



COLOR TELEVISION RECEIVER

Chassis : S51A
Model: CF6844N3X/XEF

SERVICE *Manual*

COLOR TELEVISION RECEIVER



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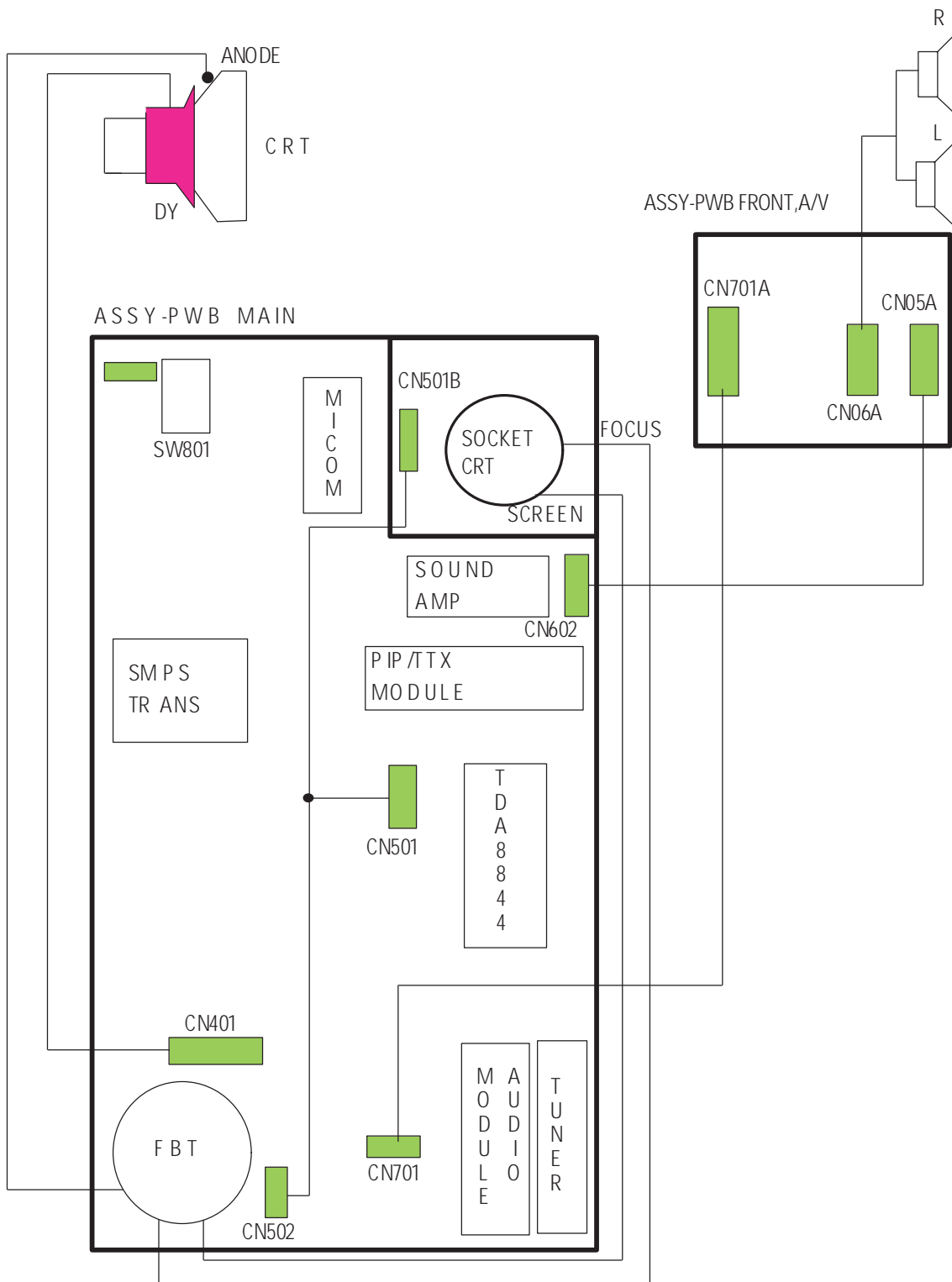
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ELECTRONICS

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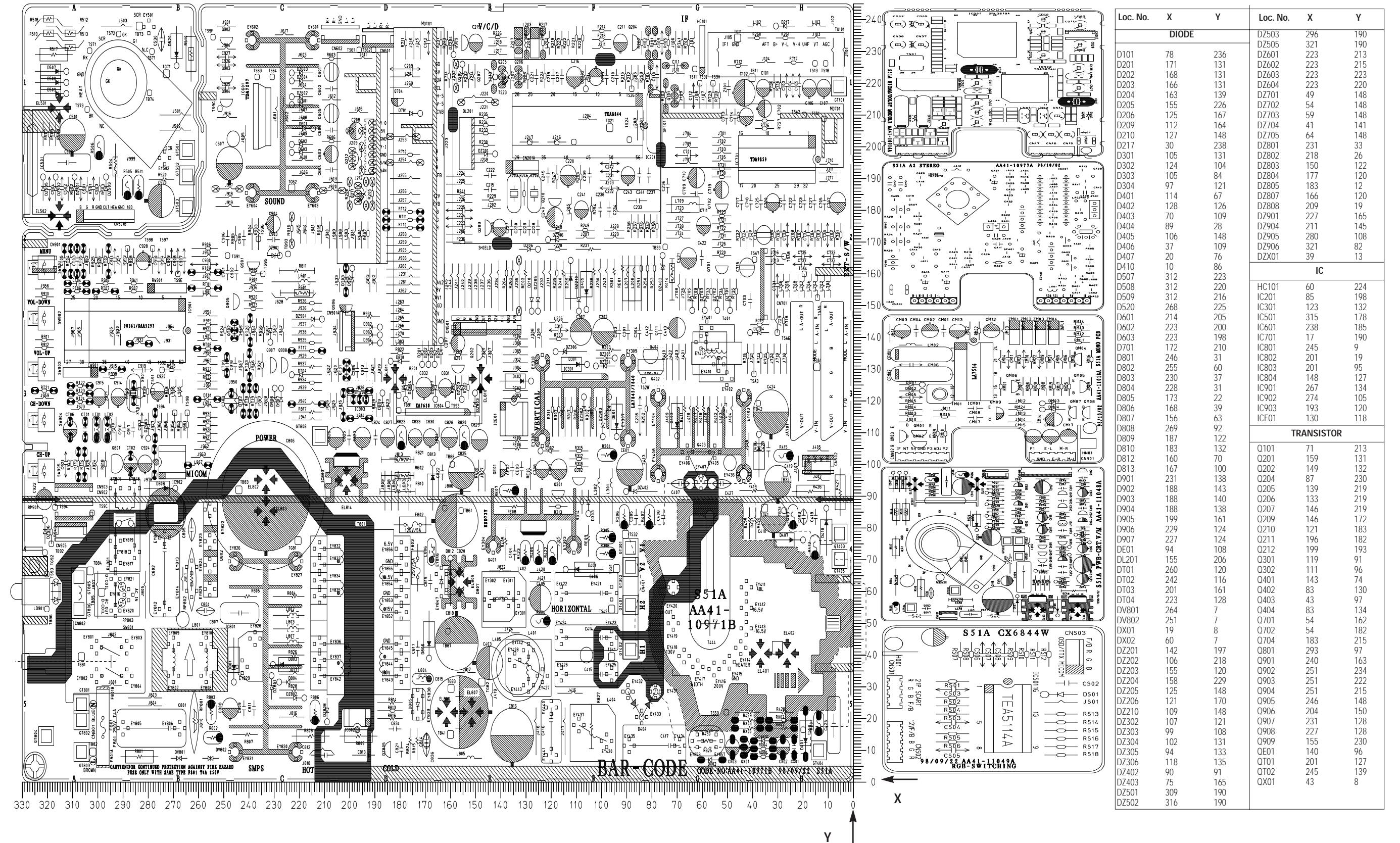
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MEMO

9. PCB Layout

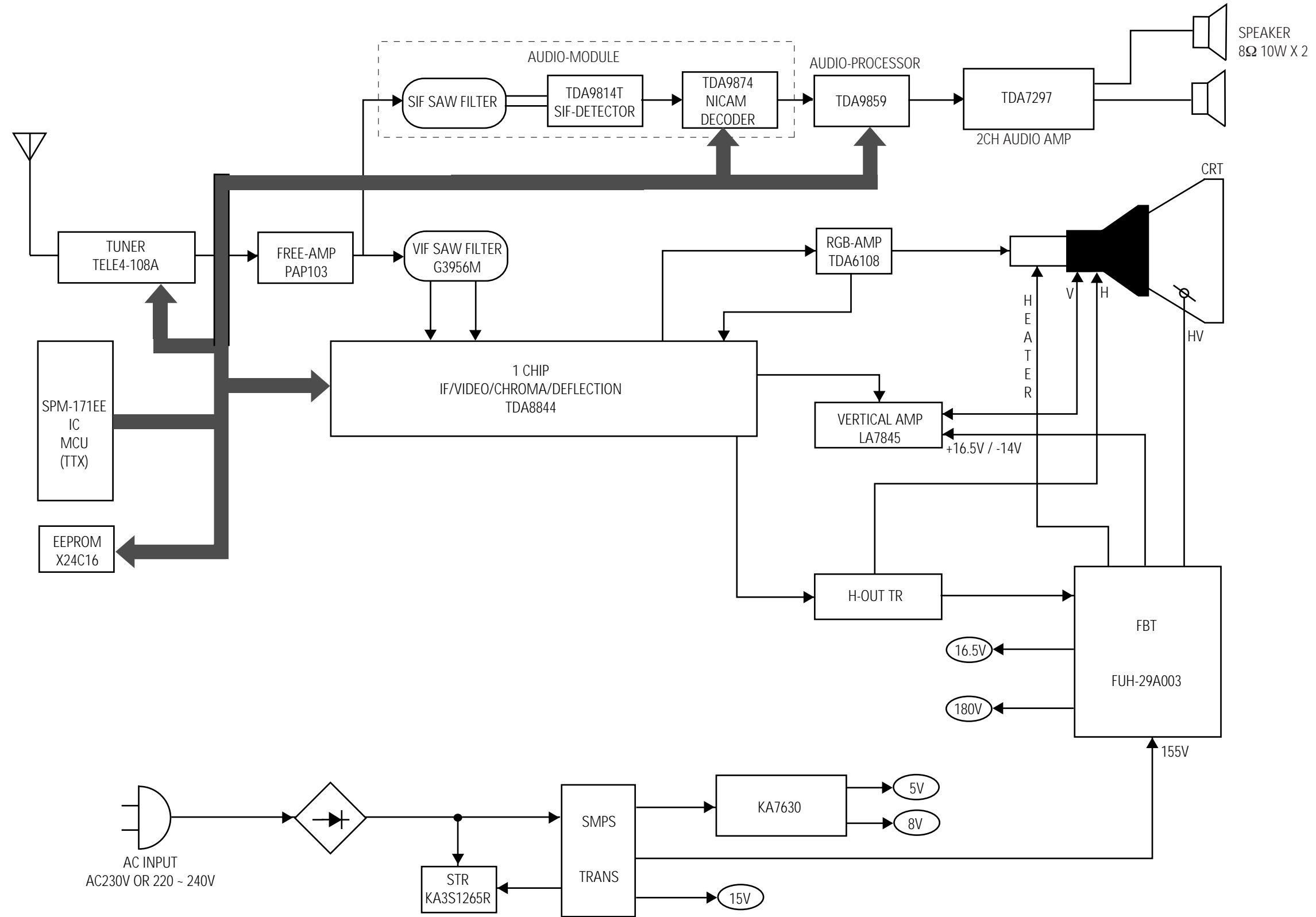
9-1 PCB Main



Loc. No.	X	Y	Loc. No.	X	Y
DIODE					
D101	78	236	DZ503	296	190
D201	171	131	DZ505	321	190
D202	168	131	DZ601	223	213
D203	166	131	DZ602	223	215
D204	163	139	DZ603	223	223
D205	155	226	DZ604	223	220
D206	125	167	DZ701	49	148
D209	112	164	DZ702	54	148
D210	127	148	DZ703	59	148
D217	30	238	DZ704	41	141
D301	105	131	DZ705	64	148
D302	124	104	DZ801	231	33
D303	105	84	DZ802	218	26
D304	97	121	DZ803	150	122
D401	114	67	DZ804	177	120
D402	128	126	DZ805	183	12
D403	70	109	DZ807	166	120
D404	89	28	DZ808	209	19
D405	106	148	DZ901	227	165
D406	37	109	DZ904	211	145
D407	20	76	DZ905	280	108
D410	10	86	DZ906	321	82
D507	312	223	DZX01	39	13
D508	312	220	IC		
D509	312	216	HC101	60	224
D520	268	225	IC201	85	198
D601	214	205	IC301	123	132
D602	223	200	IC501	315	178
D603	223	198	IC601	238	185
D701	172	210	IC701	17	190
D801	246	31	IC801	245	9
D802	255	60	IC802	201	19
D803	230	37	IC803	201	95
D804	228	31	IC804	148	127
D805	173	22	IC901	267	134
D806	168	39	IC902	274	105
D807	156	63	IC903	193	120
D808	269	92	ICE01	130	118
D809	187	122	TRANSISTOR		
D810	183	132	Q101	71	213
D812	160	70	Q201	159	131
D813	167	100	Q202	149	132
D901	231	138	Q204	87	230
D902	188	143	Q205	139	219
D903	188	140	Q206	133	219
D904	188	138	Q207	146	219
D905	199	161	Q209	146	172
D906	229	124	Q210	121	183
D907	227	124	Q211	196	182
DE01	94	108	Q212	199	193
DL201	155	206	Q301	119	91
DT01	260	120	Q302	111	96
DT02	242	116	Q401	143	74
DT03	201	161	Q402	83	130
DT04	223	128	Q403	43	97
DV801	264	7	Q404	83	134
DV802	251	7	Q701	54	162
DX01	19	8	Q702	54	182
DX02	60	7	Q704	183	215
DZ201	142	197	Q801	293	97
DZ202	106	218	Q901	240	163
DZ203	155	120	Q902	251	234
DZ204	158	229	Q903	251	222
DZ205	125	148	Q904	251	215
DZ206	121	170	Q905	246	148
DZ210	109	148	Q906	204	150
DZ302	107	121	Q907	231	128
DZ303	99	108	Q908	227	128
DZ304	102	131	Q909	155	230
DZ305	94	133	QE01	140	96
DZ306	118	135	QT01	201	127
DZ402	90	91	QT02	245	139
DZ403	75	165	OX01	43	8
DZ501	309	190			
DZ502	316	190			

