/I BOOK	[M]EG				
FC703	RJR0169T	FUSE HOLDER	[M]	A4	RQT4387-B	O/I BOOK FOR REMOTE	[M]EB				
FC704	RJR0169T	FUSE HOLDER	[M]	A4	RQT4388-E	O/I BOOK FOR REMOTE	[M]E				
FC705	RJR0169T	FUSE HOLDER	[M]	A4	RQT4389-D	O/I BOOK FOR REMOTE	[M]EG				
FC706	RJR0169T	FUSE HOLDER	[M]	A4	RQT4390-R	O/I BOOK FOR REMOTE	[M]E				
				A4	RQT4391-H	O/I BOOK FOR REMOTE	[M]EG				
		<b>JACKS</b>		A6	RSA0007	FM ANTENA	[M]				
				A7	SJP9009	ANT ADAPTER	[M]EB				
HP601	RJJ63TS01	JK, HEADPHONES	[M]								
JK101	RJH4202-1	JK, ANT TERMINAL	[M]								
JK351	SJF3069-3N	JK, RCA PIN	[M]								
JK401	SJF3068-7N	JK, RCA TERMINAL	[M]								
JK402	SJF3069N	JK, LINE	[M]								
JK403	SJF3069N	JK, LINE	[M]								
JK404	SJF3069N	JK, LINE	[M]								
JK405	SJFD7	JK, FM MULTI OUT	[M]								
JK601	RJH5601	JK, SP TERMINAL	[M]								
JK602	RJR0054	JK, SP TERMINAL	[M]								
JK794	SJS9231-1B	JK, SOCKET	[M] △								
		<b>EARTH TERMINALS</b>									
E401	SNE1004-2	EARTH TERMINAL	[M]								
E601	SNE1004-2	EARTH TERMINAL	[M]								
		<b>WIRES</b>									
W701	RWJ1812150CQ	WIRE	[M]								
W752	RWJ1803250CQ	WIRE	[M]								

## Resistors & Capacitors

Notes : \* Important safety notice:













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

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality 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.

\* Capacitor values are in microfarad ( $\mu$ F) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)

\* Resistors values are in ohms, unless specified otherwise, 1k=1,000(OHM), 1M=1,000k(OHM)

Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks
	<b>RESISTORS</b>										
R103	ERDS2TJ101T	100 1/4W [M]	R171	ERDS2TJ102T	1K 1/4W [M]	R427	ERDS2TJ103T	10K 1/4W [M]	R521	ERDS2TJ223T	22K 1/4W [M]
R104	ERDS2TJ102T	1K 1/4W [M]	R172	ERDS2TJ102T	1K 1/4W [M]	R440	ERDS1FVJ820T $\triangle$	82 1/2W [M]	R522	ERDS2TJ223T	22K 1/4W [M]
R105	ERDS2TJ471T	470 1/4W [M]	R173	ERDS2TJ471T	470 1/4W [M]	R441	ERDS2TJ473T	47K 1/4W [M]	R523	ERDS2TJ392T	3.9K 1/4W [M]
R106	ERDS2TJ224T	220K 1/4W [M]	R175	ERDS2TJ102T	1K 1/4W [M]	R442	ERDS2TJ473T	47K 1/4W [M]	R524	ERDS2TJ392T	3.9K 1/4W [M]
R107	ERDS2TJ471T	470 1/4W [M]	R176	ERDS2TJ391T	390 1/4W [M]	R443	ERDS2TJ330T	33 1/4W [M]	R525	ERDS2TJ222T	2.2K 1/4W [M]
R110	ERDS2TJ102T	1K 1/4W [M]	R181	ERDS2TJ332T	3.3K 1/4W [M]	R451	ERDS2TJ224T	220K 1/4W [M]	R526	ERDS2TJ222T	2.2K 1/4W [M]
R112	ERDS2TJ104T	100K 1/4W [M]	R301	ERDS2TJ750T	75 1/4W [M]	R452	ERDS2TJ224T	220K 1/4W [M]	R527	ERDS2TJ122T	1.2K 1/4W [M]
R113	ERDS2TJ103T	10K 1/4W [M]	R302	ERDS2TJ750T	75 1/4W [M]	R453	ERDS2TJ391T	390 1/4W [M]	R528	ERDS2TJ122T	1.2K 1/4W [M]
R114	ERDS2TJ562T	5.6K 1/4W [M]	R359	ERDS2TJ750T	75 1/4W [M]	R454	ERDS2TJ391T	390 1/4W [M]	R529	ERDS2TJ273T	27K 1/4W [M]
R115	ERDS2TJ561T	560 1/4W [M]	R362	ERDS2TJ750T	75 1/4W [M]	R455	ERDS2TJ563T	56K 1/4W [M]	R530	ERDS2TJ273T	27K 1/4W [M]
