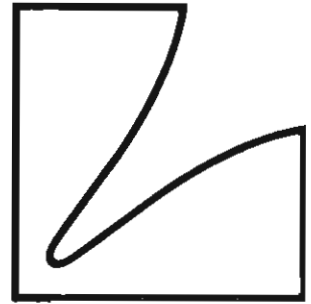


SERVICE MANUAL



PLL Frequency Synthesized FM Stereo/AM Tuner

TX-101

TX-101

TX-101

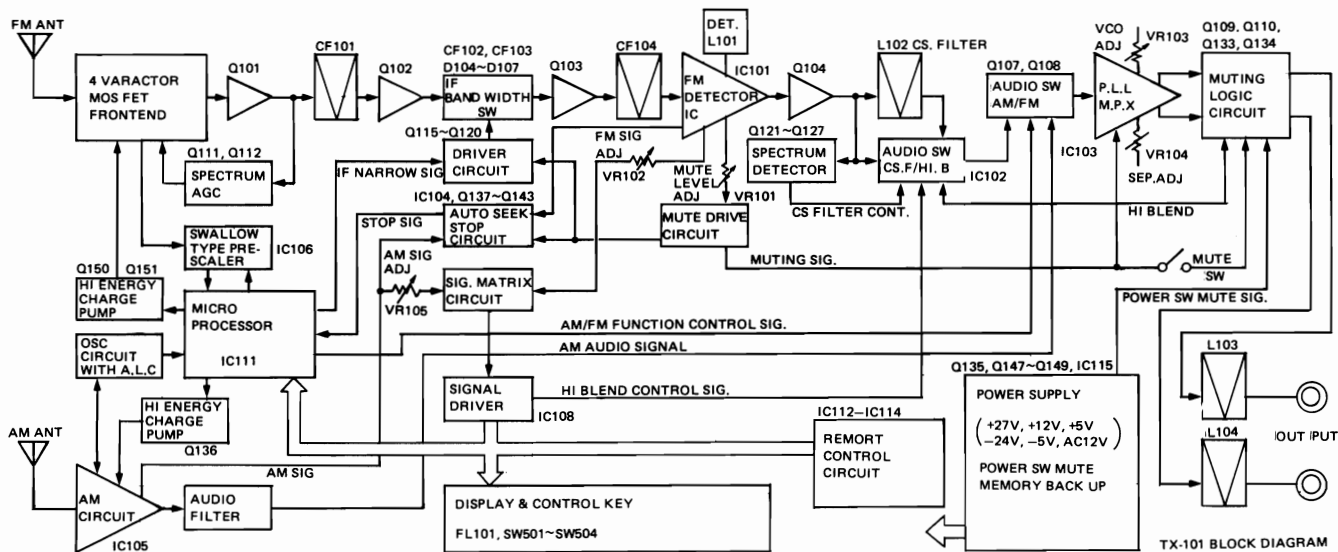


Contents

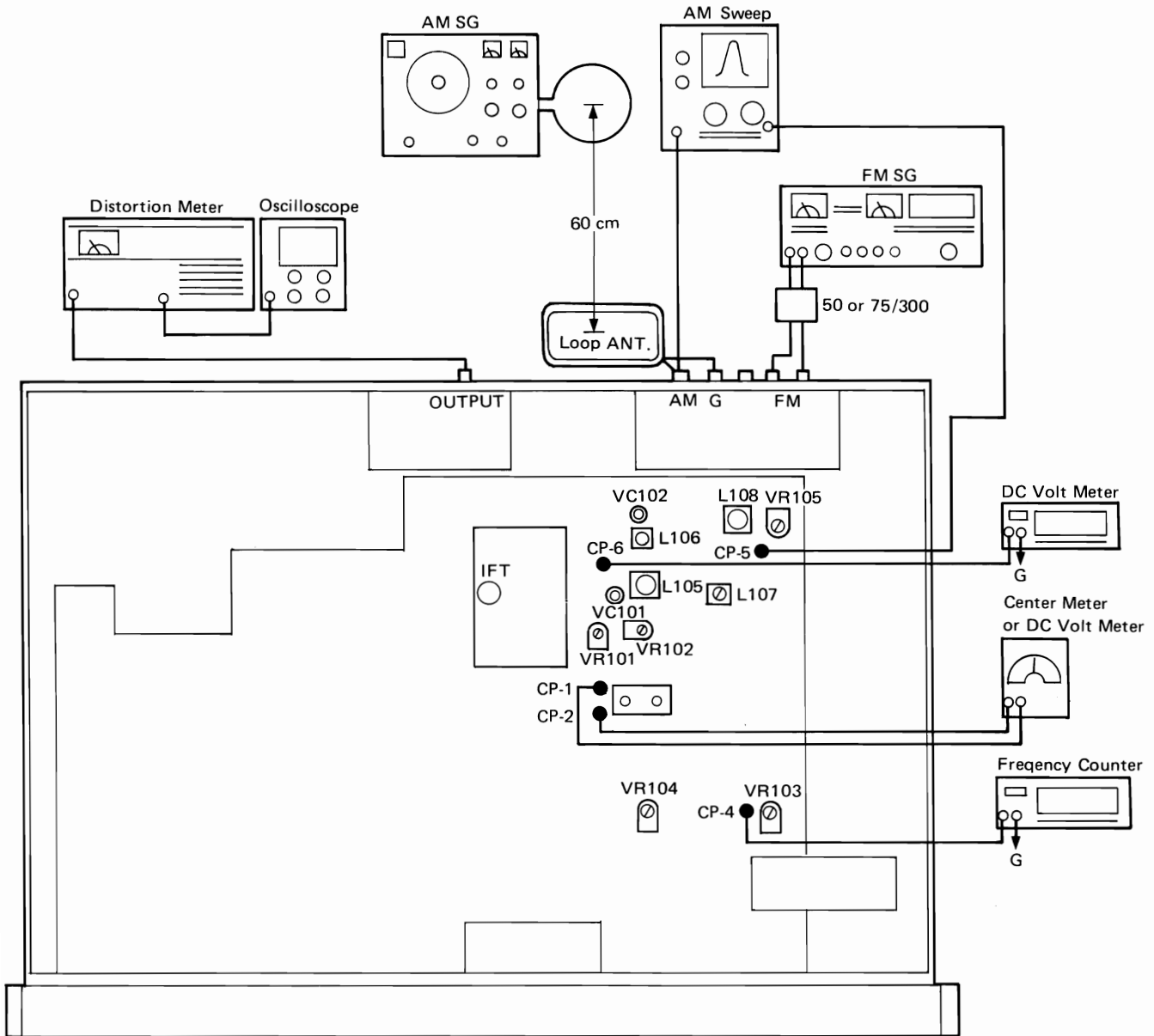
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TX-101