8. Block Diagram

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7. Electric Parts List

7-1 CF6844N3X/XEF Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
ASSY-PCB,MAIN				C409	2201-000551	C-CERAMIC,DISC:470pF,10%,1KV,Y5P,TP,8x5,5	
BUYER : SEF				C410	2401-001397	C-AL:470uF,20%,25V,GP,10x16mm,5mm,T	
*				C411	2305-000178	C-FILM,MPEF:10nF,5%,100V,TP,-,5mm	
HA94-100415 ASSY-PCB,MAIN:CF6844N3X/XEF,S51A,01				C412	2201-000599	C-CERAMIC,DISC:560pF,10%,500V,Y5P,TP,7x4,5	
BOT	0403-000295	DIODE-ZENER:MTZ5.1B,5.1V,4.94-5.20V,500mW,		C413	2401-000962	C-AL:22uF,20%,50V,GP,TP,5x11,5	
BOT	2003-001037	R-METAL OXIDE(S):39ohm,5%,2W,AF,TP,3.9x10mm		C414	2306-000330	C-FILM,MPPF:7.7nF,3%,1.6KV,TP,28.5x18.5x12	
C102	2401-002594	C-AL:220uF,20%,16V,GP,TP,8x11.5,5		C415	2306-000178	C-FILM,MPPF:3.9nF,5%,1.6KV,BK,31x15x8.5,20	
C103	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		C416	2303-001026	C-FILM,PPF:33nF,10%,400V,TP,20x15x8,7,5	
C104	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		C417	2306-001017	C-FILM,MPPF:680nF,5%,400V,TP,26X14.5X24MM,	
C105	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		C418	2201-000556	C-CERAMIC,DISC:470pF,10%,500V,Y5P,TP,7x4,5	
C106	2401-001082	C-AL:330nF,20%,50V,GP,TP,5x11,5		C419	2401-001397	C-AL:470uF,20%,25V,GP,10x16mm,5mm,T	
C107	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5		C421	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5	
C109	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5x19,-		C422	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,	
C207	2401-001026	C-AL:3.3uF,20%,50V,GP,TP,5x11mm,5mm		C423	2201-000556	C-CERAMIC,DISC:470pF,10%,500V,Y5P,TP,7x4,5	
C210	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,		C424	2401-001527	C-AL:47uF,20%,250V,HR,TP,13x25mm,5m	
C211	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5		C425	2305-000154	C-FILM,MPEF:100nF,5%,400V,TP,21.5x6.5x11.5	
C213	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5m		C427	2201-000984	C-CERAMIC,DISC:680pF,10%,2KV,Y5P,TP,11x6,7.5m	
C214	2401-000660	C-AL:2.2uF,20%,50V,GP,TP,5x11,5		C504	2202-000862	C-CERAMIC,MLC-AXIAL:390pF,10%,50V,Y5P,TP,3.5x19,-	
C215	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm		C506	2301-000213	C-FILM,PEF:220nF,5%,250V,TP,21.5x11,7.5	
C216	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		C510	2401-000430	C-AL:10uF,20%,250V,GP,TP,10X16MM,5M	
C217	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5X4.0X5.0MM,		C520	2401-001232	C-AL:4.7uF,20%,250V,GP,TP,10x12.5,5	
C218	2305-000411	C-FILM,MPEF:470nF,5%,50V,TP,7.3x4.8x5.5mm,		C530	2201-002063	C-CERAMIC,DISC:10nF,+80-20%,3KV,Y5V,TP,16x5,7	
C219	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5		C601	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5	
C220	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		C602	2301-000204	C-FILM,PEF:2.7nF,5%,50V,TP,7.4x3.9x13mm,5	
C221	2305-000289	C-FILM,MPEF:220nF,5%,63V,TP,-,5mm		C603	2401-001333	C-AL:470nF,20%,50V,GP,TP,5x11,5	
C222	2305-000412	C-FILM,MPEF:470nF,5%,63V,TP,-,5mm		C604	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm	
C223	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		C605	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5	
C224	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		C606	2301-000204	C-FILM,PEF:2.7nF,5%,50V,TP,7.4x3.9x13mm,5	
C225	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		C607	2401-001998	C-AL:1000UF,20%,25V,GP,TP,10X20,5MM	
C226	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5		C701	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
C227	2201-000986	C-CERAMIC,DISC:12pF,5%,50V,NPO,TP,5x3mm,2.5mm		C702	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5	
C228	2201-000273	C-CERAMIC,DISC:18pF,5%,50V,CH,TP,5x3mm,5		C703	2201-000483	C-CERAMIC,DISC:33pF,5%,50V,CH,TP,5x3,5	
C229	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5mm		C705	2305-000288	C-FILM,MPEF:220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C230	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm		C707	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5	
C231	2202-000183	C-CERAMIC,MLC-AXIAL:2.2nF,20%,16V,Y5R,TP,3.5x19,-		C709	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,	
C232	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5x19,-		C710	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5	
C233	2309-000138	C-FILM,PE-PPF:100nF,5%,50V,TP,20x16x8.5,7.5m		C711	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11MM,5MM	
C234	2305-000289	C-FILM,MPEF:220nF,5%,63V,TP,-,5mm		C712	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5	
C236	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5X4.0X5.0MM,		C713	2301-000247	C-FILM,PEF:33nF,5%,50V,TP,8.1x4.5x13mm,5m	
C237	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5X4.0X5.0MM,		C714	2301-000289	C-FILM,PEF:5.6nF,5%,50V,TP,7x6x3,5	
C238	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm		C715	2401-001991	C-AL:2.2uF,20%,50V,GP,TP,5x11,5	
C239	2301-000445	C-FILM,PEF:4.7nF,5%,50V,TP,5.5x7x3mm,5mm		C716	2401-001991	C-AL:2.2uF,20%,50V,GP,TP,5x11,5	
C240	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		C717	2301-000289	C-FILM,PEF:5.6nF,5%,50V,TP,7x6x3,5	
C241	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5		C718	2301-000247	C-FILM,PEF:33nF,5%,50V,TP,8.1x4.5x13mm,5m	
C242	2202-000183	C-CERAMIC,MLC-AXIAL:2.2nF,20%,16V,Y5R,TP,3.5x19,-		C719	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5	
C243	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5		C720	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11MM,5MM	
C244	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5m		C721	2301-000175	C-FILM,PEF:15nF,5%,50V,TP,7.1x3.5x13mm,5m	
C245	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5X4.0X5.0MM,		C722	2305-000288	C-FILM,MPEF:220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C301	2301-000254	C-FILM,PEF:39nF,5%,50V,TP,7.5x3.5x6.5mm,5		C723	2301-000175	C-FILM,PEF:15nF,5%,50V,TP,7.1x3.5x13mm,5m	
C302	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5,5		C725	2305-000288	C-FILM,MPEF:220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C303	2201-000259	C-CERAMIC,DISC:180pF,10%,500V,Y5P,TP,6x4,5		C727	2305-000288	C-FILM,MPEF:220nF,5%,50V,TP,7.3x4.8x5.5mm,	
C304	2301-000212	C-FILM,PEF:220nF,5%,100V,BK,16.0x10.0x24.		C730	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP,3.5x19,-	
C305	2305-000149	C-FILM,MPEF:100nF,5%,100V,TP,12x12.5x6.5,5		C731	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP,3.5x19,-	
C306	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm		C732	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP,3.5x19,-	
C307	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5,5		C733	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP,3.5x19,-	
C308	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5		C734	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP,3.5x19,-	
C309	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		C735	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP,3.5x19,-	
C403	2401-000901	C-AL:22uF,20%,160V,GP,TP,10x20,5		C736	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP,3.5x19,-	
C404	2201-000291	C-CERAMIC,DISC:1nF,10%,500V,Y5P,TP,8.5x5MM,5		C737	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP,3.5x19,-	
C405	2401-002268	C-AL:2.2uF,20%,250V/LZ,TP,8X11,5		C801	2306-000321	C-FILM,MPPF:470nF,5%,275V,TP,-,22.5mm	
C406	2306-000188	C-FILM,MPPF:330nF,5%,400V,TP,26x19.5x11,20		C802	2306-000321	C-FILM,MPPF:470nF,5%,275V,TP,-,22.5mm	
C407	2201-000984	C-CERAMIC,DISC:680pF,10%,2KV,Y5P,TP,11x6,7.5m		C804	2201-000332	C-CERAMIC,DISC:2.2nF,20%,250VAC,Y5U,TP,11x7,7	
C408	2305-000382	C-FILM,MPEF:4.7nF,5%,400V,TP,-,5MM		C805	2201-000332	C-CERAMIC,DISC:2.2nF,20%,250VAC,Y5U,TP,11x7,7	
				C806	2401-001140	C-AL:330uF,20%,400V,GP,BK,35x45,10	
				C807	2303-000163	C-FILM,PPF:2.2nF,5%,800V,TP,15x13x8.5,7.5	