R116	ERDS2TJ102T	1K 1/4W [M]	R367	ERDS2TJ102T	1K 1/4W [M]	R456	ERDS2TJ563T	56K 1/4W [M]	R531	ERDS2TJ332T	3.3K 1/4W [M]
R117	ERDS2TJ473T	47K 1/4W [M]	R368	ERDS2TJ102T	1K 1/4W [M]	R457	ERDS2TJ271T	270 1/4W [M]	R532	ERDS2TJ332T	3.3K 1/4W [M]
R118	ERDS2TJ562T	5.6K 1/4W [M]	R369	ERDS2TJ182T	1.8K 1/4W [M]	R458	ERDS2TJ271T	270 1/4W [M]	R533	ERDS2TJ103T	10K 1/4W [M]
R119	ERDS2TJ183T	18K 1/4W [M]	R370	ERDS2TJ182T	1.8K 1/4W [M]	R459	ERDS2TJ680T	68 1/4W [M]	R534	ERDS2TJ103T	10K 1/4W [M]
R120	ERDS2TJ473T	47K 1/4W [M]	R371	ERD2FCVG220T	22 1/4W [M]	R460	ERDS2TJ680T	68 1/4W [M]	R543	ERDS2TJ102T	1K 1/4W [M]
R121	ERDS2TJ332T	3.3K 1/4W [M]	R372	ERD2FCVG220T	22 1/4W [M]	R461	ERDS2TJ184T	180K 1/4W [M]	R544	ERDS2TJ102T	1K 1/4W [M]
R122	ERDS2TJ272T	2.7K 1/4W [M]	R373	ERDS2TJ103T	10K 1/4W [M]	R462	ERDS2TJ184T	180K 1/4W [M]	R545	ERDS2TJ684T	680K 1/4W [M]
R124	ERDS2TJ221T	220 1/4W [M]	R374	ERDS2TJ103T	10K 1/4W [M]	R463	ERDS2TJ123T	12K 1/4W [M]	R546	ERDS2TJ103T	10K 1/4W [M]
R125	ERDS2TJ472T	4.7K 1/4W [M]	R401	ERDS2TJ102T	1K 1/4W [M]	R464	ERDS2TJ123T	12K 1/4W [M]	R551	ERDS2TJ102T	1K 1/4W [M]
R126	ERDS2TJ472T	4.7K 1/4W [M]	R402	ERDS2TJ102T	1K 1/4W [M]	R465	ERDS2TJ563T	56K 1/4W [M]	R552	ERDS2TJ102T	1K 1/4W [M]
R127	ERDS2TJ103T	10K 1/4W [M]	R405	ERDS2TJ102T	1K 1/4W [M]	R466	ERDS2TJ563T	56K 1/4W [M]	R553	ERDS2TJ104T	100K 1/4W [M]
R128	ERDS2TJ820T	82 1/4W [M]	R406	ERDS2TJ102T	1K 1/4W [M]	R467	ERDS2TJ102T	1K 1/4W [M]	R554	ERDS2TJ104T	100K 1/4W [M]
R129	ERDS2TJ473T	47K 1/4W [M]	R407	ERDS2TJ102T	1K 1/4W [M]	R468	ERDS2TJ102T	1K 1/4W [M]	R555	ERDS2TJ223T	22K 1/4W [M]
R130	ERDS2TJ102T	1K 1/4W [M]	R408	ERDS2TJ102T	1K 1/4W [M]	R469	ERDS2TJ102T	1K 1/4W [M]	R556	ERDS2TJ223T	22K 1/4W [M]
R131	ERDS2TJ102T	1K 1/4W [M]	R409	ERDS2TJ102T	1K 1/4W [M]	R470	ERDS2TJ102T	1K 1/4W [M]	R557	ERDS2TJ681T	680 1/4W [M]
R132	ERDS2TJ103T	10K 1/4W [M]	R410	ERDS2TJ102T	1K 1/4W [M]	R501	ERDS2TJ222T	2.2K 1/4W [M]	R558	ERDS2TJ102T	1K 1/4W [M]
R133	ERDS2TJ102T	1K 1/4W [M]	R411	ERDS2TJ102T	1K 1/4W [M]	R502	ERDS2TJ222T	2.2K 1/4W [M]	R561	ERDS2TJ332T	3.3K 1/4W [M]
R134	ERDS2TJ102T	1K 1/4W [M]	R412	ERDS2TJ102T	1K 1/4W [M]	R503	ERDS2TJ103T	10K 1/4W [M]	R562	ERDS2TJ332T	3.3K 1/4W [M]
R135	ERDS2TJ102T	1K 1/4W [M]	R413	ERDS2TJ102T	1K 1/4W [M]	R504	ERDS2TJ103T	10K 1/4W [M]	R563	ERDS2TJ104T	100K 1/4W [M]
R136	ERDS2TJ102T	1K 1/4W [M]	R414	ERDS2TJ102T	1K 1/4W [M]	R505	ERDS2TJ103T	10K 1/4W [M]	R564	ERDS2TJ104T	100K 1/4W [M]
R137	ERDS2TJ102T	1K 1/4W [M]	R415	ERDS2TJ102T	1K 1/4W [M]	R506	ERDS2TJ103T	10K 1/4W [M]	R565	ERDS2TJ102T	1K 1/4W [M]
R139	ERDS2TJ272T	2.7K 1/4W [M]	R416	ERDS2TJ102T	1K 1/4W [M]	R508	ERDS1FVJ2R2T $\triangle$	2.2 1/2W [M]	R566	ERDS2TJ102T	1K 1/4W [M]
R140	ERDS2TJ272T	2.7K 1/4W [M]	R417	ERDS2TJ473T	47K 1/4W [M]	R511	ERDS2TJ471T	470 1/4W [M]	R567	ERDS2TJ101T	100 1/4W [M]
