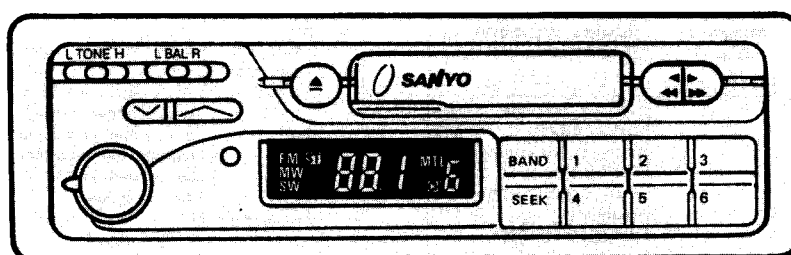


SERVICE MANUAL

Full Auto Reverse
Cassette Car Stereo
with SW/MW/
FM Stereo
Synthesizer Tuner

FX-17MK II (GENERAL)



PRODUCT CODE No.
147 582 74

Specifications

TapeCassette
Tape speed.....4.75 cm/s
Wow & flutter (DIN)0.08% (WRMS)
Output power.....Maximum 20Wx2
Signal to noise ratio....52 dB
Cross talk.....45 dB
Frequency response...40 — 16000Hz
Speaker output
impedance4Ω
Frequency rangeFM: 87.5—108.0MHz
 MW: 531—1602kHz
 SW: 2.940—7.735MHz
 9.500—18.135MHz

Sensitivity
(for 500mW output) .FM: 12dBf
 MW: 28dB
 (S/N = 20dB)
 SW: 28dB
 (S/N = 20dB)

Signal to noise ratio....FM: 55dB
 MW: 55dB
 SW: 55dB
Stereo separationFM: 35dB
Power source.....DC 14.4V (11~16V)
 Negative ground only
Dimensions.....178(W) X 50(H) X
 155(D)mm
Weight1.4kg

Specifications are subject to change without notice.

ALIGNMENT PROCEDURES

General
Test Conditions
Signal generator output;
Modulation frequency AM 400, FM 1000Hz
Modulation percentage AM 30%, FM 22.5kHz

Signal application;
Antenna receptacle through the dummy antenna.
Out put meter connection;
Across a speaker or a dummy load 4 ohms.

Setting of radio controls;
Volume control at maximum response
Tone control at high rate position

Power supply 14.4V
Location of the components for alignment are shown in MAIN PARTS IDENTIFICATION ILLUSTRATION.

FM RF Alignment

Step	Signal Input	Frequency of Signal Generator	Dial Setting of Radio	Test Equipment Connection	Adjustment
1	Through dummy ANT Fig.1	98MHz (60dB)	98MHz	Using tester measure the voltage of R236	Adjust R201 to get the voltage of $0V \pm 0.01V$ across R236
2				TP	Connect hot side of frequency counter to TP and connect GND to chassis Seeing frequency counter adjust SVR252 +0 tune the frequency $19,000kHz \pm 0.010kHz$
3		98MHz (10dB)	98MHz	Connect VTVM to speaker output leads	Adjust T401 (Located in Tuner-Pack) to get maximum output
4		98MHz (60dB)	98MHz		Adjust main volume to get S.O.L (Standard output level)

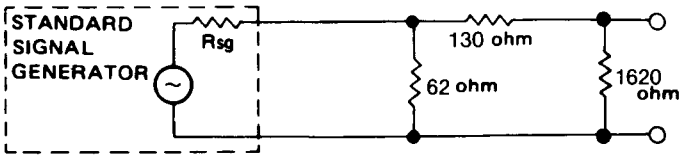


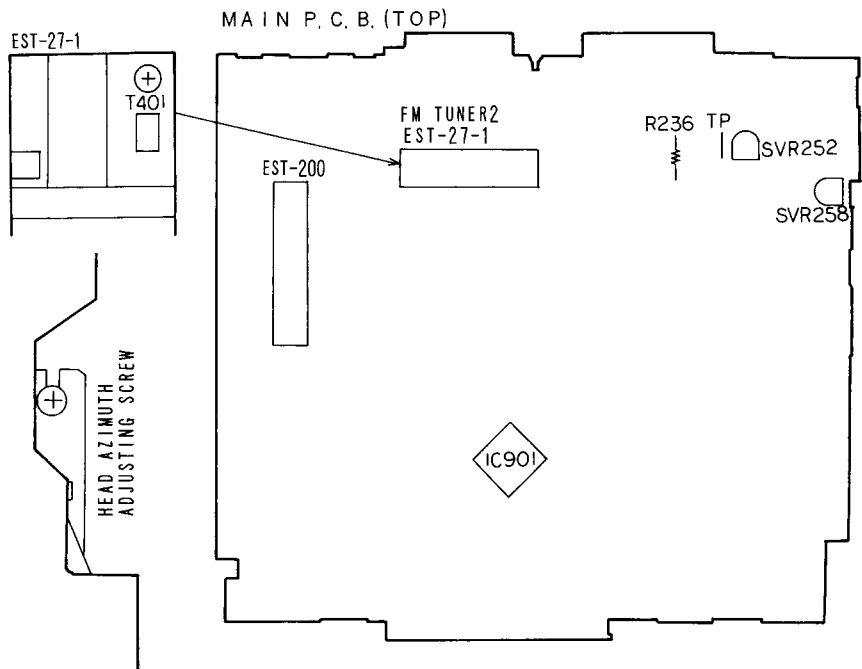
Fig.1 DUMMY ANTENNA FOR FM RF ALIGNMENT

FM MULTIPLEX ALIGNMENT (PLL) PRELIMINARIES;

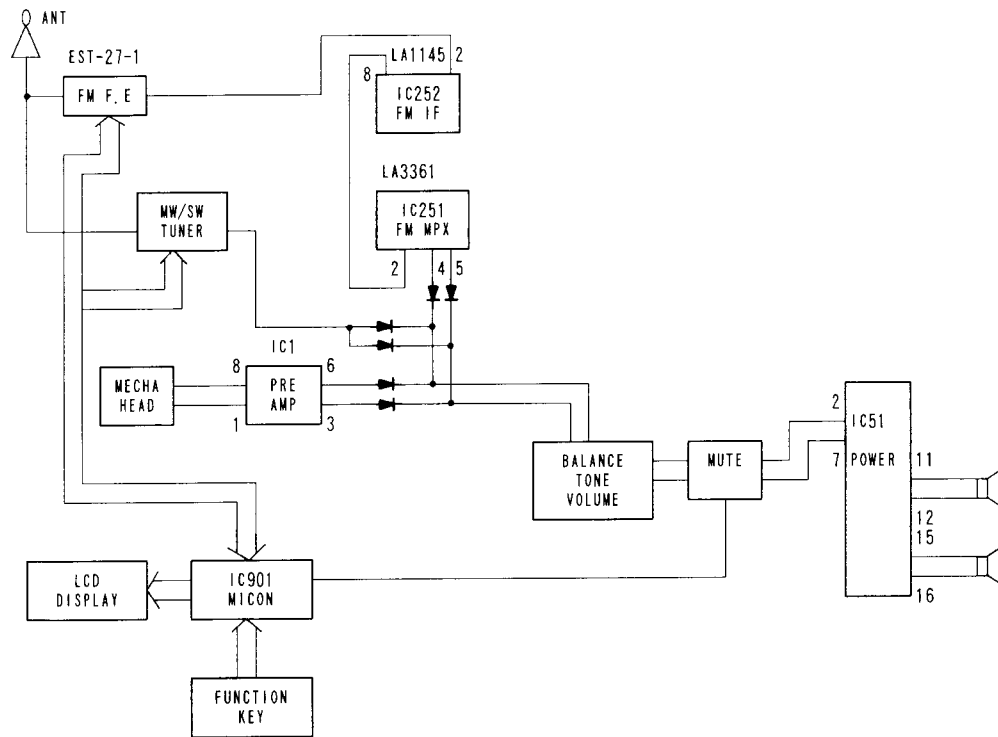
- 1. A stereo signal modulator (SSM) and SCA signal generator are necessary to perform this alignment.
- 2. All adjustments below must be done, setting the frequency at 98MHz on LCD display and applying 60dB FM signal modulated by specified signals as described below.
- 3. MPX button should be placed in stereo position in during FM multiplex alignment.