Block Diagram



Adjustment Locations



TX-101

- | | |
|------------------------------|-----------------------------|
| VR101...FM Muting | L101...FM DET. |
| VR102...FM Signal Strength | L105...AM ANT. Coil |
| VR103...VOC | L106...AM OSC Coil |
| VR104...FM Stereo Separation | L107...AM IFT |
| VR105...AM Signal Strength | L108...AM IFT |
| VC101...AM ANT. Trimmer | IFT....FM Stereo Distortion |
| VC102...AM OSC Trimmer | |

Adjustment Procedures

NOTE

Do not adjust this unit unless absolutely necessary. The following adjustments should NOT be performed unless the technician (This means you!), has a through understanding of the circuitry and principals involved AND has proper test equipment.

If these conditions are not met, it is quite likely any adjustments made will degrade performance and potentially affect reliability.

1. Unit should be connected to an AC power source. Push power switch on and allow unit to warm up for 5 minutes.

AM ALIGNMENT

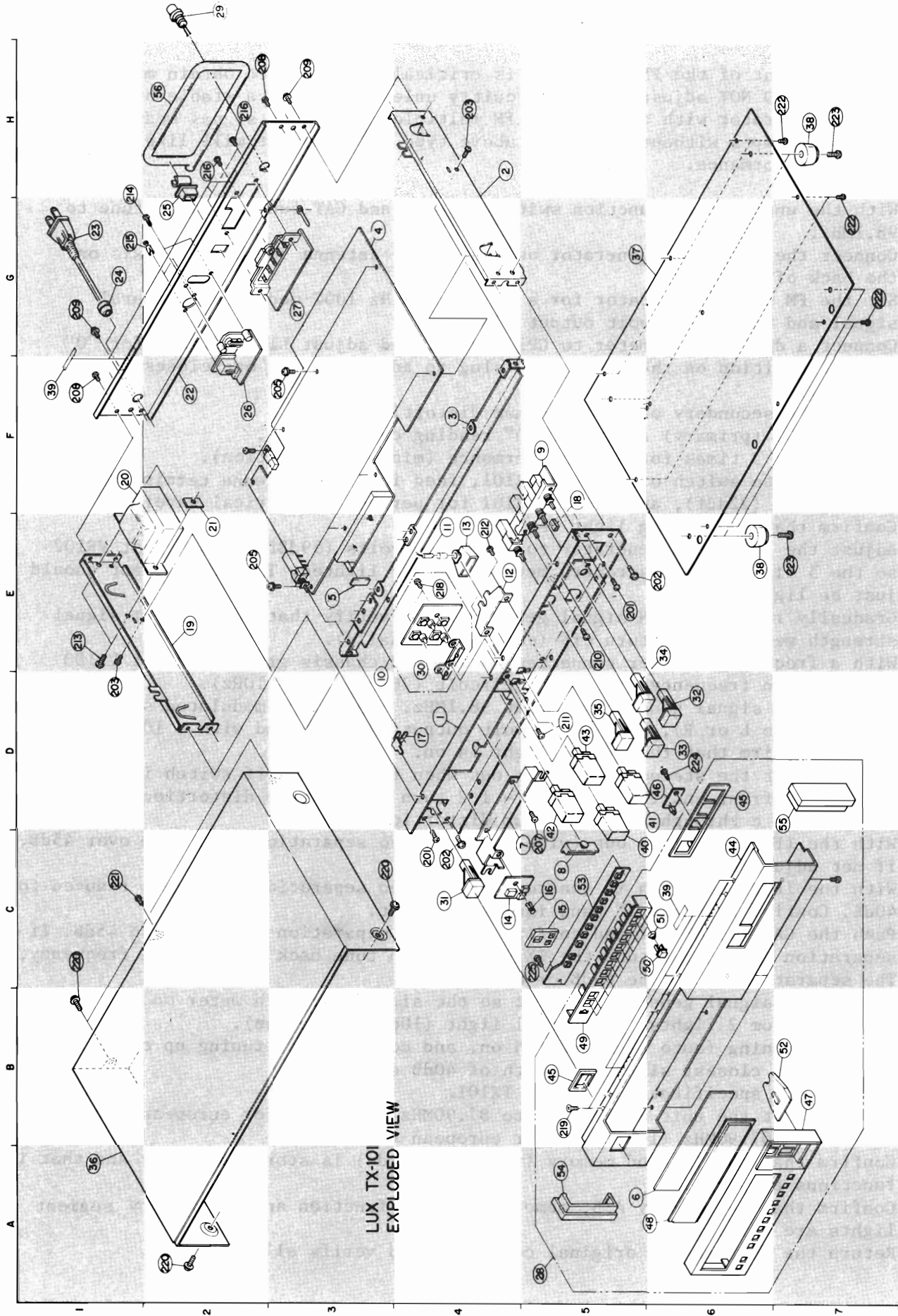
2. In order to properly align the AM section of the TX101, an AM sweep generator is necessary. If you do not have this type of test equipment, please do not attempt to align the unit.
 - a. Activate the AM function butoon.
 - b. Connect the output of the AM sweep generator to the AM antenna terminal on the TX101, Connect the input of the sweep generator to CP5. The output of the sweep generator should be between 20-50dBf.
 - c. Adjust L107 and L108 maximum symmetrical single peak response of the 450KHz signal.
 - d. Connect DC voltmeter to CP6 and ground.
 - e. Set the AM signal generator for 600KHz (603KHz for european version), 400Hz tone at 30% modulation, 60dB/m output. Set the TX101 for 600KHz (603KHz for european version). Adjust L106 to obtain 2.0 volts.
 - f. Change frequency on the generator and the TX101 to 1400KHz (1404KHz for european version). Adjust VC102 to obtain 7.0 volts.
 - g. Because these controls interact with each other, steps e and f should be repeated to obtain the desired voltages. Remove the voltmeter.
 - h. Change the frequency on the generator and the TX101 to 600KHz (603KHz for european version). Adjust L105 for maximum output.
 - i. Again change the frequency on the generator and the TX101 to 1400KHz (1404KHz for european version). Adjust VC101 for maximum output.
 - j. Because these controls interact with each other, steps h and i should be repeated several times for best performance.
 - k. Set the AM signal generator for 1000KHz (999KHz for european version), 400Hz tone at 30% modulation and 80dB/m output. Set the TX101 at 1000KHz (999KHz for european version). Adjust VR105 so the signal strength flourescent display is fully lighted (all 5 segments). The 5th segment should just be lighted.
 - l. Confirm the tuning operation in 10KHz (9KHz in european models) increments using the up/down tuning botttons from 530KHz (522KHz for european version) to 1620KHz (1611KHz for european version).
 - m. Set the AM signal generator for 1000KHz (999KHz for european version), 400Hz tone at 30% modulation and 70dB/m output.
 - n. Push the auto tuning switch in and verify that the auto seek function works in both directions.
 - o. Operate the tuner in the AM mode and confirm good sound quality and proper operation.