Electric Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
C808	2401-002292	C-AL:47uf,20%,25V,WT,TP,8X11,5		D217	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C809	2301-000224	C-FILM,PEF:22nF,5%,50V,TP,7.4x3.9x13mm,5m		D301	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP	
C811	2301-000310	C-FILM,PEF:68nF,5%,50V,TP,8.0X8.5X4.0X5,5		D302	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C812	2201-001013	C-CERAMIC,DISC:4.7nF,20%,400V,Y5U,TP,16x7,7.5		D303	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C813	2201-001013	C-CERAMIC,DISC:4.7nF,20%,400V,Y5U,TP,16x7,7.5		D304	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C814	2201-000683	C-CERAMIC,DISC:850pF,10%,1KV,Y5P,TP,10x5,5		D401	0402-000493	DIODE-RECTIFIER:1R5GU41,400V,1.5A,DO-15L,TP	
C815	2401-0003026	C-AL:330uF,20%,200V,GP,ST,22x35,10		D402	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
C816	2401-000293	C-AL:100uF,+30-10%,200V,HR,TP,16x25		D403	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
C817	2201-000599	C-CERAMIC,DISC:560pF,10%,500V,Y5P,TP,7x4,5		D404	0402-001012	DIODE-RECTIFIER:FMP-3FU,1500V,5A,TO-3PF	
C818	2401-000722	C-AL:2200uF,20%,25V,WT,TP,16x25,7.5		D406	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP	
C819	2201-000599	C-CERAMIC,DISC:560pF,10%,500V,Y5P,TP,7x4,5		D407	0402-000216	DIODE-RECTIFIER:ERC24-06,600V,1.0A,DO-204	
C820	2401-000722	C-AL:2200uF,20%,25V,WT,TP,16x25,7.5		D410	0402-000493	DIODE-RECTIFIER:1R5GU41,400V,1.5A,DO-15L,TP	
C821	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm		D507	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP	
C822	2201-000599	C-CERAMIC,DISC:560pF,10%,500V,Y5P,TP,7x4,5		D508	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP	
C823	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		D509	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP	
C824	2305-000289	C-FILM,MPEF:220nF,5%,63V,TP,-,5mm		D520	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
C825	2306-000122	C-FILM,MPPF:100nF,5%,50V,TP,7.3x4.0x5.0mm,		D601	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,	
C826	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		D602	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C827	2401-002235	C-AL:10uF,20%,16V,GP,TP,5X11MM,5MM		D801	0402-000213	DIODE-RECTIFIER:ERB12-06,600V,1.0A,DO-41,TP	
C828	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm		D802	0402-001160	DIODE-BRIDGE:D5SB60,600V,2.8A,SIP-4,ST	
C829	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		D803	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP	
C830	2401-000611	C-AL:1uF,20%,50V,WT,TP,5x11,5		D804	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C831	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5		D805	0402-000231	DIODE-RECTIFIER:FMG-G26S,600V,4A,TO-220F,ST	
C832	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		D806	0402-000493	DIODE-RECTIFIER:1R5GU41,400V,1.5A,DO-15L,TP	
C833	2401-002144	C-AL:47uf,20%,16V,GP,TP,5x11,5		D807	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-,-	
C834	2201-000370	C-CERAMIC,DISC:220pF,10%,50V,Y5P,TP,4.0X4.0,5		D808	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
C901	2201-000234	C-CERAMIC,DISC:150pF,5%,50V,CH,TP,9.5x3,5		D809	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C902	2301-000108	C-FILM,PEF:1.5nF,5%,50V,TP,6.5x3.0x5.5mm,		D810	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C903	2201-000119	C-CERAMIC,DISC:100nF,+80-20%,50V,Y5V,TP,8x3.5		D813	0402-000493	DIODE-RECTIFIER:1R5GU41,400V,1.5A,DO-15L,TP	
C904	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5		D901	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C905	2305-000665	C-FILM,MPEF:100NF,5%,63V,TP,7.5X4.0X5.0MM,		D906	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C906	2305-000665	C-FILM,MPEF:100NF,5%,63V,TP,7.5X4.0X5.0MM,		DE01	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP	
C907	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		DT01	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C908	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		DT02	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C909	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		DT04	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
C910	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5x19,-		DV801	1405-000187	VARISTOR:750V,1250A,12.5x7mm,TP	
C911	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5x19,-		DV802	1405-000187	VARISTOR:750V,1250A,12.5x7mm,TP	
C913	2301-000445	C-FILM,PEF:4.7nF,5%,50V,TP,5.5x7x3mm,5mm		DZ201	0403-000297	DIODE-ZENER:MTZ6.2B,6.2V,5.96-6.27V,500mW,	
C914	2401-002144	C-AL:47uf,20%,16V,GP,TP,5x11,5		DZ202	0403-000297	DIODE-ZENER:MTZ6.2B,6.2V,5.96-6.27V,500mW,	
C915	2401-002144	C-AL:47uf,20%,16V,GP,TP,5x11,5		DZ203	0403-000298	DIODE-ZENER:MTZ6.8C,6.8V,6.66-7.01V,500mW,	
C916	2201-000980	C-CERAMIC,DISC:30pF,5%,50V,CH,TP,5.0x3.0,5mm		DZ204	0403-000662	DIODE-ZENER:MTZ3.0B,3.0V,3.01-3.22V,500mW,	
C917	2201-000980	C-CERAMIC,DISC:30pF,5%,50V,CH,TP,5.0x3.0,5mm		DZ205	0403-000551	DIODE-ZENER:MTZ3.9B,3.9V,3.89-4.16V,500mW,	
C918	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm		DZ206	0403-000294	DIODE-ZENER:MTZ4.7B,4.7V,4.55-4.80V,500mW,	
C919	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		DZ210	0403-000659	DIODE-ZENER:MTZ2.0A,2V,1.88-2.10V,500mW,DO	
C920	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5		DZ302	0403-000545	DIODE-ZENER:MTZ24B,24V,22.61-23.77V,500mW,	
C921	2202-000796	C-CERAMIC,MLC-AXIAL:1nF,10%,50V,Y5P,TP,3.5x19,-		DZ303	0403-000545	DIODE-ZENER:MTZ24B,24V,22.61-23.77V,500mW,	
C922	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		DZ304	0403-000545	DIODE-ZENER:MTZ24B,24V,22.61-23.77V,500mW,	
C923	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		DZ305	0403-000494	DIODE-ZENER:MTZ39,39V,35.36-37.2V,500mW,DO	
C924	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5		DZ306	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,TP	
C925	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		DZ402	0403-000300	DIODE-ZENER:MTZ8.2B,8.2V,7.78-8.19V,500mW,	
C926	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		DZ403	0403-000698	DIODE-ZENER:TZP12A,12V,11.4-12.6V,1W,DO-41	
C927	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		DZ505	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,	
C928	2401-001333	C-AL:470nF,20%,50V,GP,TP,5x11,5		DZ601	0403-000545	DIODE-ZENER:MTZ24B,24V,22.61-23.77V,500mW,	
CE01	2401-002597	C-AL:220uF,20%,35V,GP,TP,10x12.5,5		DZ602	0403-000545	DIODE-ZENER:MTZ24B,24V,22.61-23.77V,500mW,	
CE02	2305-000665	C-FILM,MPEF:100NF,5%,63V,TP,7.5X4.0X5.0MM,		DZ603	0403-000545	DIODE-ZENER:MTZ24B,24V,22.61-23.77V,500mW,	
CE03	2305-000470	C-FILM,MPEF:68nF,5%,100V,TP,-,5mm		DZ604	0403-000545	DIODE-ZENER:MTZ24B,24V,22.61-23.77V,500mW,	
CN501B	AA39-20604A	LEAD CONNECTOR-ASSY,-,YBNH250-9,YBNH05/04,5/4P,50		DZ701	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,	
CN602	3711-002644	CONNECTOR-HEADER:BOX,5P,1R,2.5MM,STRAIGHT,SN		DZ702	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,	
CN701	3711-002647	CONNECTOR-HEADER:BOX,8P,1R,2.5MM,STRAIGHT,SN		DZ703	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,	
CN802	AA27-20004K	COIL-DEGAUSSING:-,29,19.0ohm,45T,3000mm,E		DZ704	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,	
CN901A	3711-002643	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGHT,SN		DZ705	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,	
CT01	2305-000665	C-FILM,MPEF:100NF,5%,63V,TP,7.5X4.0X5.0MM,		DZ801	0403-000300	DIODE-ZENER:MTZ8.2B,8.2V,7.78-8.19V,500mW,	
CT02	2401-000242	C-AL:100uF,20%,10V,GP,TP,6x11,5MM		DZ802	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,	
CT03	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		DZ803	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,	
CT04	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.		DZ804	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,	
CT05	2202-000164	C-CERAMIC,MLC-AXIAL:180PF,10%,50V,Y5P,TP,3.5X19,-,TP		DZ805	1203-001217	IC-POS.ADJUST REG.:431,70-92,3P,4.58MIL,PLASTIC,2	
CT06	2401-002144	C-AL:47uf,20%,16V,GP,TP,5x11,5		DZ807	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,	
CT08	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5		DZ808	0403-000562	DIODE-ZENER:MTZ7.5B,7.5V,7.45V,500mW,	
CT09	2305-000665	C-FILM,MPEF:100NF,5%,63V,TP,7.5X4.0X5.0MM,		DZ901	1203-000451	IC-VOLTAGE REGULATOR:33,TO-92,3P,-,PLASTIC,31/35V,	
CW901	2503-000156	C-NETWORK:100pF,4,20%,50V		DZ904	0403-000563	DIODE-ZENER:MTZ9.1B,9.1V,8.57-9.01V,500mW,	
D201	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP		DZ905	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,	
D202	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP		DZ906	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,	
D203	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP		F801	3601-000281	FUSE-FERRULE:125V,5A,FA,GLASS,2.4x7.5mm	
D204	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP		F801A	3602-000114	FUSE-HOLDER:-,30MOHM	
D205	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP		F801B	3602-000114	FUSE-HOLDER:-,30MOHM	
D209	0402-000216	DIODE-RECTIFIER:ERC24-06,600V,1.0A,DO-204		F802	3601-001086	FUSE-FERRULE:125V,5A,FA,GLASS,2.4x7.5mm	
D210	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP		F803	3601-001086	FUSE-FERRULE:125V,5A,FA,GLASS,2.4x7.5mm	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
△ GT804-	AA39-20010B	LEAD-CONNECTOR, ASSY; -YFH800-01, S, 1P, 500, 1617#22		O908	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
△ HC101	AA13-20004WIC	HYBRID;-PAP103T,SIP6P,PRE-AMP,TP		QE01	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,TP,120-	
△ IC201	0904-001294	IC-BUS CONTROLLER:8844,-,DIP,56P,600MIL,3.58MHz,		QT01	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
△ IC301	1204-000517	IC-VERTICAL DEF.:LA7845,SIP,7P,-,PLASTIC,40V,11		QT02	0504-000125	TR-DIGITAL:KSR1012,NPN,300mW,47K,TO-92,TP	
△ IC501	1201-001330	IC-VIDEO AMP:6108,ZSIP,9P;-SINGLE,-,PLASTI		R201	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
△ IC601	1201-001064	IC-POWER AMP:7297,ZIP,15P;-DUAL,32DB,PLAST		R202	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
△ IC701	1204-000473	IC-AUDIO PROCESSOR:TDA9859,DIP,32P,-,PLASTIC,-,-,		R203	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
△ IC801	1203-001482	IC-PWM CONTROLLER:3S1265R,TO-3P,5P,210,PLASTIC,6		R204	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
△ IC802	0604-001038	PHOTO-COUPLER;TR,130-260%,200MW,DIP-4,ST		R212	2001-000005	R-CARBON:390OHM,5%,1/8W,AA,TP,1.8X3.2MM	
△ IC803	1203-001006	IC-VOLTAGE REGULATOR:78R05,TO-220F,4P,-,PLASTIC,4.		R214	2001-000793	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
△ IC804	1203-000644	IC-POSI.FIXED REG.:7630,SIP,10P,-,PLASTIC,5.1/8V,		R215	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
△ IC901	AA13-00002A	IC-MCU;-SAA5297M1A-230,8BIT,SDIP,CF-		R218	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
△ IC902	1103-001043	IC-EEPROM:24C16,2Kx8BIT,DIP,8P,300MIL,10		R219	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP,1.8X3.2MM	
△ ICE01	1201-000191	IC-OP AMP:4558,DIP,8P,300MIL,DUAL,20V/mV		R220	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
JA701	3722-000195	JACK-SCART:42P,-,SN,BLK,NO		R221	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
L101	2701-000326	INDUCTOR-AXIAL:560nH,10%,2.5X3.4MM		R222	2701-000142	INDUCTOR-AXIAL:1UH,10%,2.5X3.4MM	
L102	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R223	2001-000617	R-CARBON:3.9Mohm,5%,1/8W,AA,TP,1.8X3.2m	
L103	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R224	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L202	2701-000197	INDUCTOR-AXIAL:5.6UH,10%,2.5X3.4MM		R225	2001-001026	R-CARBON:910ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L205	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R226	2001-000793	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
L206	2701-000142	INDUCTOR-AXIAL:1UH,10%,2.5X3.4MM		R230	2001-000331	R-CARBON:12KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L207	2701-000142	INDUCTOR-AXIAL:1UH,10%,2.5X3.4MM		R233	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
L208	2701-000142	INDUCTOR-AXIAL:1UH,10%,2.5X3.4MM		R234	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
L303	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R235	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
L401	AA27-40003H	COIL-HORIZ.WIDTH:-,2MH,DR15X20,2UEW0.35,ST		R237	2001-000007	R-CARBON:3KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L402	AA27-30001F	COIL-LINEARITY:-,22uH,DR1011,PI0.45,25.5,-,20		R238	2001-001110	R-CARBON(S):240kohm,5%,1/2W,AA,TP,2.4x6.4m	
L403	2001-001037	R-CARBON(S):0.32ohm,5%,1/2W,AA,TP,2.4x6.4m		R239	2001-000008	R-CARBON:15KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L403	2001-001153	R-CARBON(S):470OHM,5%,1/2W,AA,TP,2.4x6.4MM		R240	2001-001125	R-CARBON(S):300kohm,5%,1/2W,AA,TP,2.4x6.4m	
L404	AA27-40003L	COIL-HORIZ.WIDTH:-,1.0MH,DR14X20,2UEW0.45,ST		R241	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L601	3301-000287	CORE-FERRITE BEAD-AA,3.5x1x6mm,1500,2400G		R242	2001-000739	R-CARBON:4.7MOHM,5%,1/8W,AA,TP,1.8X3.2M	
L603	3301-000287	CORE-FERRITE BEAD-AA,3.5x1x6mm,1500,2400G		R243	2001-000232	R-CARBON:1.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	
L701	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R245	2001-000739	R-CARBON:4.7MOHM,5%,1/8W,AA,TP,1.8X3.2M	
L702	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R246	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
L703	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R247	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
L704	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R248	2001-000793	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
L705	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R249	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L706	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R250	2001-000938	R-CARBON:68ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L707	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R251	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
L708	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R252	2001-000563	R-CARBON:27KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L709	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R253	2001-000591	R-CARBON:3.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	
L801	AA29-30001Q	FILTER-LINE:-,20MH,1.26A,-,BSF3050		R255	2001-000008	R-CARBON:15KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L802	3301-000287	CORE-FERRITE BEAD-AA,3.5x1x6mm,1500,2400G		R256	2004-001234	R-METAL:75KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L803	3301-000287	CORE-FERRITE BEAD-AA,3.5x1x6mm,1500,2400G		R257	2001-000563	R-CARBON:27KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L804	2901-000299	FILTER-EMI ON BOARD:-,6A,UL/CSA,-,9x7.5,TP,-		R258	2004-001914	R-METAL:39KOHM,2%,1/8W,AA,TP,1.8X3.5MM	
L805	2701-001032	INDUCTOR-AXIAL:10UH,10%,5X14MM		R259	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
L806	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5X5,TP,-		R260	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L807	3301-000287	CORE-FERRITE BEAD-AA,3.5x1x6mm,1500,2400G		R261	2001-000331	R-CARBON:12KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
L808	3301-000287	CORE-FERRITE BEAD-AA,3.5x1x6mm,1500,2400G		R262	2001-001015	R-CARBON:9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m	
L901	2701-000189	INDUCTOR-AXIAL:470NH,10%,2.5X3.4MM		R301	2001-001045	R-CARBON(S):1.2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
L903	2701-000197	INDUCTOR-AXIAL:5.6UH,10%,2.5X3.4MM		R302	2001-001049	R-CARBON(S):1.3kohm,5%,1/2W,AA,TP,2.4x6.4m	
L904	2701-000211	INDUCTOR-AXIAL:68uH,10%,2.5x3.4mm		R303	2001-000016	R-CARBON(S):10HM,5%,1/2W,AA,TP,2.4x6.4MM	
L905	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R304	2008-000254	R-FUSIBLE(S):0.68ohm,5%,2W,AF,TP,3.9x10mm	
L906	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R305	2003-002069	R-METAL OXIDE:470ohm,5%,2W,AF,TP,3.9x10mm	
L907	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		R306	2003-002069	R-METAL OXIDE:470ohm,5%,2W,AF,TP,3.9x10mm	
LD901	AA96-30001B	ASSY-LED, GUIDE;-AA61-50055A,DL-G5RGA,-		R308	2003-002069	R-METAL OXIDE:470ohm,5%,2W,AF,TP,3.9x10mm	
LT01	2901-000299	FILTER-EMI ON BOARD:-,6A,UL/CSA,-,9x7.5,TP,-		R309	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
LT02	2901-000299	FILTER-EMI ON BOARD:-,6A,UL/CSA,-,9x7.5,TP,-		R310	2001-000066	R-CARBON(S):10Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
△ P/CORD	AA96-20014D	ASSY-POWER, CORD:DPKJP-140,H/C450MM,KLCE-2F,-,		R311	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
Q201	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R312	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
Q202	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R313	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
Q204	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R314	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
Q207	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R315	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
Q210	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R316	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
Q301	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R317	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
Q302	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R404	2008-000254	R-FUSIBLE(S):0.68ohm,5%,2W,AF,TP,3.9x10mm	
△ Q401	0502-000298	TR-POWER:KSD73,NPN,30W,TO-220,-,120-240		R405	2001-001138	R-CARBON(S):390ohm,5%,1/2W,AA,TP,2.4x6.4mm	
△ Q402	0502-001007	TR-POWER:KSC2073-H2,NPN,25W,TO-220,ST,6		R406	2003-002008	R-METAL OXIDE(S):18Kohm,5%,2W,AF,TP,3.9x10mm	
△ Q403	0502-001136	TR-POWER:KSD5703,NPN,70W,TO-3PF,ST,8-		R407	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP,3.9x10mm	
Q701	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R409	2008-000264	R-FUSIBLE(S):10HM,5%,1W,AF,TP,3.9X10MM	
Q702	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R410	2001-001114	R-CARBON(S):270ohm,5%,1/2W,AA,TP,2.4x6.4mm	
Q801	0501-000369	TR-SMALL SIGNAL:KSC2331-Y,NPN,1W,TO-92L,-,120-		R411	2001-001199	R-CARBON(S):91ohm,5%,1/2W,AA,TP,2.4x6.4mm	
Q901	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R412	2001-000020	R-CARBON(S):22ohm,5%,1/2W,AA,TP,2.4x6.4mm	
Q902	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP		R413	2008-000251	R-FUSIBLE(S):0.27ohm,10%,2W,AF,TP,3.9x10mm	
Q903	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP		R414	2008-000278	R-FUSIBLE(S):82ohm,5%,2W,AA,TP,3.9x10mm	
Q904	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP		R415	2008-001013	R-FUSIBLE(S):1.2ohm,5%,2W,AF,TP,3.9x10mm	
Q905	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R417	2004-004086	R-METAL:56Kohm,1%,1/2W,AA,TP,2.5x6.5mm	
Q907	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-		R418	2004-001967	R-METAL(S):68KOHM,1%,1/2W,AA,TP,6.5X2.5MM	