Step	Alignment	Instrument Connections		Adjustment
		Input	Output	
1	Maximum separation control	Apply FM stereo signal modulated only by 10% PILOT signal and 30 % stereo signal through dummy ANT to antenna terminal. Set the output select swith of SSG to the right mode	Connect VTVM to the left speaker terminal	Adjust SVR258 to get minimum output of mon-modulated channel when one of the stereo channel is modulated

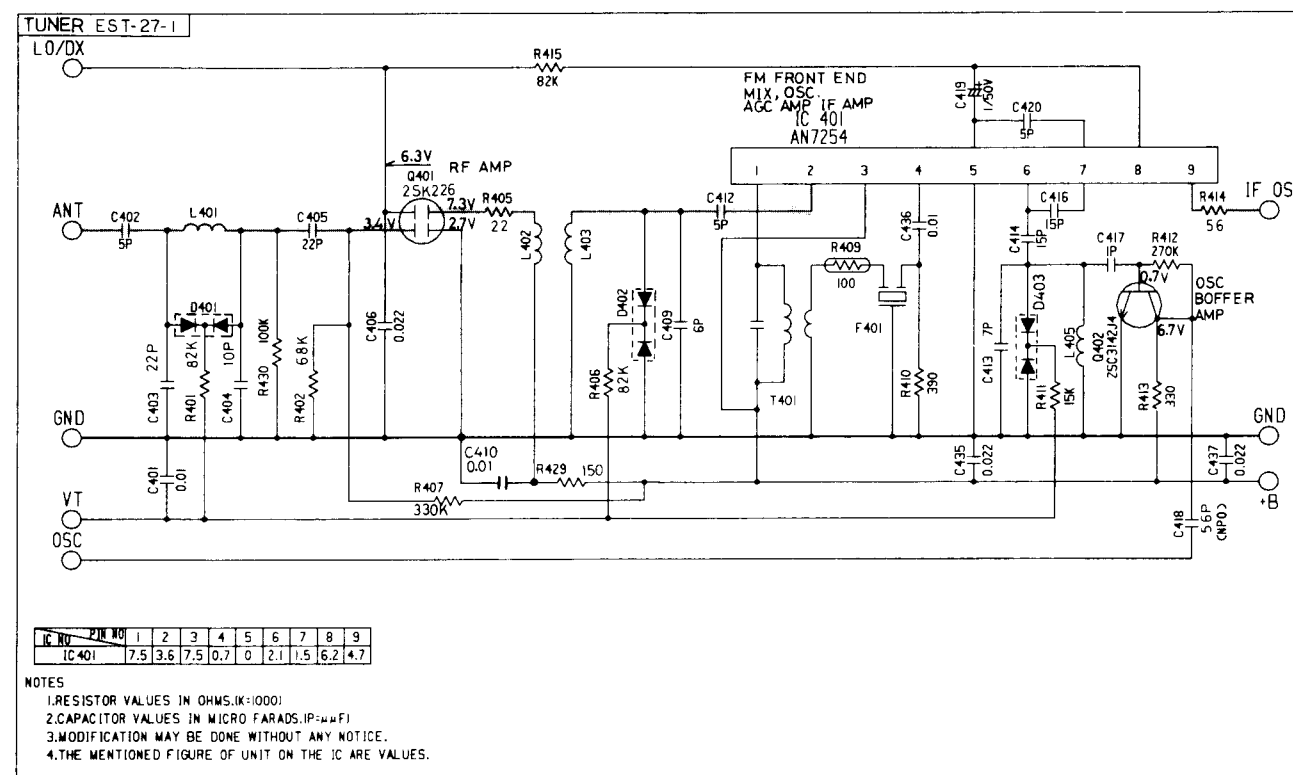
MAIN PARTS IDENTIFICATION ILLUSTRATION



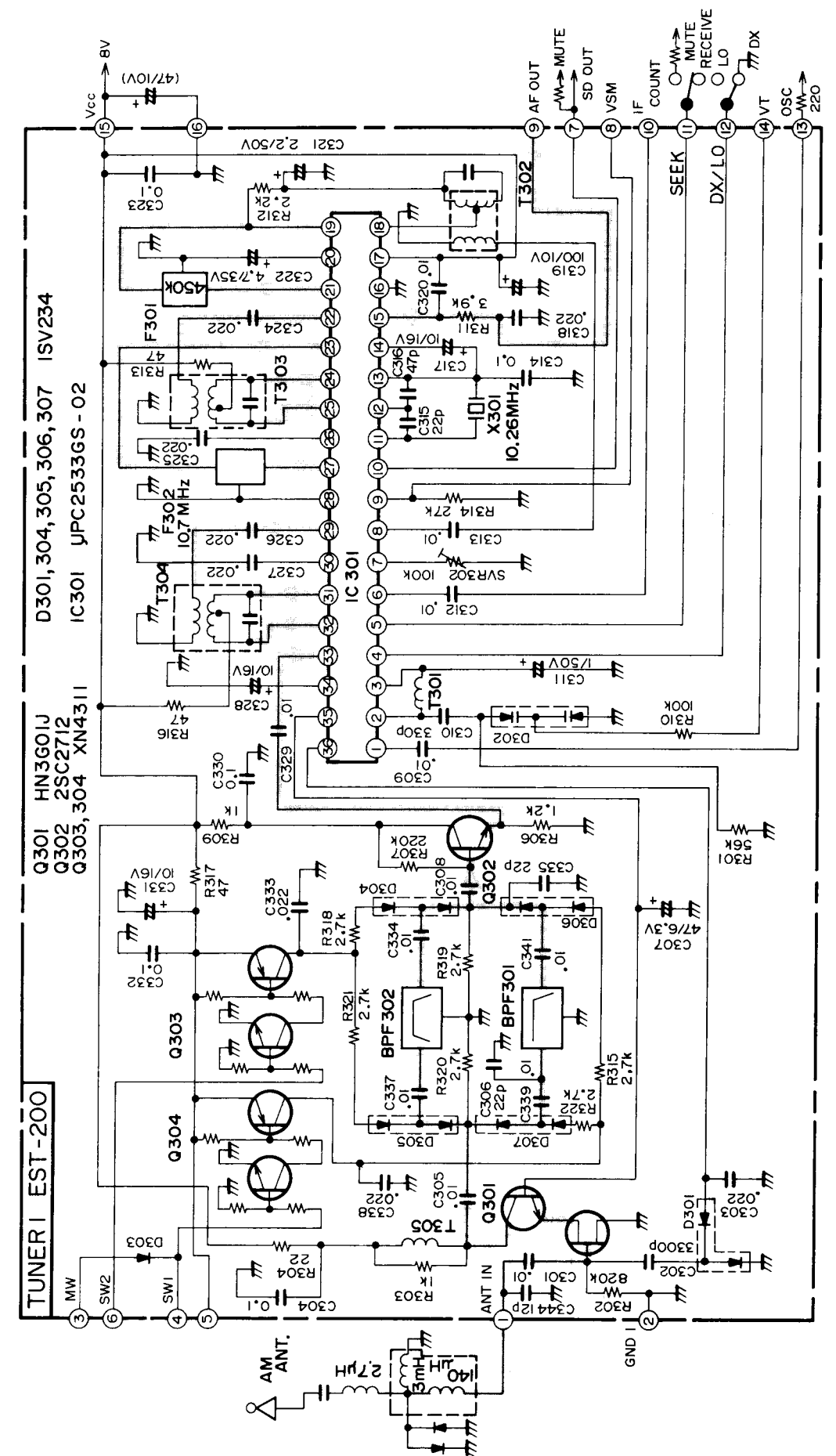
BLOCK DIAGRAM