3. FM ALIGNMENT

Proper alignment of the FM circuitry is critical. In order to obtain maximum performance, DO NOT adjust any FM circuitry unless you have a stable high quality FM signal generator with an external FM multiplex composite signal modulator. alignment attempts without using the above type of equipment will likely degrade the units performance.

- a. With the unit on, FM function switch pushed, and CAT function off, tune to 98.1MHz.
- b. Connect the FM signal generator output to the antenna 300ohm terminals on the back of the TX101.
- c. Set the FM signal generator for a 98.1MHz, 1KHz 100% modulated monaural signal and 3000 micro-volt output (75dBf).
- d. Connect a digital voltmeter to CP1 and CP2 and adjust L101 primary for "0" reading position on the meter, The slug to adjust is the one closest to IC (LA1235).
- e. Adjust the secondary of L101 minimum distortion.
- f. Adjust L101 (primary) again for "0" reading on the meter.
Repeat 2 or 3 times for best performance (minimum distortion).
- g. With the mute switch off on the TX101, feed into the antenna terminals 7 micro-volts (22dBf), and adjust VR101 for perfect symmetrical waveform.
- h. Confirm that the tuning light is lit.
- i. Adjust the FM signal generator to 500 micro-volts (59dBf), and adjust VR102 so the 5 light signal strength meter is fully lighted. The 5th segment should just be lighted.
- j. Gradually reduce the FM signal generator and verify that the 5 light signal strength meter lights turn off (each individually).
- k. With a frequency counter connected to CP4 and chassis ground, adjust VR103 for free run frequency of the PLL circuit (76KHz + or - 10Hz).
- l. With the FM signal generator set at 98.1MHz, 1KHz, 100% modulated stereo signal (mode L or R), 3000 micro-volt output (75dBf), and with a 10% pilot level, confirm that the stereo light is on.
- m. Confirm that the stereo light goes out when the muting off switch is pushed.
- n. Adjust the front end IF coil + or - 1/2 turn for minimum distortion.
Repeat step e through h for minimum distortion.
- o. With the IF band switch out (wide), the stereo separation should be over 45dB, if not adjust VR104.
- p. With the IF band switch in (narrow) the stereo separation should be reduced to 40dB. Confirm that the IF band indicator light.
- q. Push the CAT switch off and confirm that the separation is more than 45dB. If separation is 30dB, detune the TX101 and then tune back to original frequency. The separation should be 45dB or more.
- r. Reduce the signal generator output so the signal strength meter on the TX101 decrease from 2 lights (45dB) to 1 light (10dB separation).
- s. Push the tuning (auto seek) switch on, and confirm that tuning up or down will stop at the closest signal strength of 40dB or more.
- t. Confirm all specifications of the TX101.
- u. Confirm that the unit reads down to 87.90MHz (87.50MHz for european version) and up to 107.90MHz (108.00MHz for european version).
- v. Confirm that the IF band memory (narrow or wide) is stored properly and that it functions properly.
- w. Confirm that the memory A/B, memory scanning function and the memory segment lights are working.
- x. Return the unit to its original condition and verify all functions.