R141	ERDS2TJ102T	1K 1/4W [M]	R418	ERDS2TJ473T	47K 1/4W [M]	R512	ERDS2TJ471T	470 1/4W [M]	R568	ERDS2TJ101T	100 1/4W [M]
R142	ERDS2TJ102T	1K 1/4W [M]	R419	ERDS2TJ104T	100K 1/4W [M]	R513	ERDS2TJ474T	470K 1/4W [M]	R569	ERDS2TJ332T	3.3K 1/4W [M]
R143	ERDS2TJ222T	2.2K 1/4W [M]	R420	ERDS2TJ104T	100K 1/4W [M]	R514	ERDS2TJ474T	470K 1/4W [M]	R601	ERDS2TJ102T	1K 1/4W [M]
R144	ERDS2TJ222T	2.2K 1/4W [M]	R421	ERDS2TJ104T	100K 1/4W [M]	R515	ERDS2TJ474T	470K 1/4W [M]	R602	ERDS2TJ102T	1K 1/4W [M]
R147	ERDS2TJ474T	470K 1/4W [M]	R422	ERDS2TJ104T	100K 1/4W [M]	R516	ERDS2TJ474T	470K 1/4W [M]	R603	ERDS2TJ102T	1K 1/4W [M]
R148	ERDS2TJ474T	470K 1/4W [M]	R423	ERDS2TJ102T	1K 1/4W [M]	R517	ERDS2TJ222T	2.2K 1/4W [M]	R604	ERDS2TJ102T	1K 1/4W [M]
R149	ERDS2TJ680T	68 1/4W [M]	R424	ERDS2TJ102T	1K 1/4W [M]	R518	ERDS2TJ222T	2.2K 1/4W [M]	R605	ERDS2TJ392T	3.9K 1/4W [M]
			R425	ERDS2TJ103T	10K 1/4W [M]	R519	ERDS2TJ222T	2.2K 1/4W [M]	R606	ERDS2TJ392T	3.9K 1/4W [M]
			R426	ERDS2TJ103T	10K 1/4W [M]	R520	ERDS2TJ222T	2.2K 1/4W [M]	R607	ERDS2TJ223T	22K 1/4W [M]

Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks
R608	ERDS2TJ223T	22K 1/4W [M]	R658	ERDS2TJ333T	33K 1/4W [M]	R740	ERDS2TJ393T	39K 1/4W [M]	R944	ERDS2TJ104T	100K 1/4W [M]
R609	ERDS2TJ222T	2.2K 1/4W [M]	R659	ERDS2TJ183T	18K 1/4W [M]	R742	ERDS2TJ393T	39K 1/4W [M]	R945	ERDS2TJ104T	100K 1/4W [M]
R610	ERDS2TJ222T	2.2K 1/4W [M]	R660	ERDS2TJ224T	220K 1/4W [M]	R743	ERDS2TJ183T	18K 1/4W [M]	R946	ERDS2TJ103T	10K 1/4W [M]
R611	ERDS2TJ222T	2.2K 1/4W [M]	R661	ERDS2TJ102T	1K 1/4W [M]	R754	ERDS2TJ102T	1K 1/4W [M]	R947	ERDS2TJ103T	10K 1/4W [M]
R612	ERDS2TJ222T	2.2K 1/4W [M]	R662	ERDS2TJ102T	1K 1/4W [M]	R756	ERDS2TJ222T	2.2K 1/4W [M]	R948	ERDS2TJ103T	10K 1/4W [M]
R613	ERDS2TJ182T	1.8K 1/4W [M]	R663	ERDS2TJ102T	1K 1/4W [M]	R771	ERDS2TJ473T	47K 1/4W [M]	R949	ERDS2TJ103T	10K 1/4W [M]
R614	ERDS2TJ182T	1.8K 1/4W [M]	R665	ERDS2TJ472T	4.7K 1/4W [M]	R772	ERDS2TJ473T	47K 1/4W [M]	R950	ERDS2TJ102T	1K 1/4W [M]
R615	ERDS2TJ182T	1.8K 1/4W [M]	R666	ERDS2TJ472T	4.7K 1/4W [M]	R773	ERDS2TJ103T	10K 1/4W [M]	R951	ERDS2TJ122T	1.2K 1/4W [M]
R616	ERDS2TJ182T	1.8K 1/4W [M]	R681	ERDS2TJ270T	27 1/4W [M]	R774	ERDS2TJ335T	3.3M 1/4W [M]	R952	ERDS2TJ152T	1.5K 1/4W [M]
R617	ERDS2TJ563T	56K 1/4W [M]	R682	ERDS2TJ270T	27 1/4W [M]	R775	ERDS2TJ331T	330 1/4W [M]	R953	ERDS2TJ182T	1.8K 1/4W [M]
R618	ERDS2TJ563T	56K 1/4W [M]	R683	ERDS2TJ270T	27 1/4W [M]	R776	ERD25FVJ4R7T	4.7 1/4W [M]	R954	ERDS2TJ222T	2.2K 1/4W [M]
R619	ERDS2TJ563T	56K 1/4W [M]	R684	ERDS2TJ270T	27 1/4W [M]	R777	ERDS2TJ473T	47K 1/4W [M]	R955	ERDS2TJ332T	3.3K 1/4W [M]
R620	ERDS2TJ563T	56K 1/4W [M]	R685	ERDS2TJ270T	27 1/4W [M]	R778	ERDS2TJ472T	4.7K 1/4W [M]	R956	ERDS2TJ472T	4.7K 1/4W [M]
R621	ERDS2TJ470T	47 1/4W [M]	R686	ERDS2TJ270T	27 1/4W [M]	R779	ERDS2TJ103T	10K 1/4W [M]	R957	ERDS2TJ682T	6.8K 1/4W [M]
R622	ERDS2TJ470T	47 1/4W [M]	R687	ERDS2TJ270T	27 1/4W [M]	R782	ERDS2TJ470T	47 1/4W [M]	R958	ERDS2TJ123T	12K 1/4W [M]