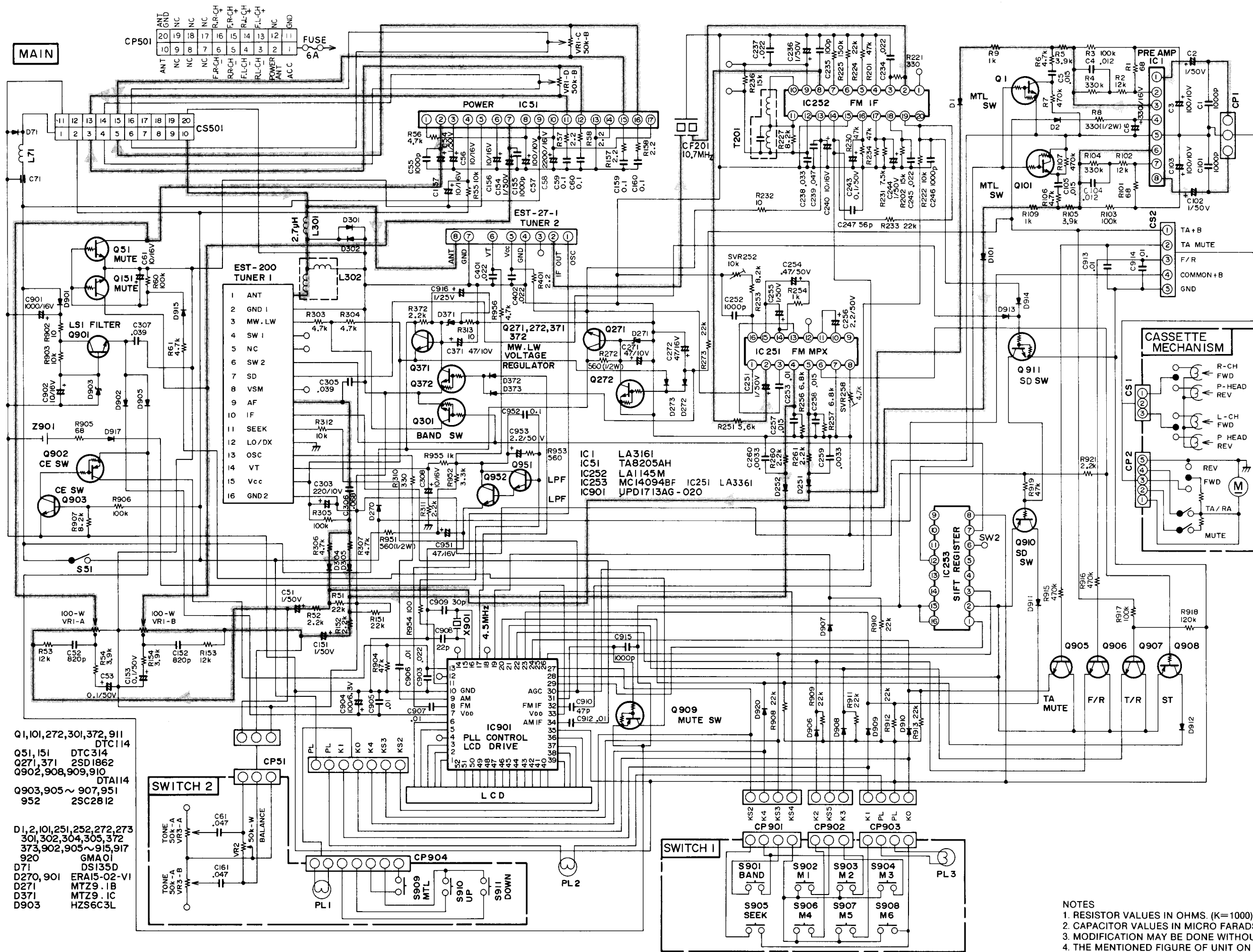
SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM

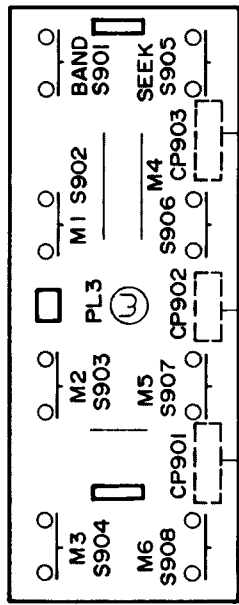


NOTES

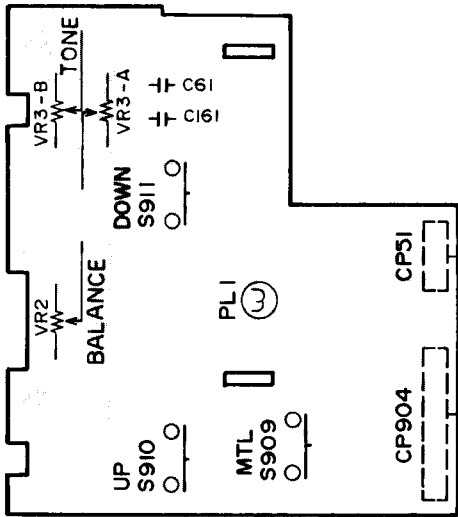
1. RESISTOR VALUES IN OHMS. (K=1000)
2. CAPACITOR VALUES IN MICRO FARADS. (P= μ F)
3. MODIFICATION MAY BE DONE WITHOUT ANY NOTICE.
4. THE MENTIONED FIGURE OF UNIT ON THE IC ARE VOLTS

WIRING DIAGRAM

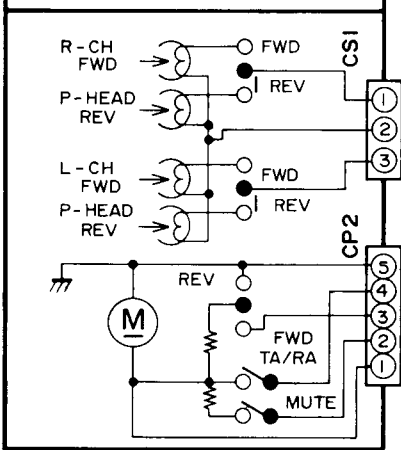
SWITCH 1 P.C.B. BOTTOM



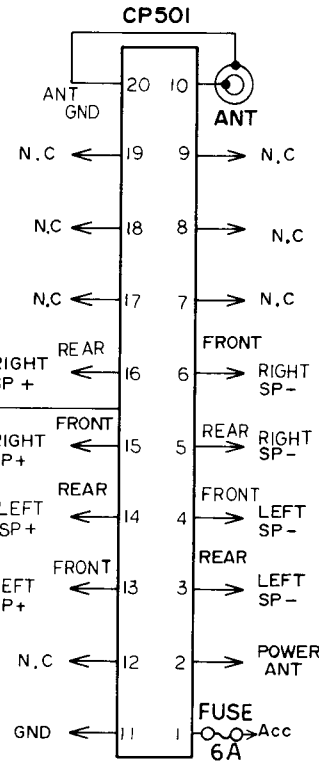
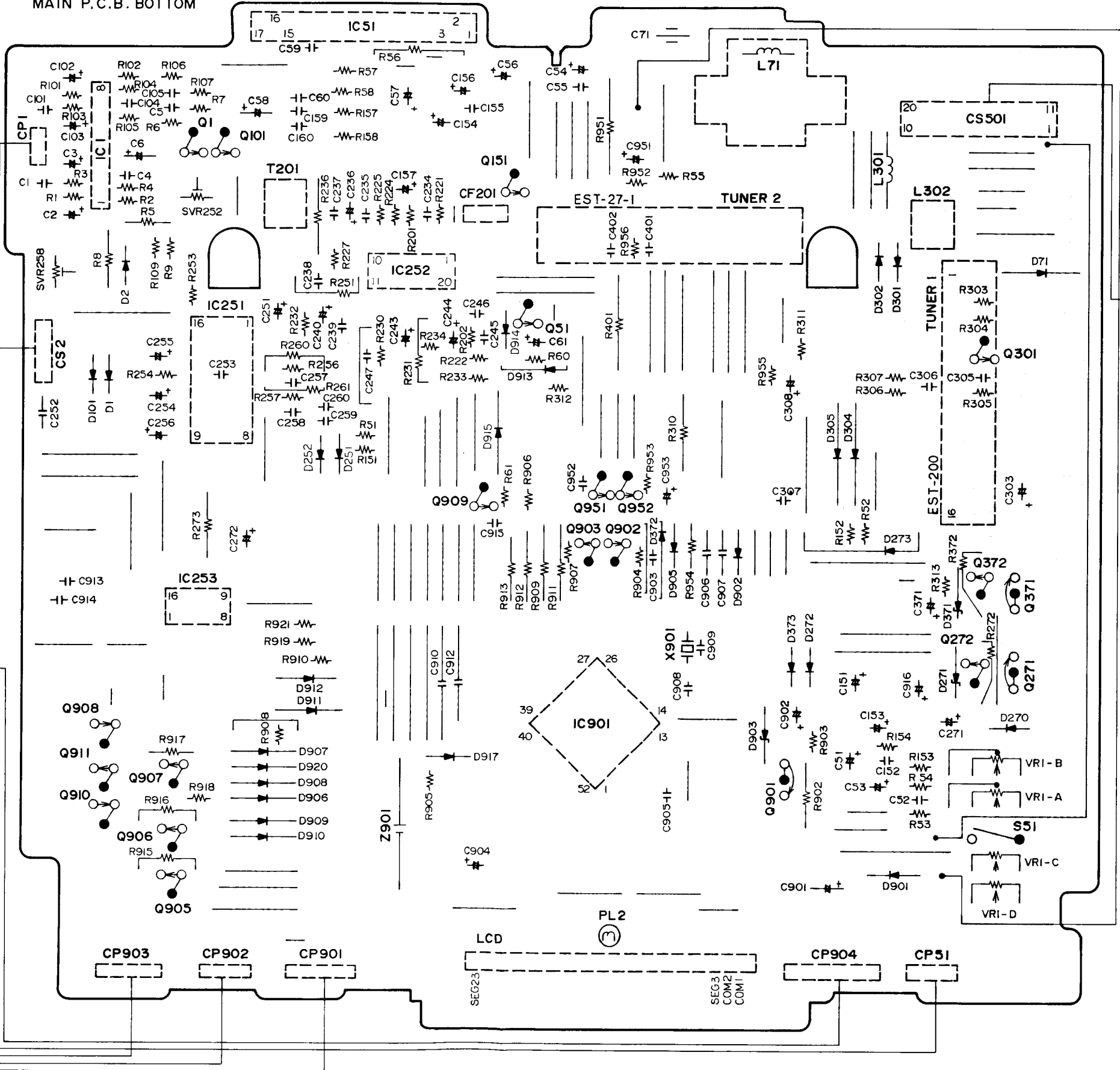
SWITCH 2 P.C.B. BOTTOM