Exploded View



LUX TX-101
EXPLODED VIEW

TX-101

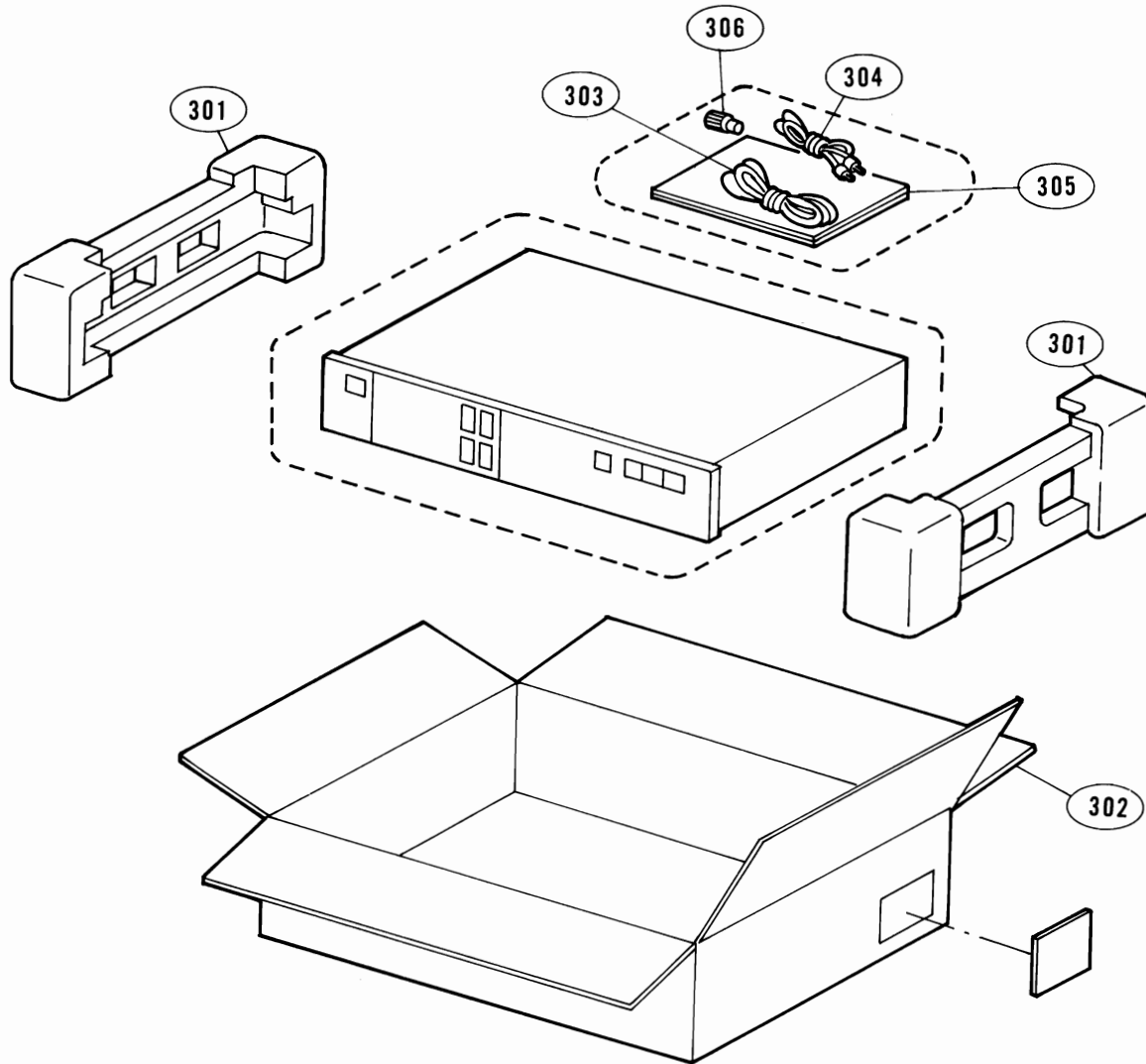
Exploded View Parts List

Index	Symbol No.	Stock No.	Description	Index	Symbol No.	Stock No.	Description
D4	1	27C60392F01	Chassis, Front	E6, H7	38	75A52969F01	Pad, Trann-leg
H4	2	07B60399F01	Bkt, 1055-1	C6, F1	39	14S53018F42	Insulator, 50x5
F4	3	07C60401F01	Bkt, 1056	C5	40	01V61300F27	Ass'y, Knob AM
G3	4	01V61300F16	Ass'y, Radio PCB (UZ)	D6	41	01V61300F28	Ass'y, Knob FM
		01V63500F71	Ass'y, Radio PCB (SK)	C5	42	01V61300F29	Ass'y, Knob DOWN
E3	5	43A53073F01	Spacer, A	D5	43	01V61300F30	Ass'y, Knob UP
A5	6	61A60886F01	Crystal, Ind. 1133	C6	44	64C60391F01	Panel, Front
C5	7	07B60402F01	Bkt, 1426	B5, D6	45	07B60397F01	Frame, Knob 1181
C5	8	43A60884F01	Bushing, Rubber 1054	D6	46	01V61300F23	Ass'y, LED PCB
F5	9	01V61300F20	Ass'y, Push SW PCB	B2	47	07C60395F01	Frame, Ind. A
D3	10	01V61300F26	Ass'y, Tact SW PCB	A6	48	61A60408F01	Crystal, Ind. 1130
E4	11	65T60521F01	Lamp, Pilot	B5	49	07B60879F01	Frame, Knob 1185
E4	12	07A60880F01	Bkt, 1442	C6	50	36A60407F01	Knob, Push 1204-1
E4	13	43A53112F01	Bushing, Lamp	C6	51	41A47848F01	Spring, SW
C4	14	01V61500F63	Ass'y, Memory LED PCB	B7	52	61A60883F01	Crystal, Acryl 1134
C5	15	43A60885F01	Bushing, Rubber 1055	C5	53	01V61500F62	Ass'y, Memory SW PCB
C5	16	05B41635J03	Rivet, Push	A5	54	07B61098F01	Frame, Panel Side A
D4	17	45A61564F01	Lever, Push 1443	D7	55	07B61099F01	Frame, Panel Side B
F5	18	43A61565F01	Spacer, 1210	H2	56	85T51078F01	Antenna, Loop
E2	19	07B60399F02	Bkt, 1055-2	C4, E5	201	03S44205G01	Scr, T-Tite M3x6
F1	20	25T53413F02	Trans, Power (UZ)	C4, E6	202	03S40036U18	Scr, T-Tite M3x8
		25T53413F03	Trans, Power (SK)	D1, H4	203	03S40036U18	Scr, T-Tite M3x8
E2	21	07A60404F01	Bkt, 1435	E2, F3	205	03C42723U01	Scr, Cup M3x6
F2	22	15C60405F01	Cover, Rear (UZ)	C5	207	03S44205G01	Scr, T-Tite M3x6
		15C60405F03	Cover, Rear (SK)	F1, H2	208	03S44205G02	Scr, T-Tite M3x6
G1	23	28T40916U01	Plug, AC Cord (UZ)	G1, H3	209	03S40036U18	Scr, T-Tite M3x8
		28T43812P02	Plug, AC Cord (SK)	E5	210	03C40014G04	Scr, Mch M3x6
G1	24	43B41625J02	Support, Cord	D5	211	03C40014G04	Scr, Mch M3x6
G2	25	55T51079F01	Lock, ANT. Holder	E4	212	03S44205G01	Scr, T-Tite M3x6
F2	26	01V61300F17	Ass'y, Rem. & OP PCB	E1	213	03C40014G10	Scr, Mch M3x8
G3	27	01V61300F18	Ass'y, ANT. Term. PCB	H1	214	03S40012G41	Scr, Tpg M3x8
A5	28	01V61300F22	Ass'y, Front Panel	G1	215	05B41635J03	Rivet, Push
H2	29	09T52960F01	Plug, ANT. P2132-A (SK)	H2	216	03S40012G41	Scr, Tpg M3x8
E4	30	07A60753F01	Bkt, 1441	E4	218	03C40014G04	Scr, Mch M3x6
C4	31	36B60406F01	Knob, Push 1159	B5	219	03S44205G16	Scr, T-Tite M3x6
D6	32	36B60406F06	Knob, Push 1159-6	A2etc	220	03S40036U01	Scr, T-Tite M4x8
D6	33	36B60406F07	Knob, Push 1159-7	C1	221	03S44205G02	Scr, T-Tite M3x6
E6	34	36B60406F08	Knob, Push 1159-8	G7, H7	222	03S44205G01	Scr, T-Tite M3x6
D5	35	36B60406F09	Knob, Push 1159-9	E7, H7	223	03S44205G25	Scr, T-Tite M4x10
A1	36	15C60393F01	Cover, Top	D6	224	03S40012G03	Scr, Tpg M3x6
G5	37	15B60394F01	Cover, Bottom	C5	225	03S40012G38	Scr, Tpg M3x8