R623	ERDS2TJ470T	47 1/4W [M]	R688	ERDS2TJ270T	27 1/4W [M]	R783	ERDS2TJ103T	10K 1/4W [M]	R960	ERDS2TJ102T	1K 1/4W [M]
R624	ERDS2TJ470T	47 1/4W [M]	R689	ERDS2TJ270T	27 1/4W [M]	R784	ERDS2TJ154T	150K 1/4W [M]	R961	ERDS2TJ122T	1.2K 1/4W [M]
R625	ERDS1FVJ100T 	10 1/2W [M]	R690	ERDS2TJ270T	27 1/4W [M]	R785	ERDS2TJ103T	10K 1/4W [M]	R962	ERDS2TJ152T	1.5K 1/4W [M]
R626	ERDS1FVJ100T 	10 1/2W [M]	R691	ERDS2TJ270T	27 1/4W [M]	R786	ERDS2TJ104T	100K 1/4W [M]	R963	ERDS2TJ182T	1.8K 1/4W [M]
R627	ERDS1FVJ100T 	10 1/2W [M]	R692	ERDS2TJ270T	27 1/4W [M]	R787	ERDS2TJ223T	22K 1/4W [M]	R964	ERDS2TJ222T	2.2K 1/4W [M]
R628	ERDS1FVJ100T 	10 1/2W [M]	R693	ERDS2TJ270T	27 1/4W [M]	R788	ERDS2TJ223T	22K 1/4W [M]	R970	ERDS2TJ102T	1K 1/4W [M]
R629	ERDS2TJ104T	100K 1/4W [M]	R694	ERDS2TJ270T	27 1/4W [M]	R789	ERDS2TJ223T	22K 1/4W [M]	R971	ERDS2TJ122T	1.2K 1/4W [M]
R630	ERDS2TJ124T	120K 1/4W [M]	R695	ERDS2TJ102T	1K 1/4W [M]	R790	ERDS2TJ223T	22K 1/4W [M]	R972	ERDS2TJ152T	1.5K 1/4W [M]
R631	ERDS2TJ154T	150K 1/4W [M]	R696	ERDS2TJ102T	1K 1/4W [M]	R793	ERDS2TJ682T	6.8K 1/4W [M]	R973	ERDS2TJ182T	1.8K 1/4W [M]
R632	ERDS2TJ184T	180K 1/4W [M]	R699	ERDS2TJ332T	3.3K 1/4W [M]	R794	ERDS2TJ682T	6.8K 1/4W [M]	R974	ERDS2TJ222T	2.2K 1/4W [M]
R633	ERDS2TJ473T	47K 1/4W [M]	R703	ERDS1FVJ3R9T 	3.9 1/2W [M]	R901	ERDS2TJ102T	1K 1/4W [M]	R980	ERDS2TJ102T	1K 1/4W [M]
R634	ERDS2TJ684T	680K 1/4W [M]	R704	ERDS1FVJ3R9T 	3.9 1/2W [M]	R903	ERDS2TJ104T	100K 1/4W [M]	R981	ERDS2TJ122T	1.2K 1/4W [M]
R635	ERDS2TJ154T	150K 1/4W [M]	R705	ERDS2TJ472T	4.7K 1/4W [M]	R906	ERDS2TJ182T	1.8K 1/4W [M]	R982	ERDS2TJ152T	1.5K 1/4W [M]
R636	ERDS2TJ684T	680K 1/4W [M]	R706	ERDS2TJ102T	1K 1/4W [M]	R907	ERDS2TJ104T	100K 1/4W [M]	R983	ERDS2TJ182T	1.8K 1/4W [M]
R637	ERDS2TJ104T	100K 1/4W [M]	R707	ERD25FVJ221T	220 1/4W [M]	R908	ERDS2TJ104T	100K 1/4W [M]	R985	ERDS2TJ222T	2.2K 1/4W [M]
R638	ERDS2TJ563T	56K 1/4W [M]	R708	ERDS2TJ152T	1.5K 1/4W [M]	R909	ERDS2TJ104T	100K 1/4W [M]	R1001	ERDS2TJ223T	22K 1/4W [M]
R639	ERDS2TJ333T	33K 1/4W [M]	R709	ERDS2TJ1R5T	1.5 1/4W [M]	R910	ERDS2TJ102T	1K 1/4W [M]	R1002	ERDS2TJ223T	22K 1/4W [M]
R640	ERDS2TJ473T	47K 1/4W [M]	R710	ERDS2TJ1R5T	1.5 1/4W [M]	R911	ERDS2TJ104T	100K 1/4W [M]	R1003	ERDS2TJ102T	1K 1/4W [M]
R641	ERDS2TJ221T	220 1/4W [M]	R711	ERDS2TJ752T	7.5K 1/4W [M]	R917	ERDS2TJ103T	10K 1/4W [M]	R1004	ERDS2TJ102T	1K 1/4W [M]
R642	ERDS2TJ221T	220 1/4W [M]	R712	ERDS2TJ682T	6.8K 1/4W [M]	R918	ERDS2TJ102T	1K 1/4W [M]	R1005	ERDS2TJ203T	20K 1/4W [M]
R643	ERDS2TJ221T	220 1/4W [M]	R713	ERDS2TJ390T	39 1/4W [M]	R919	ERDS2TJ102T	1K 1/4W [M]	R1007	ERDS2TJ473T	47K 1/4W [M]
R644	ERDS2TJ221T	220 1/4W [M]	R714	ERDS2TJ390T	39 1/4W [M]	R920	ERDS2TJ271T	270 1/4W [M]	R1008	ERDS2TJ473T	47K 1/4W [M]
R645	ERG1SJ101E 	100 1W [M]	R721	ERD2FCVG151T	150 1/4W [M]	R921	ERDS2TJ121T	120 1/4W [M]	R1009	ERDS2TJ332T	3.3K 1/4W [M]