CASSETTE MECHANISM



MAIN P.C.B. BOTTOM



IC AND TRANSISTOR VOLTAGE CHART

IC BLOCK DIAGRAM

IC1		(V)							
MODE	PIN	1	2	3	4	5	6	7	8
M W		—	—	—	—	—	—	—	—
S W		—	—	—	—	—	—	—	—
F M		—	—	—	—	—	—	—	—
TAPE		1.5	0.8	2.8	10.8	0	2.6	0.8	1.5

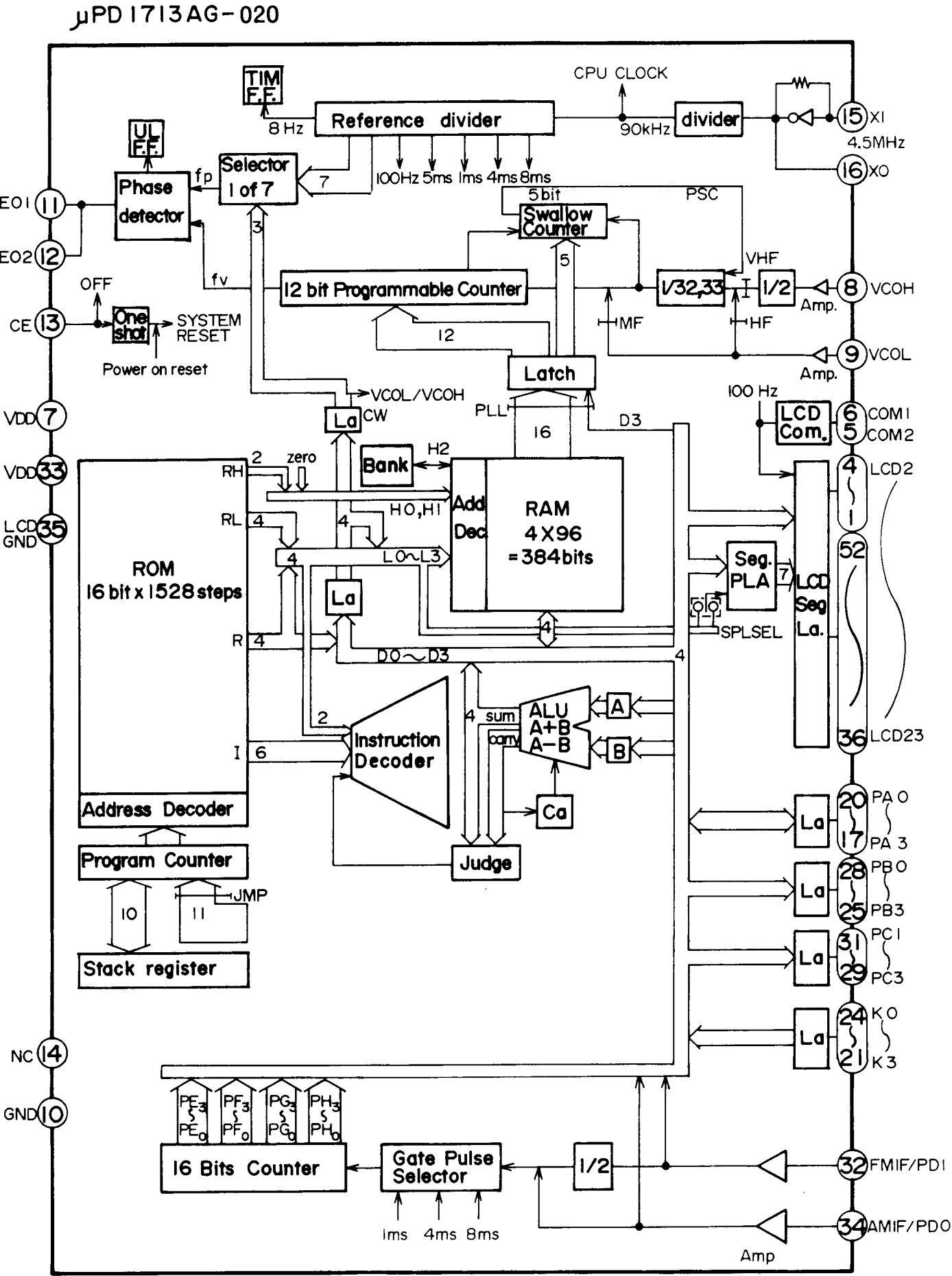
IC51																		
MODE \ PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
M W	4.5	4.5	4.5	8.6	0	4.5	4.5	4.5	13.5	13.5	5.3	5.3	0	0	5.3	5.3	13.5	
S W	4.5	4.5	4.5	8.6	0	4.5	4.5	4.5	13.5	13.5	5.3	5.3	0	0	5.3	5.3	13.5	
F M	4.5	4.5	4.5	8.6	0	4.5	4.5	4.5	13.5	13.5	5.3	5.3	0	0	5.3	5.3	13.5	
TAPE	4.5	4.5	4.5	8.6	0	4.5	4.5	4.5	13.5	13.5	5.3	5.3	0	0	5.3	5.3	13.5	

IC251																	
MODE \ PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
M W	0	0	0	0	0	5.2	0	0	0	0	0	0	0	0	0	0	
S W	0	0	0	0	0	5.2	0	0	0	0	0	0	0	0	0	0	
F M	8.5	2.4	1.8	2.8	2.8	0.8	0.9	0.6	0.5	0.8	1.5	1.1	1.5	1.5	1.5	0.9	
TAPE	0	0	0	0	0	5.2	0	0	0	0	0	0	0	0	0	0	

IC252																					
MODE \ PIN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
M W		0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S W		0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F M		0.9	3.0	3.0	0.2	4.2	5.1	2.2	5.3	5.3	5.1	5.1	5.2	8.3	0.3	0.1	0.1	5.1	4.9	0.2	0.9
TAPE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

IC253																	
MODE \ PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
M W	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.2	5.2	
S W	—	—	—	—	—	—	5.2	—	—	—	5.2	—	—	—	5.2	5.2	
F M	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	5.1	0.1	0.1	0.1	5.2	5.2	
TAPE	—	—	—	—	—	—	—	—	—	—	5.2	4.9	—	—	5.2	5.2	