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Packing Material Parts List

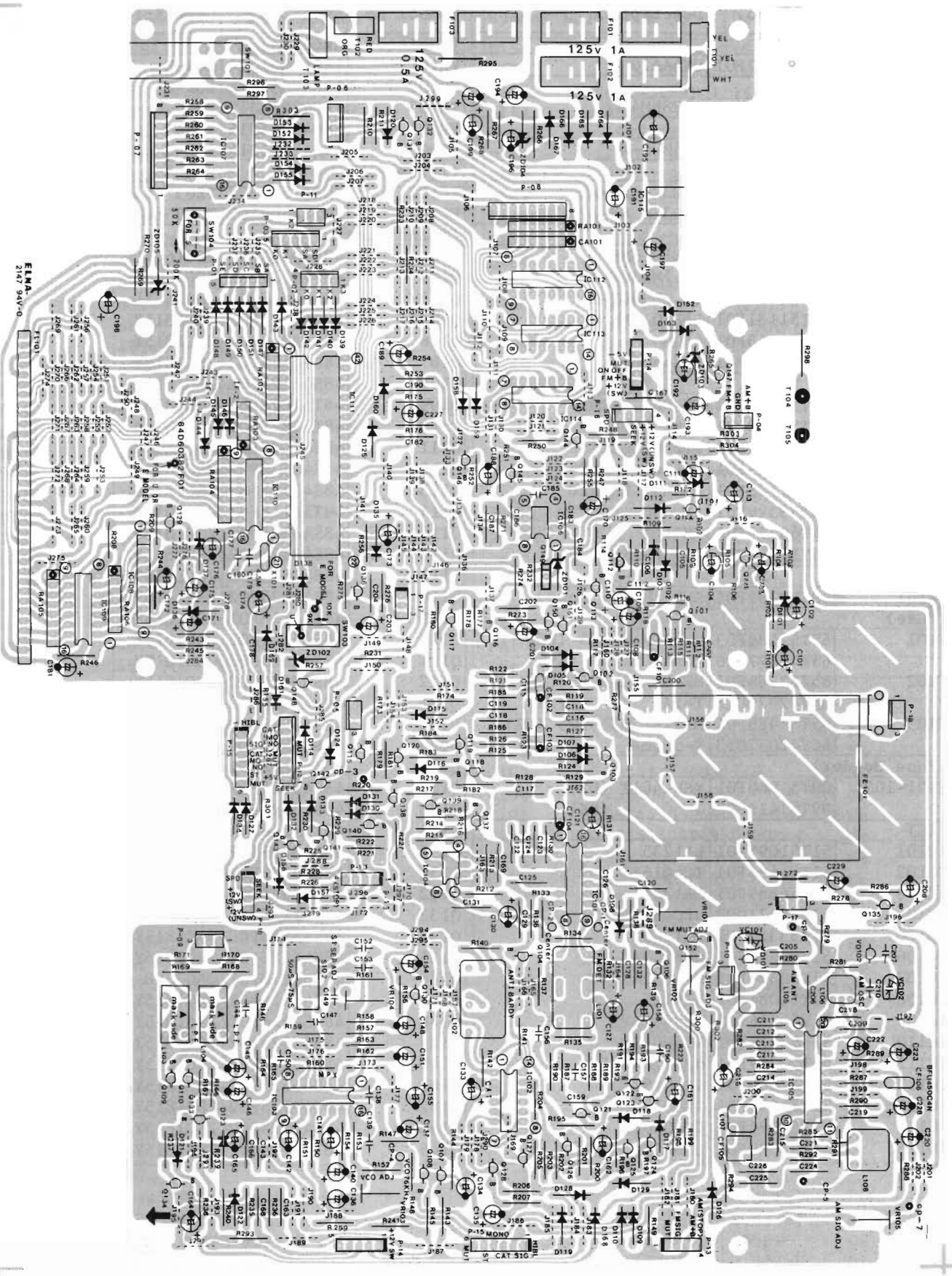
Symbol No.	Stock No.	Description	Symbol No.	Stock No.	Description
301	56C60411F01	Packing,Tray	304	28C42374J02	Cord,Output
302	56C58368F06	Carton,Packing	305	ME0257	Owner's Manual
303	85T51069F01	Antenna,FM	306	28T51066F01	Plug,ANT. (SK)