Electric Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
R419	2004-001390	R-METAL(S):1KOHM,2%,1/2W,AA,TP,2.4X6.4MM		R810	2003-000487	R-METAL OXIDE(S):12Kohm,5%,2W,AA,TP,4x12mm	
R420	2001-001114	R-CARBON(S):270ohm,5%,1/2W,AA,TP,2.4x6.4mm		R811	2003-000510	R-METAL OXIDE(S):15Kohm,5%,2W,AA,TP,4x12mm	
R421	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4X6.4MM		R812	2008-000251	R-FUSIBLE(S):0.27ohm,10%,2W,AF,TP,3.9x10mm	
R422	2008-000254	R-FUSIBLE(S):0.68ohm,5%,2W,AF,TP,3.9x10mm		R813	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R424	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4X6.4MM		R814	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R425	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4X6.4MM		R815	2004-004364	R-METAL(S):152Kohm,1%,1/2W,AA,TP,2.4x6.4m	
R426	2002-001012	R-COMPOSITION:8.2Mohm,10%,1/2W,AA,TP,3.7x9mm		R816	2004-001983	R-METAL:2.49KOHM,1%,1/2W,AA,TP,2.4X6.4	
R427	2002-001012	R-COMPOSITION:8.2Mohm,10%,1/2W,AA,TP,3.7x9mm		R817	2001-001153	R-CARBON(S):470HM,5%,1/2W,AA,TP,2.4X6.4MM	
R428	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4X6.4MM		R818	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R429	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4X6.4MM		R819	2001-000066	R-CARBON(S):10Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R430	2001-001043	R-CARBON(S):00HM,5%,1/2W,AA,TP,2.4X6.4MM		R820	2008-001047	R-FUSIBLE(S):680HM,5%,2W,AF,TP,3.9X10MM	
R501	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R821	2008-000271	R-FUSIBLE(S):3.30HM,5%,2W,AA,TP,3.9X10MM	
R502	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R822	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R503	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R823	2008-000264	R-FUSIBLE(S):10HM,5%,1W,AF,TP,3.9X10MM	
R504	2008-000256	R-FUSIBLE(S):1.50HM,5%,2W,AA,TP,3.9X10MM		R824	2001-001125	R-CARBON(S):300Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R505	2008-001076	R-FUSIBLE(S):1.8ohm,5%,2W,AF,TP,3.9x10mm		R826	2001-001153	R-CARBON(S):470HM,5%,1/2W,AA,TP,2.4X6.4MM	
R506	2008-000299	R-FUSIBLE(S):47ohm,5%,2W,AF,TP,3.9x10mm		R828	2001-000022	R-CARBON(S):33ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R507	2001-000490	R-CARBON:200OHM,5%,1/8W,AA,TP,1.8X3.2MM		R901	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R508	2001-000490	R-CARBON:200OHM,5%,1/8W,AA,TP,1.8X3.2MM		R902	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R509	2001-000490	R-CARBON:200OHM,5%,1/8W,AA,TP,1.8X3.2MM		R903	2001-000066	R-CARBON(S):10Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R510	2002-001009	R-COMPOSITION:2.7Kohm,10%,1/2W,AA,TP,3.7X9.0		R904	2004-000218	R-METAL:10KOHM,1%,1/8W,AA,TP,1.8X3.2MM	
R517	2002-001009	R-COMPOSITION:2.7Kohm,10%,1/2W,AA,TP,3.7X9.0		R905	2004-000218	R-METAL:10KOHM,1%,1/8W,AA,TP,1.8X3.2MM	
R518	2002-001009	R-COMPOSITION:2.7Kohm,10%,1/2W,AA,TP,3.7X9.0		R906	2004-000218	R-METAL:10KOHM,1%,1/8W,AA,TP,1.8X3.2MM	
R519	2002-001009	R-COMPOSITION:2.7Kohm,10%,1/2W,AA,TP,3.7X9.0		R908	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R520	2001-001062	R-CARBON(S):10Mohm,5%,1/2W,AA,TP,2.4x6.4mm		R909	2001-000472	R-CARBON:2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R601	2008-001002	R-FUSIBLE(S):0.18ohm,5%,2W,AA,TP,3.9x10mm		R910	2001-000924	R-CARBON:680OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R602	2008-001002	R-FUSIBLE(S):0.18ohm,5%,2W,AA,TP,3.9x10mm		R911	2001-000214	R-CARBON:1.1KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R603	2001-000472	R-CARBON:2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		R912	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R604	2001-000331	R-CARBON:12KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R913	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R605	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R914	2001-000472	R-CARBON:2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R606	2001-000472	R-CARBON:2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		R918	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R607	2001-000331	R-CARBON:12KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R919	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R701	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		R920	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R702	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		R921	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R703	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP,1.8X3.2MM		R922	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R704	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP,1.8X3.2MM		R923	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R705	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		R924	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R706	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		R925	2001-000924	R-CARBON:680OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R707	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP,1.8X3.2MM		R926	2001-000924	R-CARBON:680OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R708	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP,1.8X3.2MM		R927	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM	
R709	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		R928	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM	
R712	2001-000539	R-CARBON:24KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R929	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM	
R713	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		R930	2001-000628	R-CARBON:300OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R714	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R932	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R715	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		R933	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R716	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R934	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R717	2001-000539	R-CARBON:24KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R935	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R718	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		R936	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R719	2001-000527	R-CARBON:220OHM,5%,1/8W,AA,TP,1.8X3.2MM		R937	2001-001062	R-CARBON(S):10Mohm,5%,1/2W,AA,TP,2.4x6.4mm	
R720	2001-000387	R-CARBON:16Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R939	2001-000006	R-CARBON:2.4KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R721	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R941	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R722	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R942	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R723	2001-000387	R-CARBON:16Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R943	2001-000793	R-CARBON:47OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R724	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R945	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R725	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		R948	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R726	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R951	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R727	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		R953	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R728	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		R954	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
R729	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		R955	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R730	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		RE01	2004-001390	R-METAL(S):1KOHM,2%,1/2W,AA,TP,2.4X6.4MM	
R731	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		RE02	2004-001914	R-METAL:39KOHM,2%,1/8W,AA,TP,1.8X3.5MM	
R732	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8X3.2MM		RE03	2001-000066	R-CARBON(S):10Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R733	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		RE04	2001-001142	R-CARBON(S):3Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R734	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		RE05	2001-000052	R-CARBON(S):3.3Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R735	2001-000969	R-CARBON:75OHM,5%,1/8W,AA,TP,1.8X3.2MM		RE06	2004-001390	R-METAL(S):1KOHM,2%,1/2W,AA,TP,2.4X6.4MM	
R736	2001-000660	R-CARBON:33KOHM,5%,1/8W,AA,TP,1.8X3.2MM		RE07	2003-002069	R-METAL OXIDE:470ohm,5%,2W,AF,TP,3.9x10mm	
R740	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		RE08	2001-001120	R-CARBON(S):3.3ohm,5%,1/2W,AA,TP,2.4x6.4mm	
R741	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM		RE09	2001-001125	R-CARBON(S):300Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R801	2002-001011	R-COMPOSITION:3.3Mohm,10%,1/2W,AA,TP,3.7x9mm		RE10	2001-001125	R-CARBON(S):300Kohm,5%,1/2W,AA,TP,2.4x6.4m	
R802	2003-000994	R-METAL OXIDE(S):33Kohm,5%,2W,AF,TP,3.9x10mm		RL801	3501-001040	RELAY-POWER:12VDC,500mW,10A,1FormA,15mS,5m	
R803	2003-000994	R-METAL OXIDE(S):33Kohm,5%,2W,AF,TP,3.9x10mm		RM901	AA59-60001U	MODULE-REMOCOON,-,ORC-50VF/SR-12V,38KHz,940nm,	
R804	2001-001150	R-CARBON(S):470Kohm,5%,1/2W,AA,TP,2.4x6.4m		RP802	1404-001045	THERMISTOR-NTC:4.70HM,15%,2900K,35.0MW,T	
R805	2001-001150	R-CARBON(S):470Kohm,5%,1/2W,AA,TP,2.4x6.4m		RP803	1404-001026	THERMISTOR-PTC:70HM,20%,-,290V,25A,-,ST	
R806	2003-000458	R-METAL OXIDE(S):100ohm,5%,2W,AF,TP,4x12mm		RT01	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R807	2001-001178	R-CARBON(S):680ohm,5%,1/2W,AA,TP,2.4x6.4mm		RT02	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
R808	2002-001011	R-COMPOSITION:3.3Mohm,10%,1/2W,AA,TP,3.7x9mm		RT03	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
R809	2002-001013	R-COMPOSITION:4.7Mohm,10%,1/2W,AA,TP,3.7x9mm		RT04	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
RT05	2001-000780	R-CARBON:470OHM,5%,1/8W,AA,TP,1.8X3.2MM		ICN02	1209-001113	IC-ETC, LINEAR:TDA9874H,OFF,44P,-,PLASTIC,6.5	
RT06	2001-000563	R-CARBON:27KOHM,5%,1/8W,AA,TP,1.8X3.2MM		JN01	2007-000029	R-CHIP:00HM,5%,1/10W,DA,TP,2012	
RT07	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		JN02	2007-000029	R-CHIP:00HM,5%,1/10W,DA,TP,2012	
RT08	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		LN01	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-	
RT13	2001-000005	R-CARBON:390OHM,5%,1/8W,AA,TP,1.8X3.2MM		LN02	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-	
RT14	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		LN03	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2.5x3.4mm	
RT18	2001-000786	R-CARBON:47KOHM,5%,1/8W,AA,TP,1.8X3.2MM		LN04	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-	
RT19	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		LN05	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-	
RT20	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M		LN06	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
RW901	2011-000157	R-NETWORK:10K,5%,1/8W,A,SIP6P,TP		LN07	2701-000202	INDUCTOR-AXIAL:560nH,10%,2.5x3.4mm	
SF101	2904-000302	FILTER-SAW AV:38.90MHz,-,ST,13.9dB,PAL-B/G,-		QN01	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
SW801	3403-001020	SWITCH-PUSH:250V,5A,DPST,OFF-ON-OFF		QN02	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
SW901	3404-000244	SWITCH-TACT:12V,50mA,100-160gf,8.4x22.6mm,		QN03	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
SW902	3404-000244	SWITCH-TACT:12V,50mA,100-160gf,8.4x22.6mm,		QN04	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
SW903	3404-000244	SWITCH-TACT:12V,50mA,100-160gf,8.4x22.6mm,		QN05	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
SW904	3404-000244	SWITCH-TACT:12V,50mA,100-160gf,8.4x22.6mm,		RN01	2007-000941	R-CHIP:47KOHM,5%,1/10W,DA,TP,2012	
SW905	3404-000244	SWITCH-TACT:12V,50mA,100-160gf,8.4x22.6mm,		RN02	2007-001071	R-CHIP:6.8KOHM,5%,1/10W,DA,TP,2012	
T401	AA26-50001R	TRANS-HORIZ DRIVE:-,80MH,580UH,4UH,G11A E119,ST		RN03	2007-000774	R-CHIP:33KOHM,5%,1/10W,DA,TP,2012	
T444	AA26-30005U	TRANS-FLYBACK:-,FUH-29A003,29,155V		RN04	2007-001071	R-CHIP:6.8KOHM,5%,1/10W,DA,TP,2012	
T801	AA26-20007W	TRANS-SWITCHING:-,90-260V,130/15.5/12/8V,VDE,S		RN05	2007-000941	R-CHIP:47KOHM,5%,1/10W,DA,TP,2012	
TU101	AA40-10006B	TUNER-V/S:TECC0949VG28A(S),PAL-B/G,TR,18		RN06	2007-001071	R-CHIP:6.8KOHM,5%,1/10W,DA,TP,2012	
V999	3704-001105	SOCKET-CRT:11P,20P1,26.5PI,Ni,-		RN07	2007-000981	R-CHIP:5.6KOHM,5%,1/10W,DA,TP,2012	
X202	2801-000274	CRYSTAL-UNIT:4.433619MHZ,30PPM,28-AAM,20PF,		RN08	2007-000030	R-CHIP:560OHM,5%,1/10W,DA,TP,2012	
X203	2801-000226	CRYSTAL-UNIT:3.579545MHz,20ppm,28-AAM,15pF,		RN09	2007-000766	R-CHIP:330OHM,5%,1/10W,DA,TP,2012	
XT01	2801-003433	CRYSTAL-UNIT:12MHz,30ppm,28-AAA,30pF,30ohm,		RN10	2007-000586	R-CHIP:22KOHM,5%,1/10W,DA,TP,2012	
Z208	2903-000181	FILTER-CERAMIC:TR,5.5MHz,-,-,TP,PS5.5MB-TF		RN11	2007-000586	R-CHIP:22KOHM,5%,1/10W,DA,TP,2012	
ASSY-SOUND							
*	AA95-40012A	ASSY-SOUND:-,-,S51A,SECAM-L,NICAM,CF ALL,					
CN01	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-					
CN02	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-					
CN03	2203-000891	C-CERAMIC,CHIP:4.7nF,10%,50V,X7R,TP,2012,-					
CN04	2203-002392	C-CERAMIC,CHIP:220nF,+80-20%,50V,Y5V,TP,2012,					
CN05	2401-000620	C-AL:2.2uF,10%,50V,GP,TP,5x11.5					
CN06	2401-000030	C-AL:22uF,20%,25V,GP,TP,5x11.5					
CN07	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,					
CN08	2203-001002	C-CERAMIC,CHIP:47pF,5%,50V,NPO,TP,2012,-					
CN09	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,					
CN10	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-					
CN11	2401-000620	C-AL:2.2uF,10%,50V,GP,TP,5x11.5					
CN12	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,2mm					
CN13	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,2mm					
CN14	2401-000620	C-AL:10uF,20%,50V,GP,TP,5x11.5					
CN15	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11.5					
CN16	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11.5					
CN17	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11.5					
CN18	2203-000925	C-CERAMIC,CHIP:470nF,+80-20%,50V,Y5V,TP,2012,					
CN19	2203-000925	C-CERAMIC,CHIP:470nF,+80-20%,50V,Y5V,TP,2012,					
CN20	2203-000925	C-CERAMIC,CHIP:470nF,+80-20%,50V,Y5V,TP,2012,					
CN21	2203-000802	C-CERAMIC,CHIP:33nF,10%,50V,X7R,TP,2012,-					
CN22	2203-002442	C-CERAMIC,CHIP:330nF,+80-20%,25V,Y5V,TP,2012,					
CN23	2203-000389	C-CERAMIC,CHIP:15pF,5%,50V,NPO,TP,2012,-					
CN24	2203-000818	C-CERAMIC,CHIP:33pF,5%,50V,NPO,TP,2012,-					
CN25	2203-000925	C-CERAMIC,CHIP:470nF,+80-20%,50V,Y5V,TP,2012,					
CN26	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,					
CN27	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11.5					
CN28	2203-000925	C-CERAMIC,CHIP:470nF,+80-20%,50V,Y5V,TP,2012,					
CN29	2203-000925	C-CERAMIC,CHIP:470nF,+80-20%,50V,Y5V,TP,2012,					
CN30	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11.5					
CN31	2203-000925	C-CERAMIC,CHIP:470nF,+80-20%,50V,Y5V,TP,2012,					
CN32	2401-000471	C-AL:10uF,20%,50V,BP,TP,5x11.5mm					
CN33	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-					
CN34	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-					
CN35	2203-000701	C-CERAMIC,CHIP:2pF,0.25pF,50V,NPO,TP,2012,-					
CN36	2401-000242	C-AL:100uF,20%,10V,GP,TP,5x11.5					
CN37	2401-000620	C-AL:2.2uF,10%,50V,GP,TP,5x11.5					
CN38	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11.5					
CN39	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,					
CNN01	3711-002704	CONNECTOR-HEADER:NOWALL,6P,1R,2.5mm,ANGLE,SN					
CNN02	3711-002705	CONNECTOR-HEADER:NOWALL,7P,1R,2.5mm,ANGLE,SN					
DN01	0401-000160	DIODE-SWITCHING:ISS314,30V,100mA,USC,TP					
DN02	0401-000160	DIODE-SWITCHING:ISS314,30V,100mA,USC,TP					
DN03	0405-000108	DIODE-VARACTOR:BB405B,28V,10nA,DO-34,TP					
ICN01	1209-000218	IC-PLL:TDA9814T,SOP28P,-,PLASTIC,5.5		CNS01	3711-002702	CONNECTOR-HEADER:NOWALL,4P,1R,2.5mm,ANGLE,SN	
				CNS02	3711-002703	CONNECTOR-HEADER:NOWALL,5P,1R,2.5mm,ANGLE,SN	
				CNS03	AA39-20052F	LEAD CONNECTOR-ASSY:-,YBNH025-04,YSH025-4,4P,200M	
				CNS03	3711-002643	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGHT,SN	
				CS01	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11.5	
				CS02	2305-000665	C-FILM,MPEF:100NF,5%,63V,TP,7.5X4.0X5.0MM,	
				CS03	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
				CS04	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
				CS05	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
				CS06	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
				CS07	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
				CS08	2202-002037	C-CERAMIC,MLC-AXIAL:100nF,80-20%,50V,Y5V,TP,2.2x3.	
				DS01	0401-000005	DIODE-SWITCHING:1N4148,75V,300MA,DO-35,TP	
				ICS01	1001-000223	IC-VIDEO SWITCH:TEA5114A,-,DIP,16P,334MIL,SING	
				RS01	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM	
				RS04	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM	
				RS06	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM	
				RS07	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
				RS08	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
				RS09	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
				RS10	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
				RS11	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
				RS12	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	