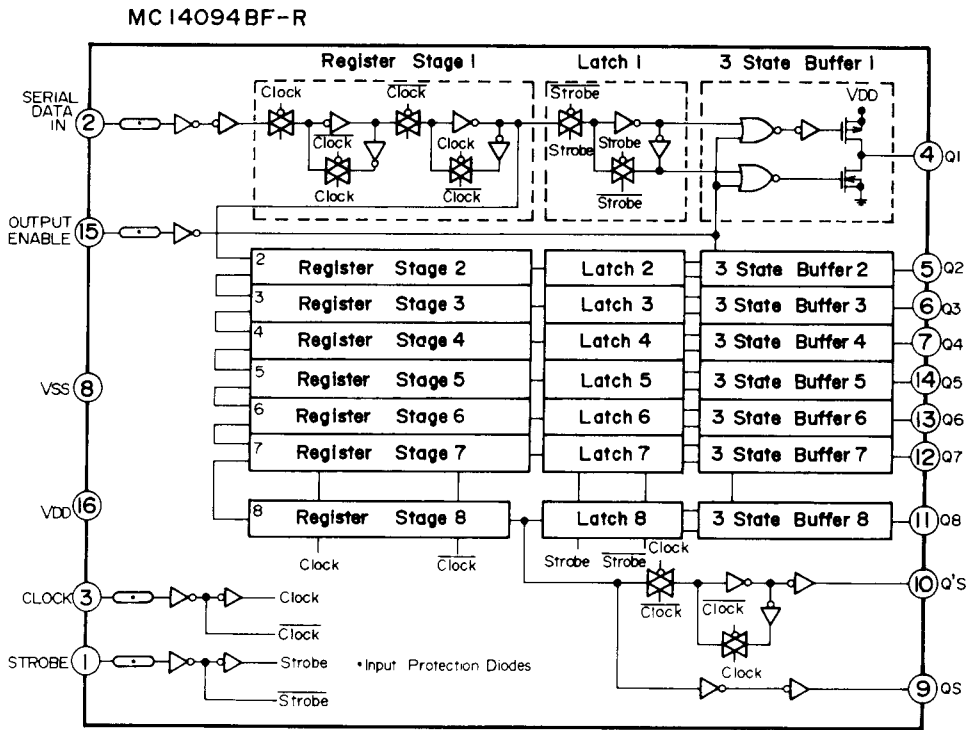
		TR.	PIN	Q51, 151	Q901	Q902	Q903	Q371	Q372	Q301	Q951	Q952	Q271	Q272	Q909	Q101	Q911	Q910	Q905	Q906	Q907	Q908
MODE	M W	B		0.1	6.5	0.2	0.8	9.2	0.1	0.1	1.3	0.8	0.2	8.1	5.2	0.1	0.1	5.3	0.1	0.4	0.1	5.2
		C		0.1	12.9	5.3	0.2	12.8	9.2	6.8	2.1	2.1	13.0	0.2	0.1	0.1	5.3	0.1	0.1	0.1	0.1	0.1
		E		0.1	5.8	5.3	0.2	8.6	0.1	0.1	0.7	0.1	0.1	0.1	5.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2
S W	B			0.1	6.5	0.1	0.7	9.2	0.1	4.9	1.3	0.8	0.2	8.6	5.2	0.1	0.1	5.2	0.1	0	0.1	5.2
		C		0.1	12.9	5.2	0.1	12.7	9.2	0.1	5.2	5.3	12.8	0.2	0.1	0.1	5.2	0.1	0.1	0.1	0.1	0.1
		E		0.1	5.8	5.2	0.1	8.6	0.1	0.1	0.8	0.1	0.1	0.1	5.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
F W	B			0.1	6.4	0.2	0.2	0.2	4.5	0.1	1.3	0.8	9.1	0.1	5.1	0.1	0.1	5.1	0.1	0.4	0.1	0.8
		C		0.1	12.7	5.2	0.2	12.7	0.2	0.3	3.5	3.5	12.7	9.1	0.1	0.1	5.1	0.1	0.2	0.2	0.2	0.3
		E		0.1	5.8	5.2	0.2	0.3	0.2	0.1	0.8	0.1	8.5	0.1	5.2	0.1	0.1	0.3	0.1	0.1	0.1	0.2
TAPE	B			0.1	6.5	0.2	0.8	0	3.1	0.2	1.2	0.6	0.3	3.1	5.3	4.9	0.2	5.2	0.2	0.4	0.1	5.3
		C		0.1	12.9	5.2	0.2	12.9	0.2	0.3	10.8	10.4	12.8	0.3	0.2	0.2	5.2	0.2	0.6	0.6	0.6	0.2
		E		0.1	5.8	5.2	0.2	0.3	0.2	0.1	0.6	0.1	0.2	0.1	5.3	0.2	0.2	0.6	0.2	0.6	0.6	0.6



CIRCUIT DESCRIPTION

PIN No.	SYMBOL		FUNCTIONAL EXPLANATION
	IN	OUT	
1			LCD driver segment output 5
2			LCD driver segment output 4
3			LCD driver segment output 3
4			LCD driver segment output 2
5			LCD driver common signal output 2
6			LCD driver common signal output 1
7	VDD		+ 5V
8	VCOH		FM oscillator input
9	VCOL		AM oscillator input
10	GND		Ground
11		E01	Phase detector output 1
12		E02	Phase detector output 2
13	CE		Chip enable terminal
14	NC		No connection
15	XI		Output side of inverter for OSC (4.5MHz)
16		X0	Output side of inverter for OSC (4.5MHz)
17		BAND	FM band signal output
18		LOC	Local signal output
19	K5		Key matrix return signal input 5
20	K4		Key matrix return signal input 4
21	K3		Key matrix return signal input 3
22	K2		Key matrix return signal input 2
23	K1		Key matrix return signal input 1
24	K0		Key matrix return signal input 0
25		KS4	Key matrix return signal output 4
26		KS3	Key matrix return signal output 3

PIN No.	SYMBOL		FUNCTIONAL EXPLANATION
	IN	OUT	
27		KS2	Key matrix return signal output 2
28		KS1	Key matrix return signal output 1
29		KS0	Key matrix return signal output 0
30		AGCC	AGC cut signal output
31		MUTE	MUTE signal output
32	FM IF		FM IF input for stop
33	VDD		+ 5V
34	AM IF		AM IF input for stop
35	LCD	GND	LCD ground
36			LCD driver segment output 23
37			LCD driver segment output 22
38			LCD driver segment output 21
39			LCD driver segment output 20
40			LCD driver segment output 19
41			LCD driver segment output 17
42			LCD driver segment output 16
43			LCD driver segment output 15
44			LCD driver segment output 14
45			LCD driver segment output 13
46			LCD driver segment output 12
47			LCD driver segment output 11
48			LCD driver segment output 10
49			LCD driver segment output 9
50			LCD driver segment output 8
51			LCD driver segment output 7
52			LCD driver segment output 6



[illegible]

PARTS LIST (CASSETTE MECHANISM)