Destination's Parts List

Symbol No.	Description	UZ 120V USA, Canada	SK 220V Europe, Etc	Symbol No.	Description	UZ 120V USA, Canada	SK 220V Europe, Etc
4	Ass'y, Radio PCB	01V61300F16	01V63500F71	D138	Di, 1S1555	48T43189F01	Non Use
20	Trans, Power	25T53413F02	25T53413F03	D143	Di, 1S1555	Non Use	48T43189F01
22	Cover, Rear	15C60405F01	15C60405F03	D156	Di, 1S1555	Non Use	48T43189F01
23	Plug, AC Cord	28T40916U01	28T43812P02	D157	Di, 1S1555	Non Use	48T43189F01
29	Plug, ANT. P2132-A	Non Use	09T52960F01	C147	Capacitor	08T52448F18 (1600pF Pp)	08T52448F13 (1000pF Pp)
306	Plug, ANT.	Non Use	28T51066F01	C149	Capacitor	08T52448F03 (390pF Pp)	08T52448F13 (1000pF Pp)
F101-103	Fuse Holder	09T51960F01	09T51410F01	C150	Capacitor	08T52448F18 (1600pF Pp)	08T52448F13 (1000pF Pp)
F101	Fuse	65T52486F03 (1A-125V)	65T42077U16 (T-1A)	R213	Resistor	06S44594P08 (56K 1/4W)	06S44594P10 (68K 1/4W)
F102	Fuse	65T52486F03 (1A-125V)	65T42077U16 (T-1A)	R250	Resistor	06S44594P06 (47K 1/4W)	Non Use
F103	Fuse	65T52486F01 (0.5A-125V)	65T42077U13 (T-500mA)				
Q125	Tr, 2SC1815Y	48S43525F02	Non Use				

Radio PCB



TX-101

Radio PCB Parts List

Symbol No.	Stock No.	Description	Symbol No.	Stock No.	Description
(Front End)			(Resistor, Variable)		
FE101	77T51132F01	UN5AA10	VR101	18C42061J14	10K-B
(FL Meter)			VR102	18C42061J14	10K-B
FL101	65T53335F01	FIP8BM4	VR103	18C42061J12	2K
(Crystal)			VR104	18C42061J16	100K
X101	48T55072F01	4.5MHz-M	VR105	18C42061J14	10K-B
(Varactor)			(Trimmer)		
VD101	48T52826F01	SVC321 SP-A2	VC101	20T47503F02	TZ03 red
VD102	48T52826F01	SVC321 SP-A2	VC102	20T47503F02	TZ03 red
(Filter, Ceramic)			(Transistor)		
CF101	91T51130F01	SFE10.7MM	Q101	48S40732P02	2SC1674L
CF102	91T53407F01	10.7MS3GY-A	Q102	48S40732P02	2SC1674L
CF103	91T53407F01	10.7MS3GY-A	Q103	48S40732P02	2SC1674L
CF104	91T51131F01	SFE10.7ML	Q104	48S43525F02	2SC1815Y
CF105	91T56243F01	450H	Q106	48S43525F02	2SC1815Y
CF106	91T60378F01	BFU450C4N	Q107	48S43525F02	2SC1815Y
(Coil)			Q108	48S43525F02	2SC1815Y
L101	24T51128F01	FM DET LA1457	Q109	48T51878F01	2SC2878A,B
L102	91T51083F01	Anti Birdy	Q110	48T51878F01	2SC2878A,B
L103	91T53325F01	Filter, LA1196	Q111	48S43525F02	2SC1815Y
L104	91T53325F01	Filter, LA1196	Q112	48S40732P02	2SC1674L
L105	24T51125F01	AM ANT LA1210	Q113	48S43525F02	2SC1815Y
L106	24T53326F01	AM OSC	Q114	48T51118F01	2SA1015Y
L107	24T60379F01	AM IFT	Q115	48S43525F02	2SC1815Y
L108	24T51543F01	AM LA-1100	Q116	48S43525F02	2SC1815Y
(Switch)			Q117	48S43525F02	2SC1815Y
SW101	40T60381F01	SUF 1KEY-2 Power	Q118	48S43525F02	2SC1815Y
(Fuse)			Q119	48T51118F01	2SA1015Y
F101	65T52486F03	MF61NM 1-125 (UZ)	Q120	48S43525F02	2SC1815Y
	65T42077U16	T-1A (SK)	Q121	48S43525F02	2SC1815Y
F102	65T52486F03	MF61NM 1-125 (UZ)	Q122	48S43525F02	2SC1815Y
	65T42077U16	T-1A (SK)	Q123	48S43525F02	2SC1815Y
F103	65T52486F01	MF61NM 0.5-125 (UZ)	Q124	48S43525F02	2SC1815Y
	65T42077U13	T-500mA (SK)	Q125	48S43525F02	2SC1815Y (UZ)
(Fuse Holder)			Q126	48T51118F01	2SA1015Y
F101-103	09T51960F01	YSH-401T (UZ)	Q127	48S43525F02	2SC1815Y
	09T51410F01	(SK)	Q128	48S43525F02	2SC1815Y
(IC)			Q129	48T51118F01	2SA1015Y
IC101	51T51095F01	LA1235	Q130	48S43525F02	2SC1815Y
IC102	51T51696F01	TC4016BP	Q131	48S43525F02	2SC1815Y
IC103	51T56889F01	HA12016	Q132	48S43525F02	2SC1815Y
IC104	51S43471U02	uPC4558C	Q133	48T51118F01	2SA1015Y
IC105	51T53323F01	LA1245	Q134	48S43525F02	2SC1815Y
IC106	51T43271F01	uPB553AC	Q135	48S43525F02	2SC1815Y
IC107	51T60377F01	M74LS247P	Q136	48T56278F01	2SC3068
IC108	51T51086F01	BA6125	Q137	48S43525F02	2SC1815Y
IC109	51T53316F01	TC5067BP	Q138	48T51118F01	2SA1015Y
IC110	51T53316F01	TC5067BP	Q139	48S43525F02	2SC1815Y
IC111	51T52357F01	uPD1704C-534	Q140	48S43525F02	2SC1815Y
IC112	51T47655F01	TC4049BP	Q141	48S43525F02	2SC1815Y
IC113	51T51696F01	TC4016BP	Q142	48S43525F02	2SC1815Y
IC114	51T51696F01	TC4016BP	Q143	48S43525F02	2SC1815Y
IC115	51T53320F01	L78M12	Q145	48T51118F01	2SA1015Y