ASSY-R/G/B,SWITCHING

* HA95-90009S ASSY-R/G/B,SWITCHING:-,-,S51A,PHILIPS MICOM ALL,-,

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
RS13	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM					
RS14	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM					
RS15	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM					
RS16	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM					
RS17	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM					
RS18	2001-000003	R-CARBON:330OHM,5%,1/8W,AA,TP,1.8X3.2MM					

ASSY-PCB,A/V FRONT

*	HA95-900009	ASSY-PCB,A/V FRONT:SCT12A/12B	
CA02	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-	
CA03	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP,1.9x3.5,-	
CA04	2202-000720	C-CERAMIC,MLC-AXIAL:8.2NF,20%,16V,Y5R,3.5X19,-,TP	
CA05	2202-000720	C-CERAMIC,MLC-AXIAL:8.2NF,20%,16V,Y5R,3.5X19,-,TP	
CA06	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
CA07	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
CN01A	AA39-20068E	LEAD-CONNECTOR,ASSY:-,YBNH025-08,67096-0	
CN05A	AA39-20069A	LEAD-CONNECTOR,ASSY:-,YBNH025-05,67096-0	
CN06A	AA39-20499B	LEAD CONNECTOR-ASSY:-,YBNH025-04,SMP025-4,4P,200,	
JE01	3722-000143	JACK-PHONE:1P(VER),3.4mm,AG,BLK,NO	
JR01	3722-001031	JACK-RCA:3P,3.6MM,#18,AU	
LA02	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM	
LA03	2701-000114	INDUCTOR-AXIAL:10UH,10%,2.5X3.4MM	
LA04	2701-000180	INDUCTOR-AXIAL:33UH,5%,2.5X3.4MM	
LA05	2701-000180	INDUCTOR-AXIAL:33UH,5%,2.5X3.4MM	
RA01	2001-000028	R-CARBON(S):100ohm,5%,1/2W,AA,TP,2.4x6.4mm	
RA02	2001-000028	R-CARBON(S):100ohm,5%,1/2W,AA,TP,2.4x6.4mm	

ASSY-SPEAKER

3001-000150	SPEAKER:20W,8ohm,91dB,130Hz
AA39-20452F	LEAD CONNECTOR-ASSY:-,YFH800-01,CLIP,1p,600mm,1617
AA39-20502A	LEAD CONNECTOR-ASSY:-,SMH025-04,REC,4P,300.700,100

ASSY-CRT



AA03-10018Y	CRT-COLOR:-,A66EAK071X01,+380MG,28,110D
AA39-20519A	LEAD CONNECTOR-ASSY:-,YFH806-06,-,6(4)P,500MM,1617

REMOCON

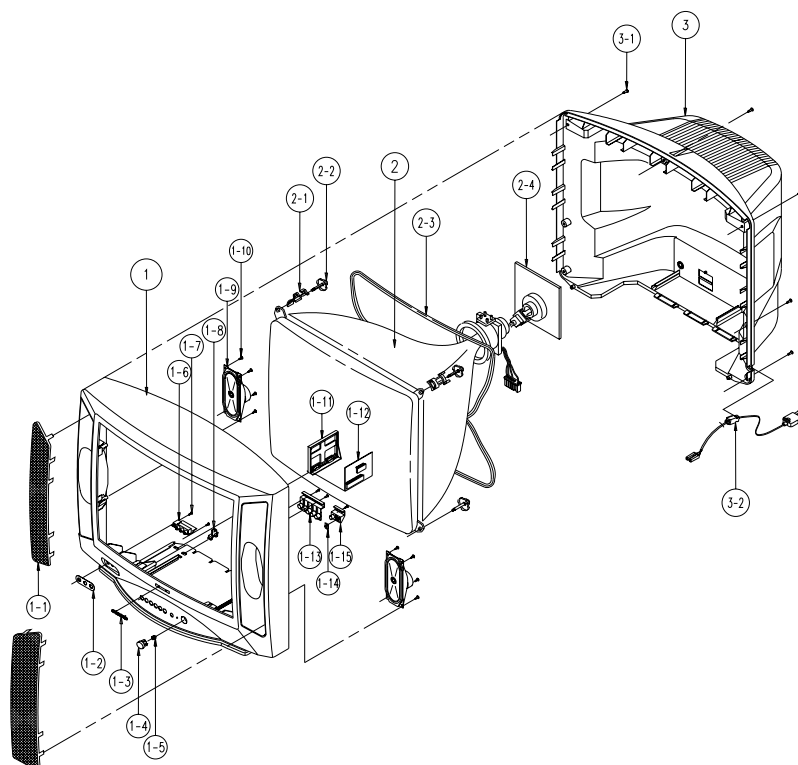
*	AA59-10117A	REMOCON:DP,TM59,-,-,-,-,AA59-10116A,
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ASSY-ACCESSORY

AA39-40001B	CABLE-RCA:-,RCA,1500mm,0.12/10,RED/WHT/Y
AA68-11363A	MANUAL-USERS:S51A,ENG,TM59,B5,W/P 100(G):-

6. Exploded View & Parts List

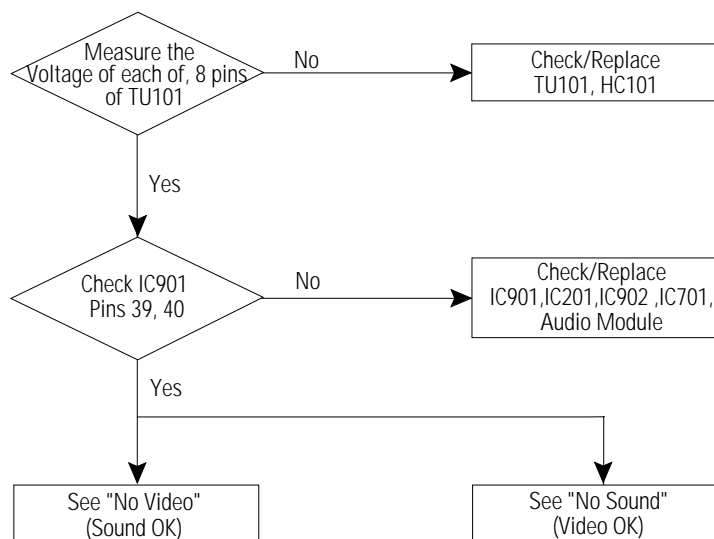
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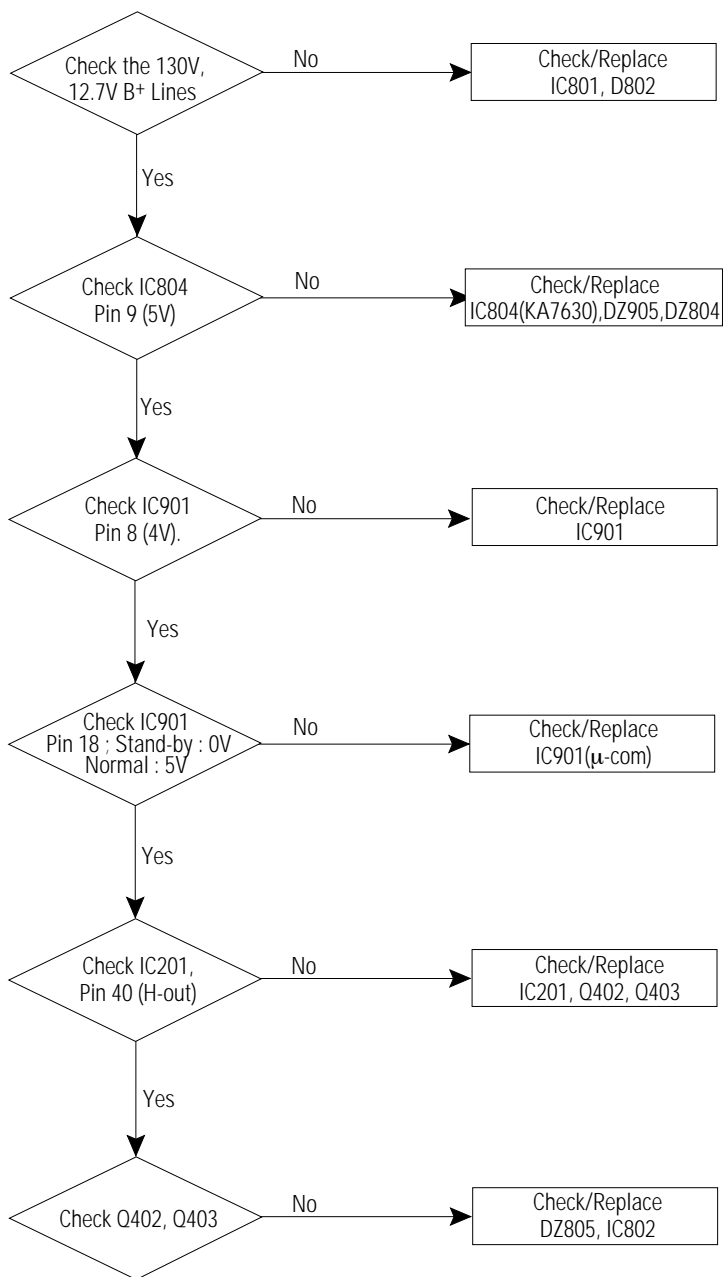
No	Code No	Description	Specification	Q'ty	Remark
1	HA91-100014	ASSY-CABINET,FRONT	6844	1	
	HA64-300029	CABINET-FRONT	-,6844,-,HIPS,HB,BLK,-,-	1	
1-1	AA63-50287A	GRILLE-WOOFER,L	DP,6844,AA63-50191A,-,-,-,-	1	
	AA63-50288A	GRILLE-WOOFER,R	DP,6844,AA63-50201A,-,-,-,-	1	
1-2		CABINET-FRONT OPTION			
1-3	AA64-70011B	BADGE-BRAND	-,AL,-,L60,SILVER,R2000 SS 25,	1	
1-4	AA64-10348A	KNOB-POWER,M	-,ABS,HB,BLK,-,6844	1	
1-5	AA61-60003M	SPRING-CS	-,SUS304,0.6,OD11.2,H20,N9,-,-	1	
1-6	HA95-900009	ASSY-PCB,A/V FRONT	SCT12A/12B	1	
1-7	AA60-10002A	SCREW-TAPPING	RH,+ ,M4,L12,ZPC(YEL),-,OD14	2	
1-8	AA61-40053A	STOPPER-PCB	ALL MODEL,HIPS HB,WHT,HB,-,-	1	
1-9	3001-000150	SPEAKER	20W,8ohm,91dB,130Hz	2	
1-10	6002-000514	SCREW-TAPPING	RH,+ ,2,M4,L15,ZPC(BLK),SWRCH18	8	
1-11		ASSY-PWB,TTX OPTION			
1-12		ASSY-PWB,TTX OPTION			
1-13	AA64-10347A	KNOB-CONTROL	-,ABS,HB,BLK,-,6844	1	
1-14	AA64-40249A	INDICATOR-LED	-,ACRYL,HB,-,-,6844,-	1	
1-15	AA64-40243A	WINDOW-REMOCON	-,PC,-,-,-,-,6844	1	
2	AA03-10018Y	CRT-COLOR	-,A66EAK071X01,+380MG,28,110D	1	
2-1	AA65-30017A	CLAMP-D,COIL	NYLON-66,V0,NTR,DADH300,25 20	4	
2-2	AA60-10050Q	SCREW-ASSY	WC,HH,+ ,M5,L26.5,SWRCH18A,ZPC(4	
2-3	AA27-20004K	COIL-DEGAUSSING	-,29,19.0ohm,45T,3000mm,E	1	
2-4	3704-001105	SOCKET-CRT	11P,20PI,26.5PI,NI,-	1	
3	HA64-300024	CABINET-BACK	6844,HIPS,V2,BLK,-,-,-	1	
3-1	6002-000514	SCREW-TAPPING	RH,+ ,2,M4,L15,ZPC(BLK),SWRCH18	8	
3-2	AA96-20014D	ASSY-POWER,CORD	DP,KJP-140,H/C450MM,KLCE-2F,-,	1	

5. Troubleshooting

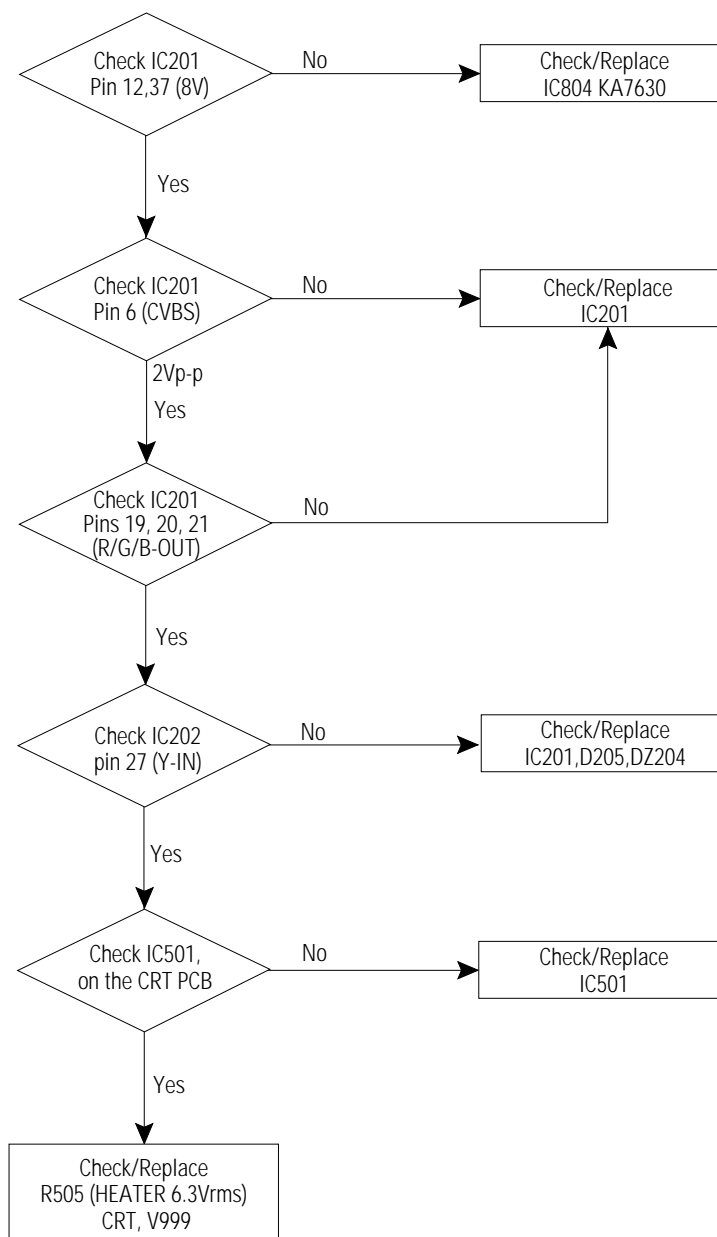
5-1 No Video (Raster On, No Sound)