R646	ERG1SJ101E 	100 1W [M]	R722	ERDS2TJ392T	3.9K 1/4W [M]	R922	ERDS2TJ472T	4.7K 1/4W [M]	R1010	ERDS2TJ332T	3.3K 1/4W [M]
R647	ERG1SJ101E 	100 1W [M]	R723	ERDS1FVJ3R9T 	3.9 1/2W [M]	R924	ERDS2TJ103T	10K 1/4W [M]	R1011	ERDS2TJ332T	3.3K 1/4W [M]
R648	ERG1SJ101E 	100 1W [M]	R724	ERDS1FVJ3R9T 	3.9 1/2W [M]	R925	ERDS2TJ103T	10K 1/4W [M]	R1012	ERDS2TJ102T	1K 1/4W [M]
R649	ERD2FCVG220T	22 1/4W [M]	R725	ERDS2TJ102T	1K 1/4W [M]	R927	ERDS2TJ181T	180 1/4W [M]	R1016	ERD2FCVJ6R8T	6.8 1/4W [M]
R650	ERD2FCVG220T	22 1/4W [M]	R731	ERD2FCVG220T	22 1/4W [M]	R929	ERDS2TJ101T	100 1/4W [M]	R1051	ERDS2TJ393T	39K 1/4W [M]
R652	ERD25FVJ4R7T	4.7 1/4W [M]	R732	ERDS2TJ153T	15K 1/4W [M]	R930	ERDS2TJ101T	100 1/4W [M]	R1052	ERDS2TJ105T	1M 1/4W [M]
R653	ERDS2TJ682T	6.8K 1/4W [M]	R733	ERDS2TJ123T	12K 1/4W [M]	R936	ERDS2TJ103T	10K 1/4W [M]	R1053	ERDS2TJ102T	1K 1/4W [M]
R654	ERDS2TJ682T	6.8K 1/4W [M]	R734	ERDS2TJ562T	5.6K 1/4W [M]	R937	ERDS2TJ103T	10K 1/4W [M]	R1055	ERDS2TJ473T	47K 1/4W [M]
R656	ERDS2TJ681T	680 1/4W [M]	R735	ERDS2TJ103T	10K 1/4W [M]	R941	ERDS2TJ472T	4.7K 1/4W [M]	R1056	ERDS2TJ473T	47K 1/4W [M]
R657	ERDS2TJ333T	33K 1/4W [M]	R739	ERD2FCVG220T	22 1/4W [M]	R943	ERDS2TJ102T	1K 1/4W [M]	R1061	ERDS2TJ222T	2.2K 1/4W [M]

Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks
	<b>CAPACITORS</b>		C148	ECBT1C103NS5	0.01 16V [M]	C440	ECBT1E103ZF5	0.01 25V [M]	C551	ECEA1HKA3R3B	3.3 50V [M]
			C149	ECBT1C103NS5	0.01 16V [M]	C451	ECEA1VKA4R7B	4.7 35V [M]	C552	ECEA1HKA3R3B	3.3 50V [M]
C101	ECBT1C103NS5	0.01 16V [M]	C150	ECBT1H104ZF5	0.1 50V [M]	C452	ECEA1VKA4R7B	4.7 35V [M]	C553	ECBT1H101KB5	100P 50V [M]
C103	ECBT1C103NS5	0.01 16V [M]	C172	ECBT1H331KB5	330P 50V [M]	C453	ECBT1H100JC5	10P 50V [M]	C554	ECBT1H101KB5	100P 50V [M]
C104	ECBT1H102KB5	1000P 50V [M]	C173	ECEA1CKA220B	22 16V [M]	C454	ECBT1H100JC5	10P 50V [M]	C555	ECBT1H221KB5	220P 50V [M]
C105	ECBT1H470J5	47P 50V [M]	C174	ECEA1CKA101B	100 16V [M]	C455	ECBT1H102KB5	1000P 50V [M]	C556	ECBT1H221KB5	220P 50V [M]
C106	ECBT1C103NS5	0.01 16V [M]	C175	ECBT1C103NS5	0.01 16V [M]	C456	ECBT1H102KB5	1000P 50V [M]	C557	ECBT1E103ZF5	0.01 25V [M]
C107	ECBT1H473ZF5	0.047 50V [M]	C176	ECBT1C103NS5	0.01 16V [M]	C457	ECA1CM330B	33 16V [M]	C558	ECBT1E103ZF5	0.01 25V [M]
C108	ECBT1H8R2KC5	8.2P 50V [M]	C181	ECBT1H471KB5	470P 50V [M]	C458	ECA1CM330B	33 16V [M]	C559	ECEA1CKA100B	10 16V [M]
C109	ECBT1C103NS5	0.01 16V [M]	C196	ECBT1H102KB5	1000P 50V [M]	C459	ECFR1E223KR	0.022 25V [M]	C560	ECEA1CKA100B	10 16V [M]
C110	ECBT1C103NS5	0.01 16V [M]	C330	ECBT1H470J5	47P 50V [M]	C460	ECFR1E223KR	0.022 25V [M]	C561	ECA1HM3R3B	3.3 50V [M]
C111	ECEA1EKA4R7B	4.7 25V [M]	C331	ECBT1H470J5	47P 50V [M]	C461	ECBT1C682KR5	6800P 16V [M]	C562	ECA1HM3R3B	3.3 50V [M]
C112	ECBT1C103NS5	0.01 16V [M]	C332	ECKR1H223ZF5	0.022 50V [M]	C462	ECBT1C682KR5	6800P 16V [M]	C563	ECBT1H104ZF5	0.1 50V [M]