TX-101

Symbol No.	Stock No.	Description
Q146	48S43525F02	2SC1815Y
Q147	48S43525F02	2SC1815Y
Q148	48S43525F02	2SC1815Y
Q149	48T60492F02	2SC2673Q,R
Q150	48S43525F02	2SC1815Y
Q151	48S43525F02	2SC1815Y
Q152	48S43525F02	2SC1815Y
(Diode)		
D101	48T57425F01	1M60FM
D102	48T57425F01	1M60FM
D103	48T57425F01	1M60FM
D104	48T43189F01	1S1555
D105	48T43189F01	1S1555
D106	48T43189F01	1S1555
D107	48T43189F01	1S1555
D108	48T43189F01	1S1555
D109	48T43189F01	1S1555
D110	48T43189F01	1S1555
D111	48T43189F01	1S1555
D112	48T43189F01	1S1555
D115	48T43189F01	1S1555
D116	48T43189F01	1S1555
D117	48T43189F01	1S1555
D118	48T43189F01	1S1555
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D120	48T43189F01	1S1555
D121	48T43189F01	1S1555
D122	48T43189F01	1S1555
D123	48T43189F01	1S1555
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D125	48T43189F01	1S1555
D126	48T43189F01	1S1555
D127	48T43189F01	1S1555
D128	48T43189F01	1S1555
D129	48T43189F01	1S1555
D130	48T43189F01	1S1555
D131	48T43189F01	1S1555
D132	48T43189F01	1S1555
D133	48T43189F01	1S1555
D134	48T43189F01	1S1555
D135	48T43189F01	1S1555
D136	48T43189F01	1S1555
D137	48T43189F01	1S1555
D138	48T43189F01	1S1555 (UZ)
D139	48T43189F01	1S1555
D140	48T43189F01	1S1555
D141	48T43189F01	1S1555
D142	48T43189F01	1S1555
D143	48T43189F01	1S1555 (SK)
D145	48T43189F01	1S1555
D146	48T43189F01	1S1555
D147	48T43189F01	1S1555
D148	48T43189F01	1S1555
D149	48T43189F01	1S1555
D150	48T43189F01	1S1555
D151	48T43189F01	1S1555
D152	48T43189F01	1S1555
D153	48T43189F01	1S1555

Symbol No.	Stock No.	Description
D154	48T43189F01	1S1555
D155	48T43189F01	1S1555
D156	48T43189F01	1S1555 (SK)
D157	48T43189F01	1S1555 (SK)
D158	48T43189F01	1S1555
D159	48T43189F01	1S1555
D160	48T43189F01	1S1555
D161	48T43189F01	1S1555
D162	48T55186F01	GP10D
D163	48T55186F01	GP10D
D164	48T55186F01	GP10D
D165	48T55186F01	GP10D
D166	48T55186F01	GP10D
D167	48T55186F01	GP10D
D168	48T43189F01	1S1555
D169	48T43189F01	1S1555
(Diode, Zener)		
ZD101	48T52739F40	HZ6C-1
ZD102	48T52739F40	HZ6C-1
ZD103	48T52739F95	HZ27-2
ZD104	48T52739F92	HZ24-2
ZD105	48T52739F40	HZ6C-1
(Network, Resistor)		
RA101	51T51133F09	4.7Kx6
RA102	51T51133F01	100Kx7
RA103	51T51133F02	100Kx4
RA104	51T51133F01	100Kx7
RA105	51T51133F01	100Kx7
RA106	51T51133F10	10Kx6
(Network, Capacitor)		
CA101	51T60380F01	0.01uF x6
(Capacitor)		
C101	23S40657F10	10uF 16V E1
C102	23S40657F10	10uF 16V E1
C103	23S41198U03	1uF 50V E1
C104	23S40657F27	0.47uF 50V E1
C105	08S44505P49	0.001uF Ce
C106	08S44505P49	0.001uF Ce
C107	08S44505P63	0.022uF Ce
C108	08S44505P63	0.022uF Ce
C109	23S40657F13	47uF 16V E1
C110	23S41198U12	10uF 50V E1
C111	23S40657F10	10uF 16V E1
C112	08S44505P61	0.01uF Ce
C113	23S40657F52	220uF 16V E1
C114	08S44505P63	0.022uF Ce
C115	08S44505P63	0.022uF Ce
C116	08S44505P63	0.022uF Ce
C117	08S44505P63	0.022uF Ce
C118	08S44505P63	0.022uF Ce
C119	08S44505P63	0.022uF Ce
C120	08S44505P63	0.022uF Ce
C121	23S40657F27	0.47uF 50V E1
C122	08S44505P63	0.022uF Ce
C123	08S44505P63	0.022uF Ce
C124	08S44505P63	0.022uF Ce
C125	08S44505P37	100pF Ce
C126	08S44505P63	0.022uF Ce