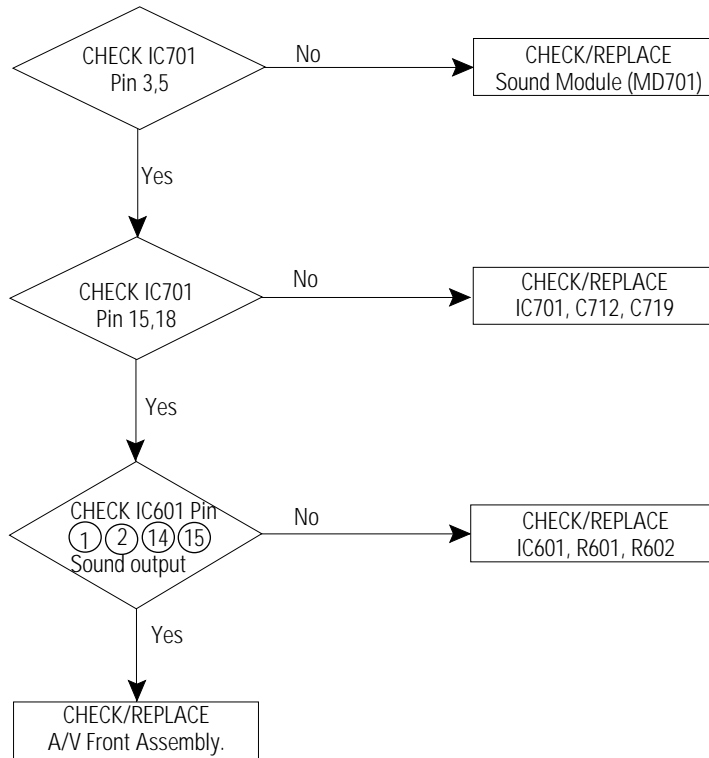
5-2 No Power



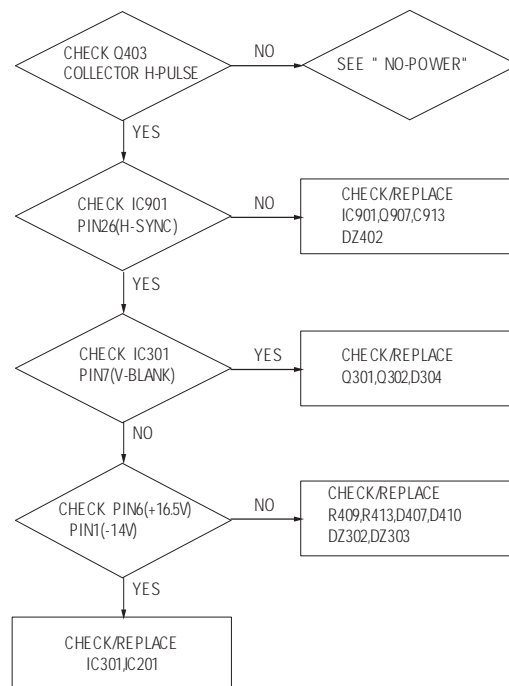
5-3 No Video (Sound OK)



5-4 No Sound (Video OK)



5-5 Power OFF/ON (Repeatedly)



5-6 SMPS (Power Supply) Does Not Function

- (1) When F802 is open:
Check/Replace F802 , IC801 , D802.
- (2) When F802 is okay, but SMPS does not function:
Check/Replace DZ801 , DZ808 , IC802 , DZ805.
- (3) Others: See "5. Troubleshooting"

4. Alignment and Adjustments

4-1 Preadjustment

4-1-1 Factory Mode

1. Do not attempt these adjustments in the Video Mode.
2. The Factory Mode adjustments are necessary when either the EEPROM (IC902) or the CRT is replaced.
3. Do not tamper with the "Adjustment" screen of the Factory Mode menu. This screen is intended only for factory use.

4-1-2 When EEPROM (IC902) Is Replaced

1. When IC902 is replaced all adjustment data revert to initial values. It is necessary to re-program this data.
2. After IC902 is replaced, warm up the TV for 10 seconds.

4-1-3 When CRT Is Replaced

1. Make the following adjustments AFTER setting up after setting up purity and convergence :

White Balance
 Sub-Brightness, Sub-Contrast
 Vertical Center
 Vertical Size
 Horizontal Size
 Fail Safe (This adjustment must be the last step).

4-2 Factory/Service Mode

4-2-1 Procedure for the "Adjustment" Mode

1. This mode uses the standard remote control. The Service Mode is activated by entering the following remote-control sequence :

(1) STAND-BY → DISPLAY → MENU → MUTE → POWER ON.
2. The "SERVICE (FACTORY)" message will be displayed. The Service Mode has three components: Adjustment, Option and Reset.
3. Access the Adjustment Mode by pressing the "VOLUME" keys (Up or Down). The adjustment parameters are listed in the accompanying table, and selected by pressing the CHANNEL keys (▲, ▼).

4. Selection sequences for the PAL system:

DOWN or UP key:

AGC ↔ VCO ↔ SBT ↔ SCT ↔ SCR ↔ SC ↔ RG ↔
 BG ↔ CDL ↔ STT ↔ LCO ↔ VOL ↔ PSL ↔ PVS ↔
 PVA ↔ PHS ↔ PEW ↔ PEP ↔ PEC ↔ PET ↔ VSC ↔
 TSC ↔ SA ↔ QEW ↔ PCT ↔ PTT ↔ PHM ↔ PVP ↔
 PHP ↔ NSR ↔ PDL ↔ AGC.

5. The VOLUME keys increase or decrease the adjustment values (stored in the non-volatile memory) when Adjustment Mode is cancelled.
6. Cancel the Adjustment Mode by re-pressing the "HIDDEN" or "Power OFF/ON" keys.
7. After adjustments are completed, re-start the TV set.

4-2-2 Main Adjustment Parameters

OSD	FUNCTION	RANGE
AGC	AUTO GAIN CONTROL	0 - 63
VCO	VOLTAGE CONTROLLED OSCILLATOR	0 - 127
SBT	SUB BRIGHTNESS	0 - 23
SCT	SUB CONTRAST	0 - 23
SCR	SUB COLOUR	0 - 23
SC	S-CORRECTION	0 - 63
RG	RED DRIVE GAIN	0 - 63
BG	BLUE DRIVE GAIN	0 - 63
CDL	CATHODE DRIVE LEVEL	0 - 7
STT	SUB TINT (FOR NTSC)	0 - 7
LCO	SECAM-L VOLTAGE CONTROLLED OSCILLATOR	0 - 1
VOL	VOLUME INITIAL LEVEL	0 - 63
PSL	PAL VERTICAL SLOPE	0 - 63
PVS	PAL VERTICAL SHIFT	0 - 63
PVA	PAL VERTICAL AMPLITUDE	0 - 63
PHS	PAL HORIZONTAL SHIFT	0 - 63
PEW	PAL E-W WIDTH	0 - 63
PEP	PAL E-W PALABOLA	0 - 63
PEC	PAL E-W CORNER	0 - 63
PET	PAL E-W TRAPEZIUM	0 - 63
VSC	VERTICAL SCROLL	0 - 63
TSC	TELETEXT SUB CONTRAST	0 - 63
SA	SEPARATION ADJUSTMENT (STEREO)	0 - 15
QEW	Q(12.8:9)MODEL E-W WIDTH	0 - 7
PCT	PIP CONTRAST	0 - 15
PTT	PIP TINT	0 - 63
PHM	PIP HORIZONTAL MOVE	0 - 15
PVP	PIP VERTICAL POSITION	0 - 63
PHP	PIP HORIZONTAL POSITION	0 - 63
NSR	NTSC SUB COLOUR	0 - 23
PDL	PAL DELAYTIME	0 - 15

FACTORY MODE VALUE

OSD	INITIAL	OSD	INITIAL	OSD	INITIAL
2 (CH)		LCO	1 (FIXED)	TSC	20(FIXED)
AGC	10	VOL	25	SA	7
VCO	80(FIXED)	PSL	31(FIXED)	QEW	5
SBT	7	PVS	31	PCT	7(FIXED)
SCT	16	PVA	31	PTT	31(FIXED)
SCR	5(FIXED)	PHS	40	PHM	8(FIXED)
SC	11(FIXED)	PEW	38	PVP	31(FIXED)
RG	31	PEP	22	PHP	31(FIXED)
BG	31	PEC	22	NSR	3 (FIXED)
CDL	5	PET	30	PDL	0 (FIXED)
STT	10(FIXED)	VSC	31(FIXED)		

4-2-3 AGING Mode (Reference Only)

This pattern is used for pre-heating the CRT during manufacturing--it is accessed in the factory by twice pressing the "FACTORY " key.

Even if the TV power is cut off, the Aging Mode is not cancelled, The AGING mode is cancelled by repressing the "HIDDEN" or any key on the front panel.

4-2-4 Option Byte Table

Option Byte
1.ZOOM MODE : NORMAL/ZOOM/16:9
2.AUDIO MODE : NICAM STEREO
3.ONE CHIP : TDA8844
4.LED OPTION : NORMAL
5.LANGUAGE : WEST ENG/GER/FRA/DUT/SPA/ITA/SWE
6.SYSTEM: CX
7.ATS OPTION : ON
8.FIELD POL : FIELD POS

OPTION	OSD	NOTE
ZOOM MODE	PLU/NOR/ZOOM/16:9	12.8 : 9 CRT USED(30",22")
	NORMAL/ZOOM/16:9	NORMAL CRT USED
	NORMAL/ZOOM	
	PLUS/NORMAL	12.8 : 9 CRT USED(26")
AUDIO MODE	NICAM STEREO	NICAM MODULE USED
	STEREO	A2 MODULE USED
	LINE STEREO	MONO MODULE USED (LINE STEREO MODEL)
	MONO	MONO MODULE USED (MONO MODEL)
ONECHIP	TDA8844	CRT(MORE THAN 22-INCH)USED
	TDA8842	CRT(MORE THAN 21-INCH)USED
LED OPTION	NORMAL	DEFAULT
	POLAND	POLAND MODEL ONLY
LANGUAGE	WEST ENG/GER/FRA/DUT/SPA/ ITA/SWE	WEST EUROPE MARKET ENGLISH/GERMANY/FRANCE/ NETHERLANDS/SPAIN/ITALY/SWEDEN
	EAST ENG/CZE/CRO/RUM/HUN/ POL	EAST EUROPE MARKET ENGLISH/CZECH/CROATIA/ROMANIA/ HUNGARY/POLAND
SYSTEM	CF	SECAM-L/L', PAL/SECAM-B/G
	CI	PAL - I (UHF BAND ONLY)
	CK	PAL/SECAM - B/G,D/K
	CX	PAL/SECAM -B/G
	CB	PAL -B/G
ATS OPTION	ON	ATM FUNCTION USED
	OFF	ATM FUNCTION NOT USED
FIELD POL	FIELD POS	PHILIPS CRT USED
	FIELD NEG	OTHER CRT USED

4-2-5 RESET

The Reset Mode is used during factory inspection.
Function Reset:

- | | |
|-----------------|----------------|
| 1. Channels | Add/Erase |
| 2. Language | Last condition |
| 3. Station name | Clear |

4-3 Other Adjustments

4-3-1 General

1. Usually, a color TV needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync and focus.
2. The picture should have good black and white details. There should be no objectionable color shading; if color shading is present, perform the purity and convergence adjustments described below.
3. Use the specified test equipment or its equivalent.
4. Correct impedance matching is essential.
5. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test results.
6. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
7. Do not attempt to connect or disconnect any wires while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
8. To protect against shock hazard, use an isolation transformer.

4-3-2 Automatic Degaussing

A degaussing coil is mounted around the picture tube, so that external degaussing after moving the TV should be unnecessary. But the receiver must be properly degaussed upon installation.

The degaussing coil operates for about 1 second after the power is switched ON. If the set has been moved or turned in a different direction, disconnect its AC power for at least 30 minutes.

If the chassis or parts of the cabinet become magnetized, poor color purity will result. If this happens, use an external degaussing coil. Slowly move the degaussing coil around the faceplate of the picture tube and the sides and front of the receiver. Slowly withdraw the coil to a distance of about 6 feet before removing power.

4-3-3 High Voltage Check

CAUTION: There is no high voltage adjustment on this chassis. The B+ power supply must be set to +155 volts (Full color bar input and normal picture level).

1. Connect a digital voltmeter to the second anode of the picture tube.
2. Turn on the TV. Set the Brightness and Contrast controls to minimum (zero beam current).
3. The high voltage should not exceed 33KV.
4. Adjust the Brightness and contrast controls to both extremes. Ensure that the high voltage does not exceed 33KV under any conditions.

4-3-4 FOCUS Adjustment

1. Input a black and white signal.
2. Adjust the tuning control for the clearest picture.
3. Adjust the FOCUS control for well defined scanning lines in the center area of the screen.

4-3-5 Screen Adjustment

1. Connect CRT socket pin GK, BK, RK to an oscilloscope probe.
2. Input a gray scale pattern. (Use a pattern generator, PM5518)
3. Use the Picture mode for the STANDARD picture.
4. Adjust the Screen VR (on the FBT) so that the voltage on the oscilloscope becomes $140 \pm 2.5V$ (See Fig. 4-1).