C113	ECBT1H102KB5	1000P 50V [M]	C333	ECKR1H223ZF5	0.022 50V [M]	C463	ECEA1VKA4R7B	4.7 35V [M]	C601	ECEA1CKA220B	22 16V [M]
C114	ECEA1HKA3R3B	3.3 50V [M]	C351	ECEA1CU101B	100 16V [M]	C464	ECEA1VKA4R7B	4.7 35V [M]	C602	ECEA1CKA220B	22 16V [M]
C115	ECEA1EKA4R7B	4.7 25V [M]	C352	ECEA1CU101B	100 16V [M]	C465	ECBT1E103ZF5	0.01 25V [M]	C603	ECEA1VKA4R7B	4.7 35V [M]
C116	ECBT1C822MS5	8200P 16V [M]	C354	ECBT1E103ZF5	0.01 25V [M]	C466	ECBT1E103ZF5	0.01 25V [M]	C604	ECEA1VKA4R7B	4.7 35V [M]
C117	ECQB1H471JM3	470P 50V [M]	C355	ECBT1E103ZF5	0.01 25V [M]	C469	ECBT1H181KB5	180P 50V [M]	C605	ECA1JM330B	33 6.3V [M]
C118	ECQB1H103JM3	0.01 50V [M]	C357	ECBT1E103ZF5	0.01 25V [M]	C470	ECBT1H181KB5	180P 50V [M]	C606	ECA1JM330B	33 6.3V [M]
C119	ECQB1H103JM3	0.01 50V [M]	C358	ECBT1E103ZF5	0.01 25V [M]	C503	ECEA0JKA101B	100 6.3V [M]	C607	ECA1JM330B	33 6.3V [M]
C120	ECEA1HKA010B	1 50V [M]	C373	ECA1EM470B	47 25V [M]	C504	ECEA0JKA101B	100 6.3V [M]	C608	ECA1JM330B	33 6.3V [M]
C121	ECEA1HKA010B	1 50V [M]	C374	ECA1EM470B	47 25V [M]	C505	ECFR1C104MR	0.1 16V [M]	C609	ECCR1H120KC5	12P 50V [M]
C122	ECEA1HKA2R2B	2.2 50V [M]	C401	ECEA1VKA4R7B	4.7 35V [M]	C506	ECFR1C104MR	0.1 16V [M]	C610	ECCR1H120KC5	12P 50V [M]
C123	ECEA1HKA010B	1 50V [M]	C402	ECEA1VKA4R7B	4.7 35V [M]	C511	ECEA1HKA3R3B	3.3 50V [M]	C611	ECCR1H120KC5	12P 50V [M]
C124	ECBT1H102KB5	1000P 50V [M]	C403	ECBT1E103ZF5	0.01 25V [M]	C512	ECEA1HKA3R3B	3.3 50V [M]	C612	ECCR1H120KC5	12P 50V [M]
C125	ECBT1H150JC5	15P 50V [M]	C404	ECBT1E103ZF5	0.01 25V [M]	C513	ECBT1H150J5	15P 50V [M]	C613	ECBT1H821KB5	820P 50V [M]
C126	ECBT1H104ZF5	0.1 50V [M]	C405	ECBT1H101KB5	100P 50V [M]	C514	ECBT1H150J5	15P 50V [M]	C614	ECBT1H821KB5	820P 50V [M]
C127	ECEA1CKA220B	22 16V [M]	C406	ECBT1H101KB5	100P 50V [M]	C515	ECBT1H221KB5	220P 50V [M]	C615	ECBT1H821KB5	820P 50V [M]
C128	ECBT1C103NS5	0.01 16V [M]	C409	ECEA1CKA220B	22 16V [M]	C516	ECBT1H221KB5	220P 50V [M]	C616	ECBT1H821KB5	820P 50V [M]
C129	ECEA0JKA101B	100 6.3V [M]	C410	ECEA1CKA220B	22 16V [M]	C517	ECBT1H330J5	33P 50V [M]	C617	ECQV1H104JM3	0.1 50V [M]
C130	ECEA0JKA101B	100 6.3V [M]	C411	ECBT1H101KB5	100P 50V [M]	C518	ECBT1H330J5	33P 50V [M]	C618	ECQV1H104JM3	0.1 50V [M]
C131	ECBT1C103NS5	0.01 16V [M]	C412	ECBT1H101KB5	100P 50V [M]	C519	ECEA1VKA4R7B	4.7 35V [M]	C619	ECQV1H104JM3	0.1 50V [M]
C132	ECBT1H102KB5	1000P 50V [M]	C415	ECBT1E103ZF5	0.01 25V [M]	C520	ECEA1VKA4R7B	4.7 35V [M]	C620	ECQV1H104JM3	0.1 50V [M]
C133	ECBT1H150JC5	15P 50V [M]	C416	ECBT1E103ZF5	0.01 25V [M]	C521	ECEA1VKA4R7B	4.7 35V [M]	C621	ECEA2AU100B	10 100V [M]
C134	ECBT1H180JC5	18P 50V [M]	C417	ECBT1H101KB5	100P 50V [M]	C522	ECEA1VKA4R7B	4.7 35V [M]	C622	ECEA1HN010SB	1 50V [M]
C135	ECBT1C103MS5	0.01 16V [M]	C418	ECBT1H101KB5	100P 50V [M]	C523	ECFR1E123KR	0.012 25V [M]	C623	ECA1HM470B	47 50V [M]