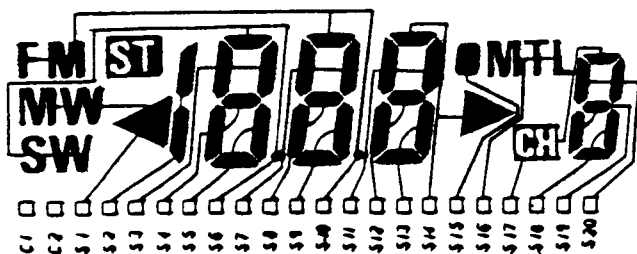
Ref.No	PART No.	DESCRIPTION	Q'ty
CASSETTE MECHANISM			
A1	632 669 1397	ASSY, CHASSIS	1
A129	632 516 9682	LEVER, LOCK	1
A130	411 000 9403	RING E 2	1
A2	632 531 5089	SHAFT, MECHANISM	1
A3	412 044 4102	SPECIAL SCREW	1
	632 562 7014	FELT	1
A4	632 516 9804	LEVER, REVERSE A	1
A6	632 523 3734	LEVER ASS'Y	1
A7	632 517 0756	COMPRESSION SPRING	1
A9	632 638 5197	GUIDE, SPECIAL SCREW	1
A10	412 029 5902	SPECIAL SCREW	1
A12	632 543 9983	SLEEVE	1
A13	411 015 8309	RING E 1.5	1
A17	632 554 8234	SPRING, TENS	1
A122	632 554 8241	SPRING, TENS	1
A20	632 519 1348	LEVER ASS'Y, REVERSE C	1
A21	632 540 0174	WIRE SPRING	1
A22	632 602 6540	HEAD, PLAY	1
A23	632 536 7583	PC BOARD, MECHANISM	1
	632 254 0002	PLUG, 5P	1
	401 024 7400	CARBON 10K JA 1/6W	2
A24	411 027 1008	SCR S-TPG BIN 2X3	1
A25	632 256 9515	SLIDE SWITCH	1
A26	632 519 7784	LEAF SWITCH	1
A28	632 521 8854	LEVER ASS'Y, PLAY GEAR C	1
A29	632 516 9668	LEVER, PLAY GEAR B	1
A30	632 305 5987	SPECIAL WASHER	1
A31	632 624 7839	LEVER, PLAY GEAR, A	1
A32	632 519 1362	LEVER ASS'Y, PINCHPOLLER F	1
A33	632 544 9579	LEVER, REVERSE B	1
A34	411 000 9403	RING E 2	1
A35	632 523 3765	LEVER, FF LOCK	1
A36	632 517 0688	COIL SPRING	1
A37	632 519 1379	LEVER ASS'Y, PINCHROLLER R	1
A38	632 516 9767	LEVER, HEAD BACK	1
A39	632 567 6326	SPACER	1
A40	632 653 6988	ASSY, GUIDE, LEVER, FF	1
A41	412 046 5800	SPECIAL SCREW	1
A42	632 516 9927	LEVER, FF RIGHT	1
A43	632 516 9903	LEVER, FF LEFT	1
A44	632 543 2519	COIL SPRING	2
A45	632 543 0324	LEVER ASS'Y, EJECT	1
A46	632 517 0626	COIL SPRING	1
A47	632 541 8322	CASE, A	1
A54	632 580 6983	CUSHION	1
	632 644 5518	SHEET	1
A48	632 516 9965	CASE, B	1
	632 580 6976	CUSHION	2
A49	632 517 0190	GUIDE, CASSETTE	1
A50	632 519 1409	LEVER ASS'Y, CASE C	1
A51	632 516 9637	LEVER, CASE D	1
A52	632 648 2636	SPRING, TORS	1
A53	632 541 8490	WIRE SPRING	1

Ref.No	PART No.	DESCRIPTION	Q'ty
A55	632 518 5132	COIL SPRING	1
A56	411 015 8309	RING E 1.5	1
A57	411 159 6407	SCR S-TPG PAN P+F 1.7X3	1
A58	632 516 9842	FLYWHEEL	1
A59	632 536 1116	FLYWHEEL	1
A60	411 089 7000	WASHER Y 2X4X0.13	2
A61	632 310 2827	SPECIAL WASHER	2
A62	632 310 2834	SPECIAL WASHER	2
A63	632 536 9228	BELT, FLYWHEEL	1
A64	632 556 6795	ASSY, MOTOR, DC	1
A66	411 047 4201	SCR PAN+FLG 2.6X3	2
A67	632 517 0763	BELT, A	1
A68	632 653 5523	GEAR, PULLEY	1
A69	632 310 2827	SPECIAL WASHER	1
A70	632 624 9543	PULLEY, IDLER	1
A71	632 568 7414	MOUNT-M, SPECIAL WASHER	1
A72	632 519 1416	LEVER ASS'Y, FF GEAR	1
A115	632 689 6174	SPACER	1
A116	411 089 7000	WASHER Y 2X4X0.13	1
A73	632 543 1666	GEAR ASS'Y, FF	1
A74	632 568 7414	MOUNT-M, SPECIAL WASHER	1
A75	411 000 9908	RING E 3	1
A76	632 516 9729	LEVER, FF B	1
A77	632 519 1423	CHASSIS ASS'Y, GEAR	1
A78	632 517 0152	REEL, TAKE UP	2
A79	632 544 1221	REEL, RING	2
A80	632 540 0099	SENSOR, A	2
A81	632 543 2496	COMPRESSION SPRING	2
A82	632 536 9211	CUSHION, FELT	2
A83	412 036 6008	SPECIAL WASHER	2
A118	411 089 6508	WASHER Y 2X3.5X0.25	2
A84	632 517 0138	GEAR, B	1
A85	632 543 1642	GEAR ASS'Y, TAKE UP	1
A86	632 517 0107	GEAR, A	1
A87	632 568 7414	MOUNT-M, SPECIAL WASHER	2
A123	632 607 2288	MOUNT-M, SPECIAL WASHER	1
A89	632 517 0220	LEVER, SENSOR	1
A90	632 535 2169	PLATE SPRING	2
A91	632 531 7748	SHAFT	1
A92	632 517 0022	GEAR, SENSOR	1
A93	632 543 1673	GEAR ASS'Y, REVERSE	1
A94	632 568 7414	MOUNT-M, SPECIAL WASHER	1
A95	632 517 0176	LEVER, LOCK GEAR	1
A96	632 548 8196	SPRING, TENS	1
A121	632 548 8202	SPRING, TENS	1
A97	632 517 0565	WIRE SPRING	1
A98	411 027 1008	SCR S-TPG BIN 2X3	1
A99	411 131 9907	SCR FLT PCS 1.7X3	2
A131	632 589 6410	SHEET	1
A100	632 516 9606	CHASSIS, KEY OFF	1
A112	412 016 5601	SPECIAL SCREW	2
A113	632 593 7823	SWITCH, LEAF	1
A114	412 029 5803	SPECIAL SCREW	1
	632 666 3462	BAND, WIRE	1

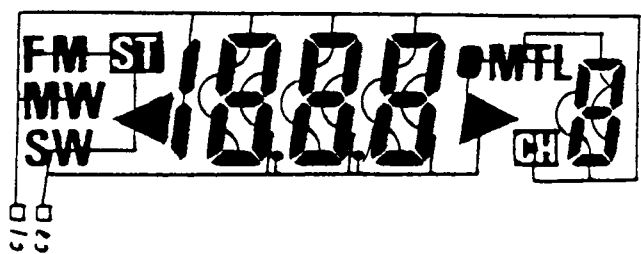
NOTES: 1. Part orders must contain Model Number, Part Number and Description.