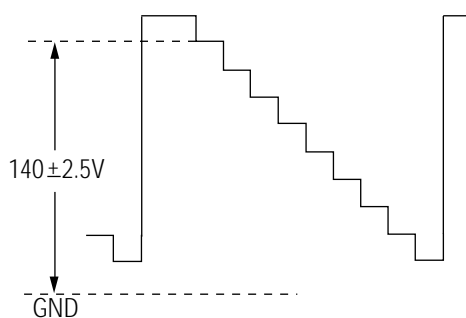


Fig. 4-1

4-3-6 Purity Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Plug in the CRT deflection yoke and tighten the clamp screw.
3. Plug the convergence yoke into the CRT and set in as shown in Fig. 4-2.
4. Input a black and white signal.
5. Fully demagnetize the receiver by applying an external degaussing coil.
6. Turn the CONTRAST and BRIGHTNESS controls to maximum.
7. Loosen the clamp screw holding the yoke. Slide the yoke backward or forward to provide vertical green belt. (Fig. 4-3).
8. Tighten the convergence yoke.
9. Slowly move the deflection yoke forward, and adjust for the best overall green screen.
10. Temporarily tighten the deflection yoke.
11. Produce blue and red rasters by adjusting the low-light controls. Check for good purity in each field.
12. Tighten the deflection yoke.

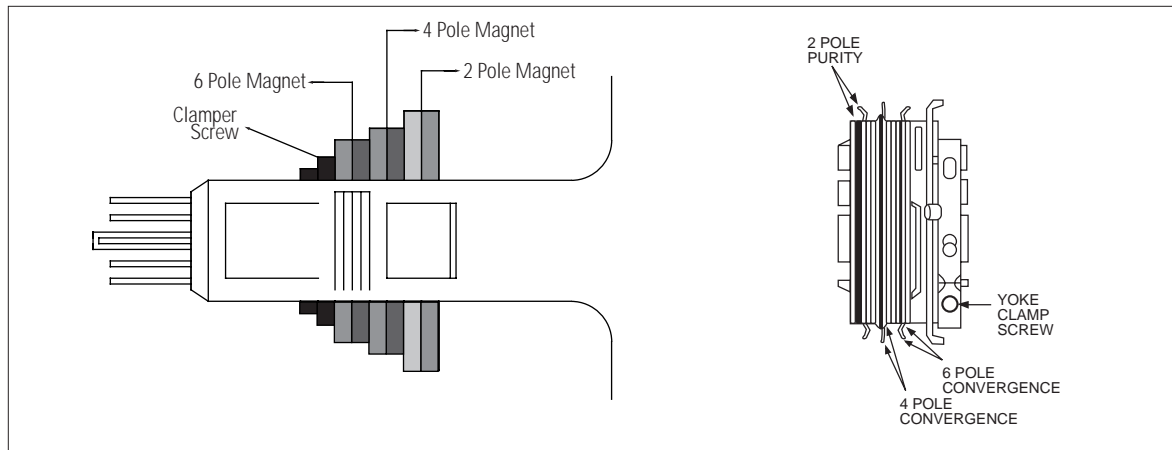


Fig. 4-2 Convergence Magnet Assembly

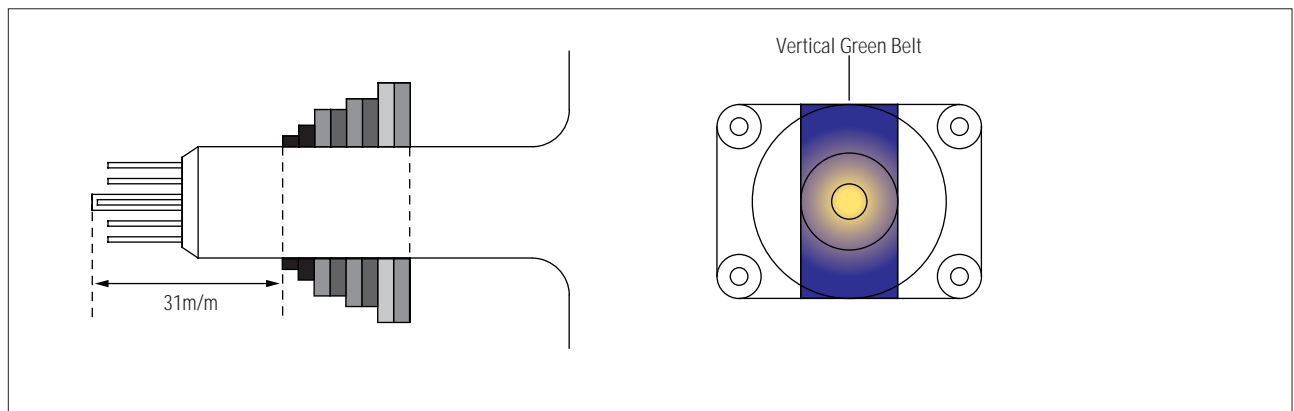


Fig. 4-3 Center Convergence Adjustment

4-3-7 White Balance Adjustment

(a) Set up

1. Warm up the TV for at least 30 minutes in the White Pattern.
2. Input a Toshiba pattern.

(b) High-Light Adjustment

Set SCT to 40 ± 5 fL in the Factory Service Mode with using CA100. (See Fig. 4-4 ①)

(c) Low-Light Adjustment

Set SBT to 1.5 ± 0.2 fL in the Factory Service Mode with using CA100. (See Fig. 4-4 ②)

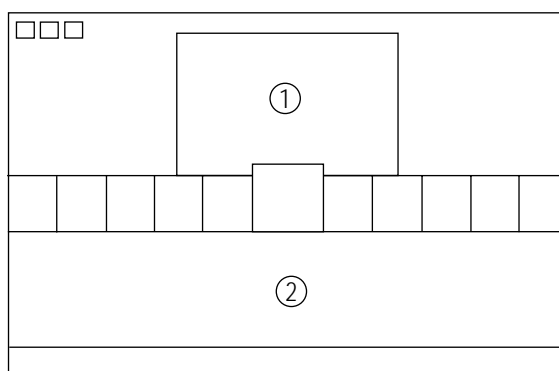


Fig. 4-4

4-3-8 Center Convergence Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Adjust the two tabs of the 4 pole magnets to change the angle between them. Superimpose the red and blue vertical lines in the center area of the screen.
3. Adjust the Brightness and Contrast controls for a well defined picture.
4. Adjust the two-tab pairs of the 4 pole magnets, and change the angle between them. Superimpose the red and the blue vertical lines in the center area of the screen.
5. Turn the both tabs at the same time, keeping the angle constant, and superimpose the red and blue horizontal line in the center of the screen.
6. Adjust the two-tab pairs of the 6-pole magnets to superimpose the red and blue line onto the green. (Changing the angle affects the vertical lines, and rotating both magnets affects the horizontal lines.)
7. Repeat adjustments 2~6, if necessary.
8. Since the 4-pole magnets and 6-pole magnets interact, the dot movement is complex (Fig. 4-5).



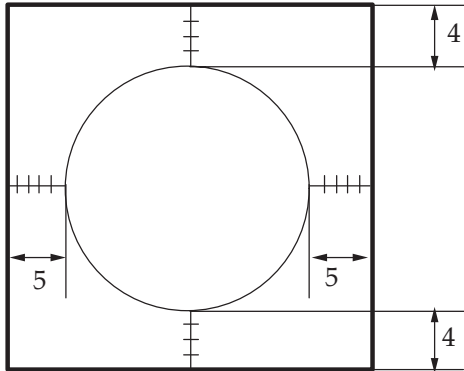
Fig. 4-5 Center Convergence Adjustment

4-3-9 RF AGC Adjustment

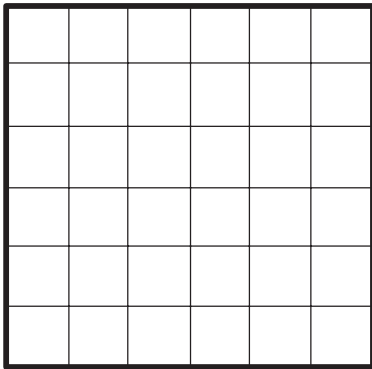
1. Tune to the strongest local station.
2. Enter the Factory Service Mode to make adjustments.
3. Adjust the AGC control until noise(snow) disappears from the screen.

4-3-10 Geometry Adjustment

1. Input a lion head pattern.
2. Adjust PVS so that the picture is vertically centered.
3. Adjust with PVA so that the top and bottom margins of the picture are 4.
4. Adjust PHS so that the picture is horizontally centered.
5. Adjust with PEW so that the left and right margins of the picture are 5.

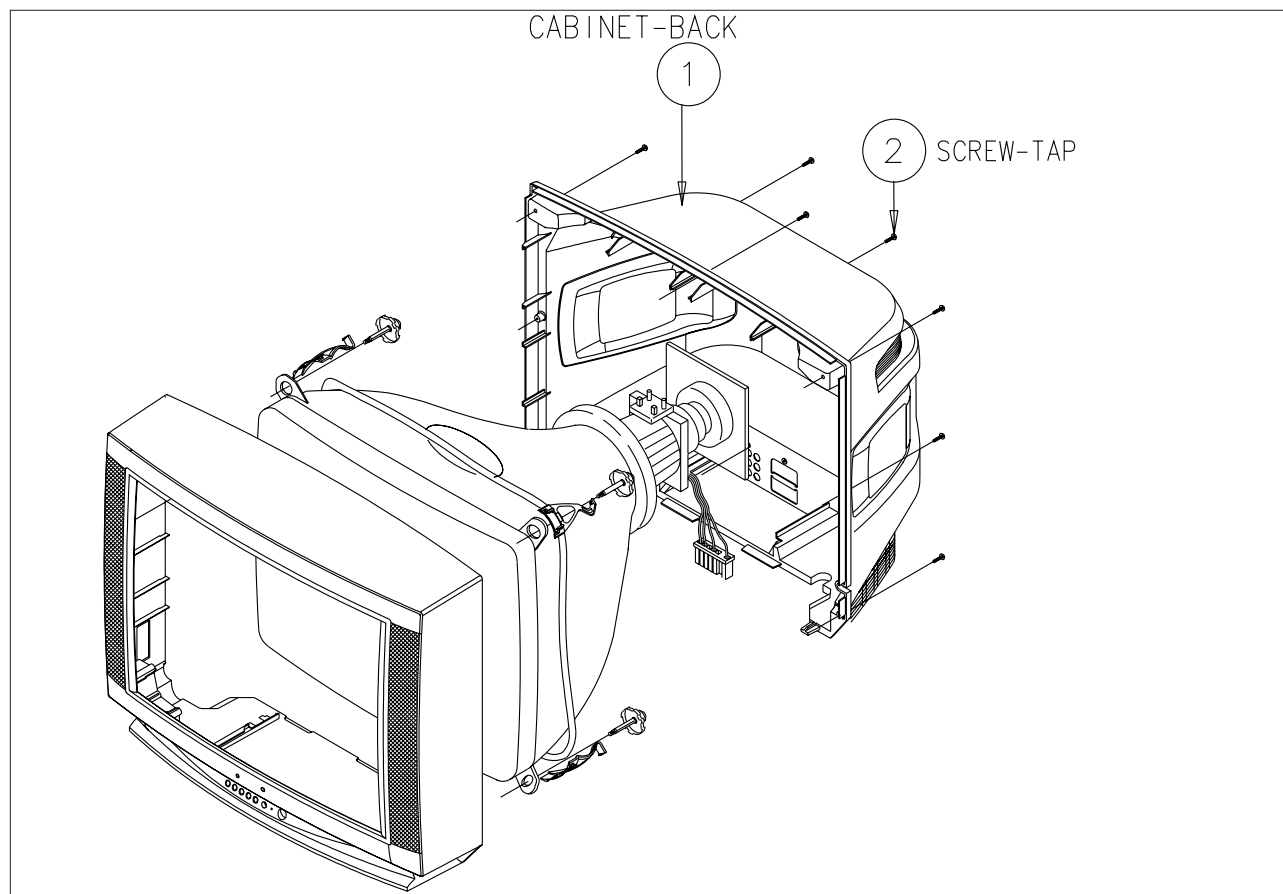


6. Input a crosshatch pattern.
7. Adjust PEP, PEC , PET for vertical linearity.



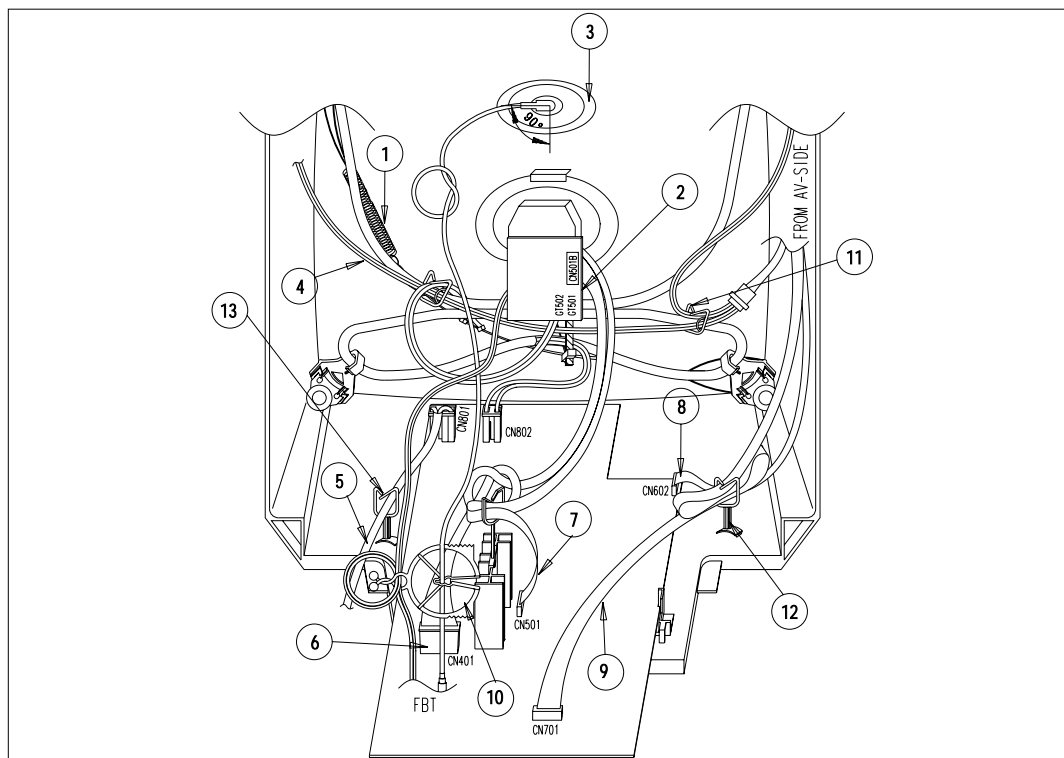
3. Disassembly and Reassembly

3-1 Back Cover Removal



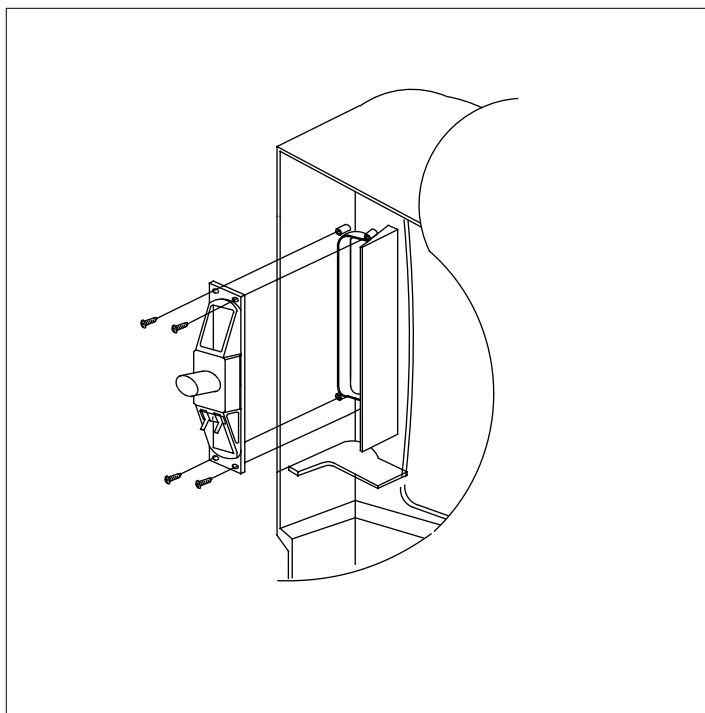
1. After removing the 7 screws, pull the cabinet backwards.