C136	ECBT1C103MS5	0.01 16V [M]	C419	ECBT1H331KB5	330P 50V [M]	C524	ECFR1E123KR	0.012 25V [M]	C624	ECEA2AN2R2SB	2.2 100V [M]
C137	ECBT1H561KB5	560P 50V [M]	C420	ECBT1H331KB5	330P 50V [M]	C525	ECQV1H683JM3	0.068 50V [M]	C625	ECEA1HN100SB	10 50V [M]
C138	ECBT1H561KB5	560P 50V [M]	C421	ECBT1H331KB5	330P 50V [M]	C526	ECQV1H683JM3	0.068 50V [M]	C626	ECEA1HN100SB	10 50V [M]
C139	ECQB1H682JM3	6800P 50V [M]	C422	ECBT1H331KB5	330P 50V [M]	C527	ECBT1C562KR5	5600P 16V [M]	C627	ECKR1H223ZF5	0.022 50V [M]
C140	ECQB1H682JM3	6800P 50V [M]	C423	ECBT1H101KB5	100P 50V [M]	C528	ECBT1C562KR5	5600P 16V [M]	C628	ECKR1H223ZF5	0.022 50V [M]
C141	ECEA1HKA010B	1 50V [M]	C424	ECBT1H101KB5	100P 50V [M]	C529	ECQB1H273JF3	0.027 50V [M]	C629	ECKR1H223ZF5	0.022 50V [M]
C142	ECEA1HKA010B	1 50V [M]	C425	ECBT1H101KB5	100P 50V [M]	C530	ECQB1H273JF3	0.027 50V [M]	C630	ECKR1H223ZF5	0.022 50V [M]
C143	ECEA1HKA010B	1 50V [M]	C426	ECBT1H101KB5	100P 50V [M]	C531	ECBT1E103ZF5	0.01 25V [M]	C631	ECKR1H223ZF5	0.022 50V [M]
C144	ECEA1HKA010B	1 50V [M]	C427	ECBT1H221KB5	220P 50V [M]	C532	ECBT1E103ZF5	0.01 25V [M]	C632	ECKR1H223ZF5	0.022 50V [M]
C145	ECBT1H220JC5	22P 50V [M]	C428	ECBT1H221KB5	220P 50V [M]	C533	ECEA1CKA220B	22 16V [M]	C635	ECEA1VKA4R7B	4.7 35V [M]
C146	ECBT1H331KB5	330P 50V [M]	C431	ECEA1CKA100B	10 16V [M]	C534	ECEA1CKA220B	22 16V [M]	C636	ECEA1HN010SB	1 50V [M]
C147	ECBT1H102KB5	1000P 50V [M]	C432	ECEA1CKA100B	10 16V [M]	C536	ECBT1E103ZF5	0.01 25V [M]	C637	ECBT1H102KB5	1000P 50V [M]

Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks	Ref No.	Part No.	Values & Remarks
C638	ECBT1H101KB5	100P 50V [M]	C909	ECEA1HKA220B	22 50V [M]	C1021	ECEA1HKAR15B	0.15 50V [M]			
C639	ECBT1H102KB5	1000P 50V [M]	C910	ECEA1HKA220B	22 50V [M]	C1022	ECA1HM3R3B	3.3 50V [M]			
C640	ECKR1H223ZF5	0.022 50V [M]	C911	ECEA1HKA220B	22 50V [M]	C1023	ECQV1H154JM3	0.15 50V [M]			
C641	ECQV1H104JM3	0.1 50V [M]	C912	ECEA1HKA220B	22 50V [M]	C1024	ECQV1H154JM3	0.15 50V [M]			
C642	ECQV1H104JM3	0.1 50V [M]	C913	ECEA1VKA100B	10 35V [M]	C1025	ECA1HM3R3B	3.3 50V [M]			
C643	ECQV1H104JM3	0.1 50V [M]	C914	ECEA1VKA100B	10 35V [M]	C1026	ECEA1HKAR15B	0.15 50V [M]			
C644	ECQV1H104JM3	0.1 50V [M]	C916	ECEA1HKA010B	1 50V [M]	C1027	ECEA1VKA4R7B	4.7 35V [M]			
C683	ECBT1C332KR5	3300P 16V [M]	C917	ECEA0JKA101B	100 6.3V [M]	C1028	ECA1HMR47B	0.47 50V [M]			
C684	ECBT1C332KR5	3300P 16V [M]	C918	ECEA0JKA101B	100 6.3V [M]	C1029	ECEA1VKA4R7B	4.7 35V [M]			
C685	ECBT1E103ZF5	0.01 25V [M]	C919	ECBT1E103ZF5	0.01 25V [M]	C1030	ECA1HMR47B	0.47 50V [M]			
C701	ECBT1E103ZF5	0.01 25V [M]	C920	ECEA1HKA010B	1 50V [M]	C1031	ECQV1H104JM3	0.1 50V [M]			
C702	ECQE2104KF3	0.1 250V [M]	C935	ECBT1H101KB5	100P 50V [M]	C1032	ECQV1H104JM3	0.1 50V [M]			
C703	EC0S1HP682BB	6800P 50V [M]	C939	ECBT1H101KB5	100P 50V [M]	C1033	ECA1EM470B	47 25V [M]			
C704	EC0S1HP682BB	6800P 50V [M]	C943	ECBT1H331KB5	330P 50V [M]	C1034	ECQV1H474JM3	0.47 50V [M]			