2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

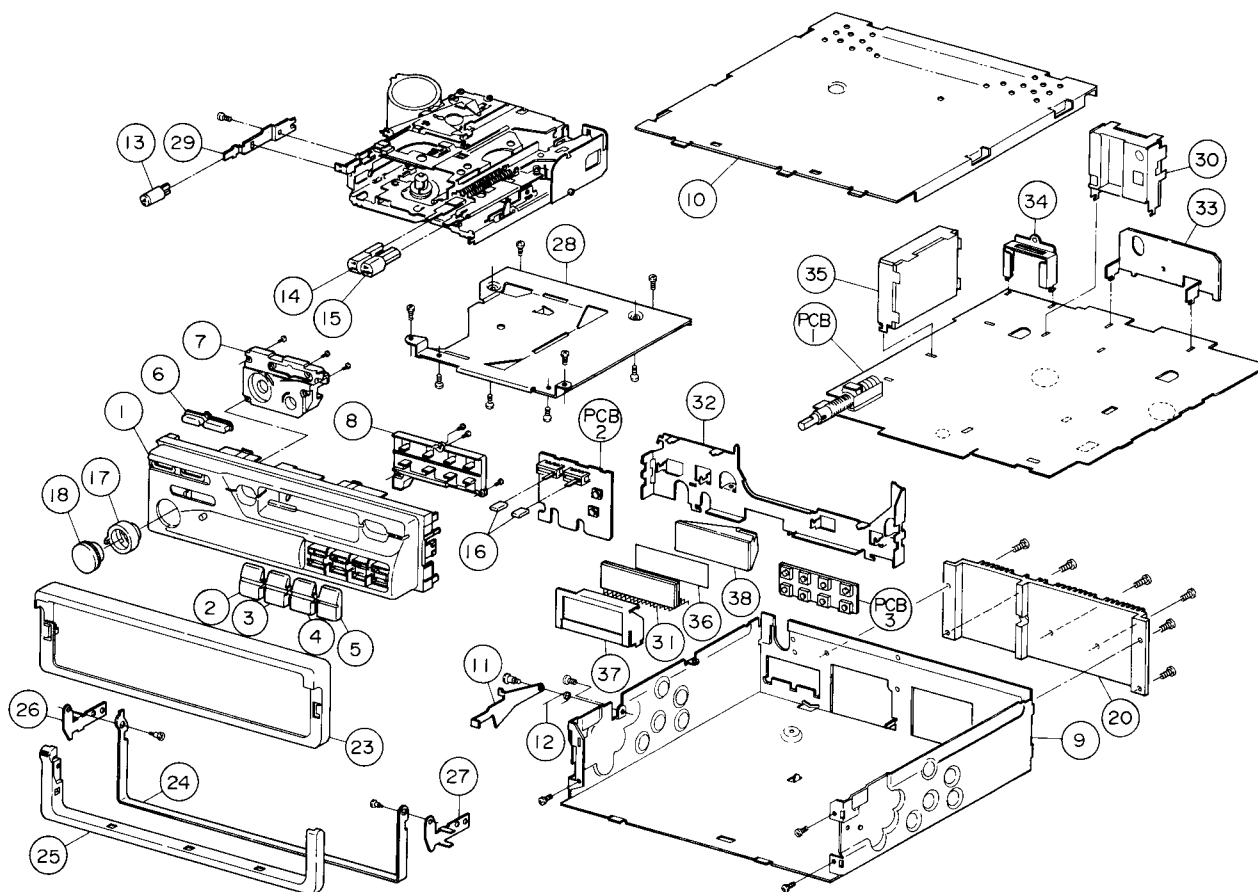
SEGMENT



COMMON



EXPLODED VIEW



PARTS LIST

Ref.No	PART No.	DESCRIPTION	Q'ty
INDIVIDUAL			
	632 680 6821	INNER CARTON	1
	632 548 2620	PAD,R	1
	632 548 2613	PAD,L	1
	632 298 3199	POLYETHYLENE BAG	1
	632 645 2325	LABEL,BARCODE,TYPE D-1 (INNER CARTON,SET)	1
ACCESSORY			
CP501	632 676 0482	INSTRUCTION MANUAL	1
	632 681 5892	INSTRUCTION MANUAL ARABIA	1
	632 298 1881	POLYETHYLENE BAG INSTRUCTION MANUAL	1
	632 631 9840	ASSY,CASE	1
	632 679 5408	CORD,ATTACHMENT	1
	411 028 5609	SCR S-TPG PAN 2.6X4 GROUND	1
	412 036 8002	SPECIAL SCREW,PLUG	2
	632 283 4927	SPECIAL SCREW	1
	632 546 2943	BASE	1
	632 298 1683	POLYETHYLENE BAG	1
	411 031 4200	SCR BIN 3X12,SHIPPING	1
	632 534 9923	CAUTION LABEL,SHIPPING	1

Ref.No	PART No.	DESCRIPTION	Q'ty
CABINET			
1	632 698 8992	ASSY,PANEL,NOSE	1
2	632 574 8009	BUTTON,BAND,BAND/SEEK	1
3	632 554 9231	BUTTON,PRESET,1/4	1
4	632 574 8016	BUTTON,PRESET,2/5	1
5	632 554 9293	BUTTON,PRESET,3/6	1
6	632 554 9309	BUTTON,TUNING,UP/DOWN	1
7	632 554 9347	LUMINANT	1
8	632 554 9354	LUMINANT	1
	411 138 9603	SCR S-TPG PAN PCS 1.7X5	6
	632 566 9830	SHEET,LUMINANT	1
	632 566 9854	SHEET,LUMINANT	2
13	632 554 9316	BUTTON,EJECT	1
14	632 554 9323	BUTTON,REW	1
15	632 554 9330	BUTTON,FF	1
16	632 554 9361	KNOB,SLIDE	2
17	632 523 3291	KNOB, VOLUME	1
18	632 544 9715	KNOB ASS'Y, VOLUME	1
23	632 556 5590	PANEL,TRIM	1
24	632 556 5606	HANDLE	1
25	632 558 0616	HANDLE	1
	412 035 6108	SPECIAL SCREW	2
26	632 556 5415	BRACKET-M,HANDLE	1
27	632 556 5422	BRACKET-M,HANDLE	1
	411 028 5609	SCR S-TPG PAN 2.6X4	2
	632 679 6597	LABEL,RATING	1

NOTES: 1. Part orders must contain Model Number, Part Number and Description.

2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

PARTS LIST (CONTINUED)

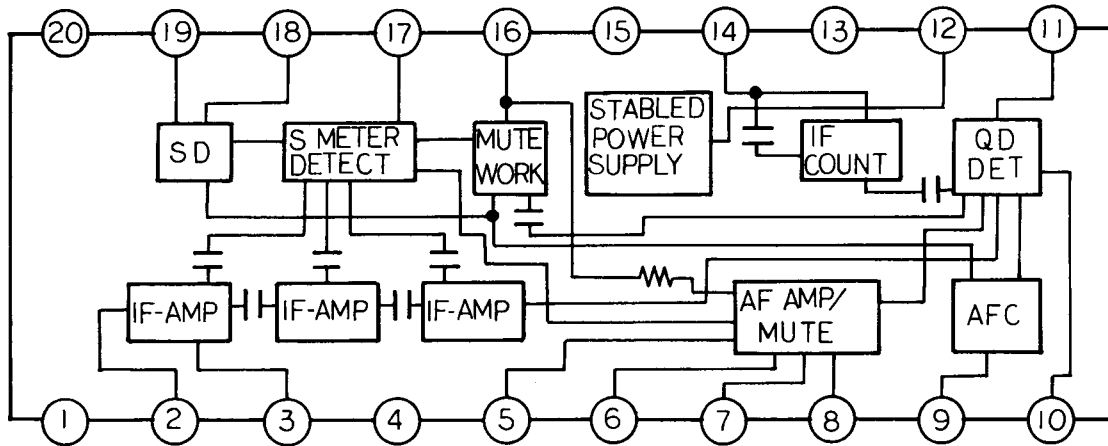
Ref.No	PART No.	DESCRIPTION	Q'ty
CHASSIS			
9	632 675 0667	CHASSIS	1
10	632 556 5354	CHASSIS,TOP	1
11	632 624 1554	LEVER,TAKE OUT	1
12	632 558 0630	SPRING,TORS,TAKE OUT	1
	412 035 6207	SPECIAL SCREW,TAKE OUT	1
32	632 556 5347	CHASSIS,FRONT	1
	411 028 5609	SCR S-TPG PAN 2.6X4	2
		F.CHASSIS-CHASSIS	
	411 028 2905	SCR S-TPG PAN 2X4	1
		F.CHASSIS-CHASSIS	
28	632 556 5361	BRACKET-E,MECHA.	1
	411 028 5609	SCR S-TPG PAN 2.6X4	4
		MECHA-BRACKET	
	411 028 5609	SCR S-TPG PAN 2.6X4	4
		BRACKET-CHASSIS	
20	632 583 4207	HEAT SINK	1
	411 028 5906	SCR S-TPG PAN 2.6X5	4
		HEAT SINK-CHASSIS	
33	632 657 7349	BRACKET-E	1
	411 028 4909	SCR S-TPG PAN 2.6X10	2
34	632 628 6333	BRACKET-E,SOCKET	1
	411 028 5609	SCR S-TPG PAN 2.6X4	1
		BRACKET	
29	632 529 4353	LEVER, EJECT	1
	411 152 6107	SCR PAN PCS 2.6X2.5	1
38	632 556 5392	MOUNT-E,LCD	1
36	632 558 0678	SHEET,LCD	1
37	632 556 5385	BRACKET-E,LCD	1
CHASSIS ELECTRICAL			
	632 563 8744	CASSETTE MECH.,FEC-1011P, NO SERVICE PART	1
	632 563 9765	CORD,3P-100MM	1
30	632 593 7380	TUNER,FM,EST-27-1	1
35	632 670 4769	TUNER,MW/SW1/SW2,EST-200	1
31	632 578 3086	LCD	1
MAIN P.C.B. ASSEMBLY			
PCB1	632 698 9067	ASSY,PCB,MAIN	1
CS2	632 568 0699	CORD,5P-100MM,MECHA	1
CP1	632 253 9983	PLUG, 3P,HEAD	1
IC1	409 016 7902	IC LA3161	1
IC251	409 016 9500	IC LA3361	1
IC51	409 166 4103	IC TA8205AH	1
IC252	409 140 2903	IC LA1145M	1
Z901	632 564 0280	BATTERY,CR2032-1HF	1
L71	632 266 1073	CHOKE COIL	1
L71	632 266 1080	CHOKE COIL } or	1
CS501	632 539 5647	SOCKET	1
X901	632 649 0174	RESONATOR,XTAL,4.5MHZ	1
PL2	632 559 7645	LAMP,5V,115MA	1
IC253	409 224 2706	IC MC14094BF	1
T201	632 559 4538	TRANS,IF,FM	1
CF201	632 605 3454	FILTER,CERAM,10.7MHZ	1
L302	632 665 1117	COIL,FERRITE,ANTENNA	1
VR1-A, B,C,D, S51	632 676 9195	VR,ROTARY,100WX2 50KBX2	1
IC901	410 176 5400	IC UPD1713AG-020	1
Q910	405 078 8703	TR DTA114TK	1
Q908	405 078 8703	TR DTA114TK	1
Q51	405 083 5100	TR DTC314TK	1
Q151	405 083 5100	TR DTC314TK	1
Q902	405 029 3009	TR DTA114YK	1
Q909	405 029 3009	TR DTA114YK	1
Q903	405 015 8704	TR 2SC2812-L6	1
Q905	405 015 8704	TR 2SC2812-L6	1
Q906	405 015 8704	TR 2SC2812-L6	1
Q907	405 015 8704	TR 2SC2812-L6	1
Q951	405 015 8704	TR 2SC2812-L6	1
Q952	405 015 8704	TR 2SC2812-L6	1