3-2 Main Board Removal

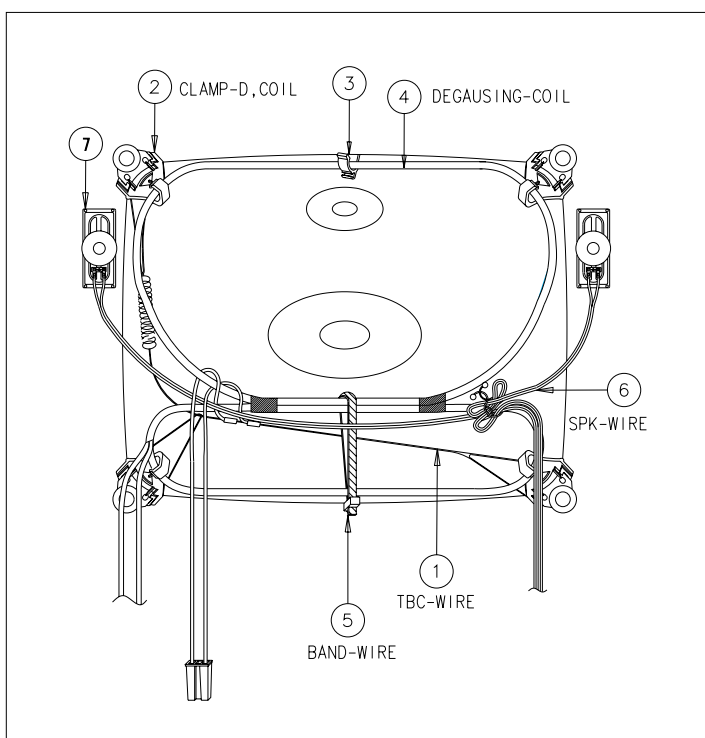


1. Separate the TBC-wire 2P connector from GT501,GT502.
2. Separate the CRT Assembly from the CRT socket.
3. Remove the Anode Cap from the CRT.
4. Separate the D-Coil Connector from CN802.
5. Separate the AC cord from CN801.
6. Separate the DC connector from CN401.
7. Separate the CN501B 8P CRT connector from CN501.
8. Separate the CNA05 5P A/V side connector from CN602.
9. Separate the CNA01 8P CRT connector from CN701.
10. Separate the Focus Screen Wire from the FBT clamper.
11. Separate the TBC wire 2P, speaker wires from the wire clamper.
12. Separate the CN701, CN602 connector from the wire clamper.
13. Separate the AC cord from the wire clamper.
14. Remove the main board by pulling it with both hands.

3-3 Speaker Removal

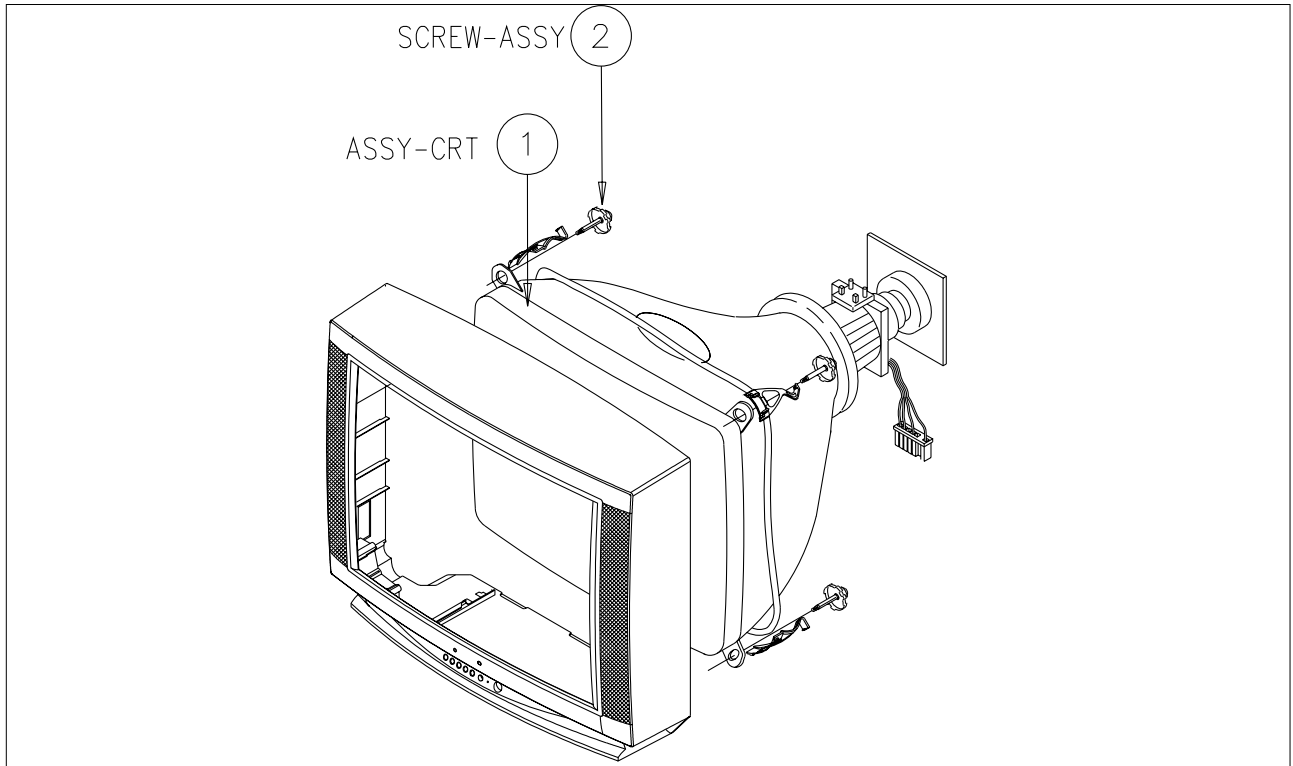


1. Remove the speaker by pressing the tension rib.



1. Separate the speaker wires from D-coil (located on the bottom to the right side).
2. Remove the screws.

3-4 CRT Removal



1. Remove the 4 nuts that mount the CRT to the front cabinet.
Pull the CRT backwards.
2. Caution: Because of the high vacuum and large surface area of the picture tube, be careful while handling it: (1) Always lift the picture tube by grasping it firmly around the faceplate, (2) Never lift the tube by its neck. (3) Do not scratch the picture tube or apply excessive pressure. Fractures of the glass may cause an implosion.

2. Specifications and IC Data

2-1 Specifications

Television System:

MODEL	SYSTEM
CI	PAL-I (UHF)
CII	PAL-I (VHF/UHF)
CX	PAL-B/G, SECAM-B/G
CK	PAL-B/G, D/K, SECAM-B/G, D/K
CB	PAL-B/G
CF	SECAM-L/L', PAL/SECAM-B/G

Channels:

BAND \ SYSTEM	PAL/SECAM -B/G, I	PAL/SECAM -D/K	SECAM-K1, PAL-D
VHF	2-12	1-13	2-9
UHF	21-69	21-69	13-57

Intermediate-Frequencies (MHz):

BAND \ SYSTEM	PAL/SECAM -B/G	PAL/SECAM -D/K, K1	PAL-I	SECAM-L	SECAM-L'
Picture IF Carrier	38.90	38.90	38.90	38.90	34.50
Sound IF Carrier	33.40	32.40	32.90	34.40	41.00
Color Sub Carrier	34.47	34.47	34.47	34.47	38.93

Picture Tube:

21 Inch	A51EER131X31	Quick start, in-line-gun, Black stripe, 90° degree deflection
25 Inch	A59EAK071X01 (Normal) A59EAK552X21 (Invar)	
28 Inch	A66EAK071X01 (Normal) A66EAK552X21 (Invar)	
30 Inch	A70QBZ791X	

Power Requirements: AC 230 V, 50Hz or AC 220 ~ 240 V, 50Hz

Antenna Input Impedance:

VHF, UHF: Telescopic dipole antenna (75Ω unbalanced type)

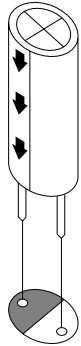
Speaker Impedance: 8Ω, 10W + 10W or 16Ω, 5W + 5W (533C only)

2-2 IC Line Up

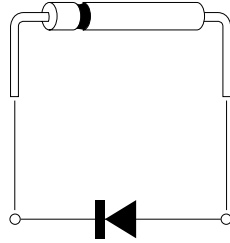
LOC NO	NO	Specification	Description	Remarks
HIC101	1	PAP103T	IF PRE-AMP	
IC201	2	TDA8844	PAL/SECAMNTSC/SECAM-L	
		TDA8843	PAL/NTSC	
IC301	3	LA7845	VERTICAL DEFLECTION AMP	
IC501	4	TDA6108	RGB DRIVE AMP	
IC601	5	TDA7297	SOUND AMP(10W/CH)	
		TDA7266S	SOUND AMP(5W/CH)	
IC701	6	TDA9859	AUDIO PROCESSOR	
IC801	7	KA3S1265R	SMPS IC(12A)	
IC802	8	PC123Y	PHOTO COUPLER	
IC803	9	78R05	SWITCHING REGULATOR	
IC804	10	KA7630	SWITCHING REGULATOR(5,8V)	
IC901	11	SPM171EE	MICOM	
IC902	12	24W16	EEPROM	16K
ICE01	13	4558	EW DRIVE AMP	
ICN01	14	TDA9814T	SIF DETECTOR (SECAM-L)	NICAM MODULE
ICN02	15	TDA9874H	NICAM DEMODULATOR	
ICA01	16	LA7567N	SIF DETECTOR	A2 STEREO MODULE
ICA02	17	TDA9873H	A2 DEMODULATOR	
ICM01	18	LA7566	SIF & FM DETECTOR	MONO
ICS01	19	TEA5114	VIDEO SWITCH	RGB -S/W

2-3 Semiconductor Base Diagrams

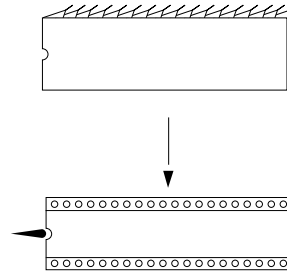
ELECTROLYTIC-
CONDENSER



DIODE

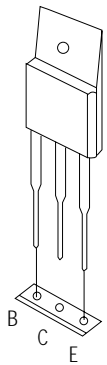


IC



TDA884X(Pin 56)
SPM171EX(Pin 52)
24W16(Pin 8)
TDA9859(Pin 32)

TRANSISTOR



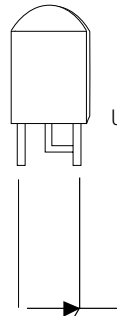
2SD1651
2SD1650
KSD5072
KSD5071
KSD1711

TRANSISTOR



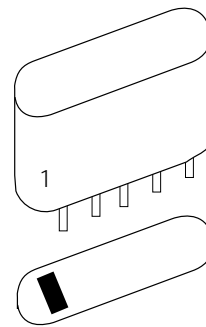
KSA815-Y
KSA539-Y

IC

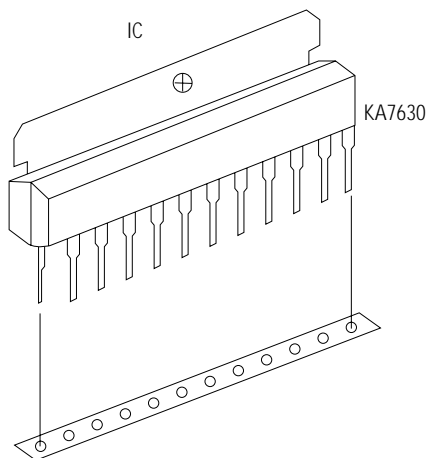


UPC574J
or
KA33V

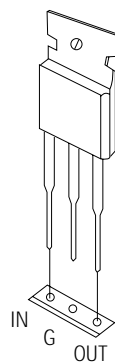
SAW-FILTER



G1962
K2950M
K9253M
G3956M



TRANSISTOR



KA7812

TRANSISTOR



KSR1012
KSR1010
KSR2010

Fig. 2-1 Semiconductor Base Diagrams

MEMO

1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.
3. Make sure that there are no cabinet openings through which people—particularly children—might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (Figure 1-1):
Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANIS C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).
5. With the unit completely reassembled, plug the AC line cord directly into the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

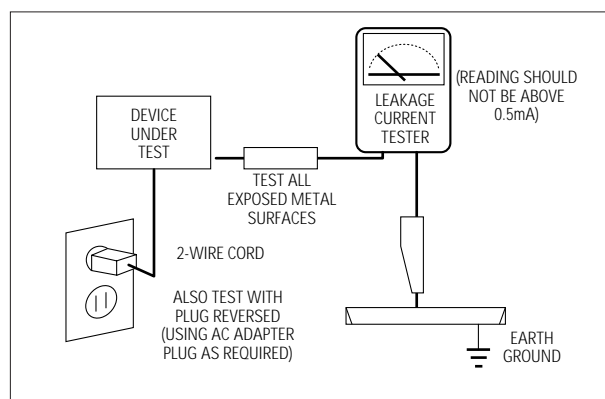


Fig. 1-1 AC Leakage Test



6. Antenna Cold Check:
With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.
7. X-ray Limits:
The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.
8. High Voltage Limits:
High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be reconfirmed whenever they are serviced.
(X-ray protection circuits also may be called "horizontal disable" or "hold-down".)

Heed the high voltage limits. These include the X-ray Protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

1-1 Safety Precautions (Continued)

9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.
10. Design Alteration Warning:
Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.
11. Hot Chassis Warning:
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.
12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.
13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.
14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.
15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.
16. Picture Tube Implosion Warning:
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.
17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.
18. Product Safety Notice:
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.

Components that are critical for safety are indicated in the circuit diagram by shading, () or ().
Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-2 Servicing Precautions

Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

Warning2: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.
2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor (“solid state”) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power—this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.
6. Use only an anti-static solder removal device. Many solder removal devices are not rated as “anti-static”; these can accumulate sufficient electrical charge to damage ESDs.
7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.