C705	EC0S1VP562BB	5600P 35V [M]	C944	ECEA1CKA100B	10 16V [M]	C1035	ECBT1H681KB5	680P 50V [M]			
C706	EC0S1VP562BB	5600P 35V [M]	C945	ECBT1E103ZF5	0.01 25V [M]	C1036	ECBT1H101KB5	100P 50V [M]			
C707	ECA1VM101B	100 35V [M]	C946	ECBT1H470J5	47P 50V [M]	C1037	ECBT1H101KB5	100P 50V [M]			
C708	ECKR1H103ZF5	0.01 50V [M]	C947	ECBT1H470J5	47P 50V [M]	C1038	ECBT1H101KB5	100P 50V [M]			
C709	ECA1CM330B	33 16V [M]	C948	ECBT1E103ZF5	0.01 25V [M]	C1039	ECEA1CU101B	100 16V [M]			
C710	ECBT1E103ZF5	0.01 25V [M]	C949	ECBT1E103ZF5	0.01 25V [M]	C1040	ECEA1CKA100B	10 16V [M]			
C711	ECKR1H103ZF5	0.01 50V [M]	C952	ECBT1H101KB5	100P 50V [M]	C1041	ECBT1E103ZF5	0.01 25V [M]			
C712	ECA1HM100B	10 50V [M]	C953	ECBT1H101KB5	100P 50V [M]	C1051	ECA1HM2R2B	2.2 50V [M]			
C713	ECKR1H103ZF5	0.01 50V [M]	C955	ECBT1H101KB5	100P 50V [M]	C1052	ECA1HMR39B	0.33 50V [M]			
C714	ECA1EM470B	47 25V [M]	C956	ECBT1H101KB5	100P 50V [M]	C1053	ECA1HM3R3B	3.3 50V [M]			
C715	ECEA1CU101B	100 16V [M]	C961	ECBT1H101KB5	100P 50V [M]	C1054	ECEA0JU221B	220 6.3V [M]			
C721	ECQE2104KF3	0.1 250V [M]	C962	ECBT1H561KB5	560P 50V [M]	C1055	ECA1HMR47B	0.47 50V [M]			
C731	ECKR1H103ZF5	0.01 50V [M]	C963	ECBT1H102KB5	1000P 50V [M]	C1056	ECQV1H823JZ3	0.082 50V [M]			
C732	ECKR1H103ZF5	0.01 50V [M]	C1001	ECA1HM010B	1 50V [M]	C1057	ECBT1C332KR5	3300P 16V [M]			
C751	ECKWRS102MBC $\Delta$	1000P 400V [M]	C1002	ECA1HM010B	1 50V [M]	C1058	ECQV1H823JZ3	0.082 50V [M]			
C752	ECKR1H103ZF5	0.01 50V [M]	C1003	ECA1HM3R3B	3.3 50V [M]	C1059	ECEA1CU101B	100 16V [M]			
C753	ECA1EM102E $\Delta$	1000 25V [M]	C1004	ECA1HM3R3B	3.3 50V [M]	C1060	ECBT1E223ZF5	0.022 25V [M]			
C754	ECBT1E103ZF5	0.01 25V [M]	C1005	ECA1HM010B	1 50V [M]	C1062	ECBT1E223ZF5	0.022 25V [M]			
C755	ECA1CM470B $\Delta$	47 16V [M]	C1007	ECFR1E223KR	0.022 25V [M]	C1063	ECEA1CU101B	100 16V [M]			
C757	ECA1CM100B	10 16V [M]	C1008	ECFR1E473KR	0.047 25V [M]	C1065	ECBT1H681KB5	680P 50V [M]			
C771	ECEA1VKA4R7B	4.7 35V [M]	C1009	ECEA0JU221B	220 6.3V [M]	C1067	ECBT1C152KR5	1500P 16V [M]			
C772	ECEA1VKA4R7B	4.7 35V [M]	C1010	ECEA1CKA100B	10 16V [M]	C1068	ECBT1C152KR5	1500P 16V [M]			
C773	ECBT1E223ZF5	0.022 25V [M]	C1011	ECEA1CKA100B	10 16V [M]						
C774	ECEA0JKA101B	100 6.3V [M]	C1012	ECEA1CKA100B	10 16V [M]						
C775	ECBT1E223ZF5	0.022 25V [M]	C1013	ECEA1CKA100B	10 16V [M]						
C776	ECA1CM471B	470 16V [M]	C1014	ECEA0JU221B	220 6.3V [M]						
C901	ECA0JM102B	02 6.3V [M]	C1015	ECQV1H104JM3	0.1 50V [M]						
C902	ECBT1E223ZF5	0.022 25V [M]	C1016	ECQV1H104JM3	0.1 50V [M]						
C903	ECBT1E103ZF5	0.01 25V [M]	C1017	ECA1HMR47B	0.47 50V [M]						
C904	ECA0JM102B	02 6.3V [M]	C1018	ECEA1VKA4R7B	4.7 35V [M]						
C906	ECEA0JKA101B	100 6.3V [M]	C1019	ECA1HMR47B	0.47 50V [M]						
C908	ECBT1E103ZF5	0.01 25V [M]	C1020	ECEA1VKA4R7B	4.7 35V [M]						