Ref.No	PART No.	DESCRIPTION	Q'ty
Q301	405 000 3608	TR DTC114YK	1
Q1	405 000 3608	TR DTC114YK	1
Q101	405 000 3608	TR DTC114YK	1
Q911	405 000 3608	TR DTC114YK	1
Q372	405 000 3608	TR DTC114YK	1
Q272	405 000 3608	TR DTC114YK	1
Q371	406 007 8900	TR 2SD1862-TV2-R	1
Q271	406 007 8900	TR 2SD1862-TV2-R	1
Q901	406 007 1208	TR 2SC4038-TL2-R	1
SVR258	632 538 8021	PRESET RESISTOR, 4.7K	1
SVR252	632 530 7183	PRESET RESISTOR, 10K	1
D71	407 005 1603	DIODE DS135D	1
D901	407 005 8602	DIODE ERA15-02	1
D270	407 005 8602	DIODE ERA15-02	1
D902	407 007 9904	DIODE GMA01	1
D905	407 007 9904	DIODE GMA01	1
D906	407 007 9904	DIODE GMA01	1
D915	407 007 9904	DIODE GMA01	1
D2	407 007 9904	DIODE GMA01	1
D101	407 007 9904	DIODE GMA01	1
D1	407 007 9904	DIODE GMA01	1
D912	407 007 9904	DIODE GMA01	1
D911	407 007 9904	DIODE GMA01	1
D910	407 007 9904	DIODE GMA01	1
D909	407 007 9904	DIODE GMA01	1
D908	407 007 9904	DIODE GMA01	1
D907	407 007 9904	DIODE GMA01	1
D917	407 007 9904	DIODE GMA01	1
D273	407 007 9904	DIODE GMA01	1
D272	407 007 9904	DIODE GMA01	1
D920	407 007 9904	DIODE GMA01	1
D373	407 007 9904	DIODE GMA01	1
D372	407 007 9904	DIODE GMA01	1
D302	407 007 9904	DIODE GMA01	1
D301	407 007 9904	DIODE GMA01	1
D305	407 007 9904	DIODE GMA01	1
D304	407 007 9904	DIODE GMA01	1
D251	407 007 9904	DIODE GMA01	1
D252	407 007 9904	DIODE GMA01	1
D914	407 007 9904	DIODE GMA01	1
D913	407 007 9904	DIODE GMA01	1
D903	407 098 1306	ZENER DIODE HZS6C3L	1
D371	407 053 8906	ZENER DIODE MTZ9.1C	1
D271	407 053 8807	ZENER DIODE MTZ9.1B	1
L301	632 265 0596	CHOKE COIL, 2.7UH	1
C71	404 038 7909	CERAMIC 2200P M 50V	1
SWITCH 1 P.C.B. ASSEMBLY			
PCB3	632 673 2076	ASSY,PCB,SWITCH,1	1
CP902	632 539 9607	PLUG, 3P	1
CP901	632 540 0204	PLUG, 4P	1
CP903	632 540 0204	PLUG, 4P	1
S901	632 539 9096	TACT SWITCH	1
S902	632 539 9096	TACT SWITCH	1
S903	632 539 9096	TACT SWITCH	1
S904	632 539 9096	TACT SWITCH	1
S905	632 539 9096	TACT SWITCH	1
S906	632 539 9096	TACT SWITCH	1
S907	632 539 9096	TACT SWITCH	1
S908	632 539 9096	TACT SWITCH	1
PL3	632 559 7645	LAMP,5V,115MA	1
SWITCH 2 P.C.B. ASSEMBLY			
PCB2	632 673 2083	ASSY,PCB,SWITCH,2	1
VR2	632 578 3055	VR,SLIDE,50KW,BALANCE	1
VR3-A, B	632 557 8354	VR,SLIDE,50KAX2,TONE	1
CP51	632 539 9607	PLUG, 3P	1
CP904	632 539 9669	PLUG, 7P	1
S909	632 539 9096	TACT SWITCH	1
S910	632 539 9096	TACT SWITCH	1
S911	632 539 9096	TACT SWITCH	1
PL1	632 559 7645	LAMP,5V,115MA	1

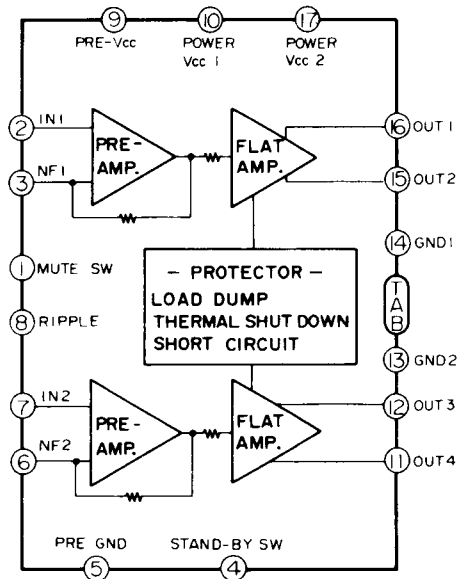
NOTES: 1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

IC BLOCK DIAGRAM

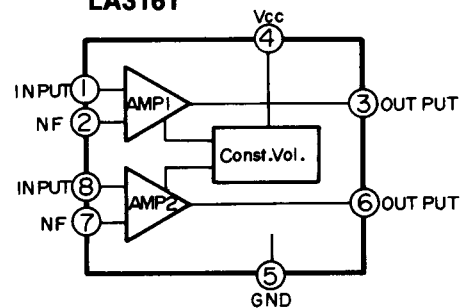
LA1145M



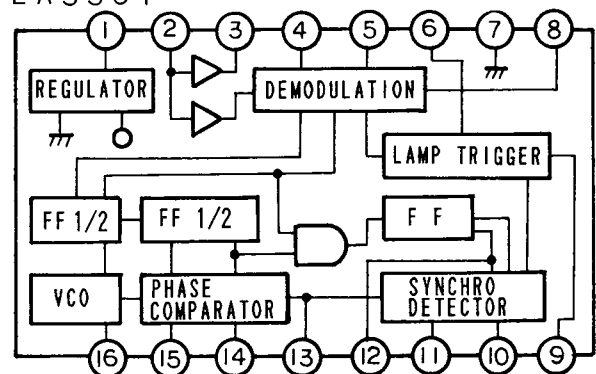
TA8205AH



LA3161



LA3361



SANYO

SANYO Electric Co., Ltd.
Osaka, Japan.