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Symbol No.	Stock No.	Description	Symbol No.	Stock No.	Description
C127	23S40657F14	100uF 16V E1	C184	08S44505P63	0.022uF Ce
C128	08S44505P63	0.022uF Ce	C185	21S40655F11	10pF Ce
C129	08S44505P63	0.022uF Ce	C186	08S44505P63	0.022uF Ce
C130	23S40657F28	1uF 50V E1	C187	08S44505P41	220pF Ce
C131	08S44505P63	0.022uF Ce	C188	23S40657F10	10uF 16V E1
C132	08S44505P63	0.022uF Ce	C189	23S40657F28	1uF 50V E1
C133	23S40657F30	3.3uF 50V E1	C190	08S44505P63	0.022uF Ce
C134	23S40657F11	22uF 16V E1	C191	23S40657F35	47uF 50V E1
C135	23S40657F11	22uF 16V E1	C192	23S40657F35	47uF 50V E1
C136	23S40657F31	4.7uF 50V E1	C193	23S40657F31	4.7uF 50V E1
C137	23S40657F10	10uF 16V E1	C194	23S40657F35	47uF 50V E1
C138	08S40656F21	0.047uF My	C195	23S41198U65	1000uF 25V E1
C139	08T52448F13	1000pF Pp	C196	23S40657F35	47uF 50V E1
C140	23S40657F30	3.3uF 50V E1	C197	23S40657F52	220uF 16V E1
C141	23S40657F28	1uF 50V E1	C198	23S40657F20	47uF 25V E1
C142	23S40657F30	3.3uF 50V E1	C199	23S40657F28	1uF 50V E1
C143	08S44505P63	0.022uF Ce	C200	08S44505P61	0.01uF Ce
C144	08S40656F21	0.047uF My	C201	23S40657F31	4.7uF 50V E1
C145	23S40657F10	10uF 16V E1	C202	08S44505P63	0.022uF Ce
C146	23S40657F10	10uF 16V E1	C203	23S40657F31	4.7uF 50V E1
C147	08T52448F18	1600pF Pp (UZ)	C204	08S44505P63	0.022uF Ce
	08T52448F13	1000pF Pp (SK)	C205	08S44505P61	0.01uF Ce
C148	23S40657F11	22uF 16V E1	C206	08S44505P61	0.01uF Ce
C149	08T52448F03	390pF Pp (UZ)	C207	21S40655F11	10pF Ce
	08T52448F13	1000pF Pp (SK)	C208	23S40657F20	47uF 25V E1
C150	08T52448F18	1600pF Pp (UZ)	C209	08S44505P63	0.022uF Ce
	08T52448F13	1000pF Pp (SK)	C210	08T52448F01	330pF Pp
C151	23S40657F10	10uF 16V E1	C211	08S44505P63	0.022uF Ce
C154	23S40657F13	47uF 16V E1	C212	08S44505P63	0.022uF Ce
C155	23S40657F52	220uF 16V E1	C213	08S44505P63	0.022uF Ce
C156	08T52448F03	390pF Pp	C214	08S44505P63	0.022uF Ce
C157	08T52448F03	390pF Pp	C215	08S44505P63	0.022uF Ce
C158	23S40657F11	22uF 16V E1	C216	23S40657F10	10uF 16V E1
C159	08S44505P49	0.001uF Ce	C217	08S44505P63	0.022uF Ce
C160	08T52448F29	4700pF Pp	C218	08S44505P63	0.022uF Ce
C161	23S40657F28	1uF 50V E1	C219	08S44505P63	0.022uF Ce
C162	23S40657F28	1uF 50V E1	C220	23S40657F14	100uF 16V E1
C163	08S44505P63	0.022uF Ce	C221	08S44505P49	0.001uF Ce
C164	23S40657F10	10uF 16V E1	C222	23S40657F28	1uF 50V E1
C165	23S41198U41	220uF 16V E1	C223	23S40657F30	3.3uF 50V E1
C166	08S44505P63	0.022uF Ce	C224	08S44505P53	0.0022uF Ce
C167	08S44505P63	0.022uF Ce	C225	08S44505P63	0.022uF Ce
C168	08S44505P63	0.022uF Ce	C226	08S44505P57	0.0047uF Ce
C169	08S44505P49	0.001uF Ce	C227	23S40657F28	1uF 50V E1
C170	23S40657F10	10uF 16V E1	C228	23S40657F27	0.47uF 50V E1
C171	23S40657F28	1uF 50V E1	C229	23S40657F20	47uF 25V E1
C172	23S40657F28	1uF 50V E1	(Resistor)		
C173	23S40657F11	22uF 16V E1	R101	06S44594P02	33K 1/4W Rd
C174	23S41198U62	1000uF 6.3VE1	R102	06S44594P02	33K 1/4W Rd
C175	23S40657F04	220uF 6.3V E1	R103	06S44594P06	47K 1/4W Rd
C176	23S40657F11	22uF 16V E1	R104	06S44594P12	82K 1/4W Rd
C177	08S44505P63	0.022uF Ce	R105	06S44593P77	3.3K 1/4W Rd
C178	08S44505P63	0.022uF Ce	R106	06S44594P30	470K 1/4W Rd
C179	21S40655F15	22pF Ce	R107	06S44593P75	2.7K 1/4W Rd
C180	21S40655F15	22pF Ce	R108	06S44594P14	100K 1/4W Rd
C181	23S40657F20	47uF 25V E1	R109	06S44593P77	3.3K 1/4W Rd
C182	08S44505P63	0.022uF Ce	R110	06S44594P26	330K 1/4W Rd
C183	08S44505P63	0.022uF Ce	R111	06S44593P81	4.7K 1/4W Rd

Symbol No.	Stock No.	Description	Symbol No.	Stock No.	Description
R112	06S44593P57	470 1/4W Rd	R170	06S44593P41	100 1/4W Rd
R113	06S44593P33	47 1/4W Rd	R171	06S44593P41	100 1/4W Rd
R114	06S44593P65	1K 1/4W Rd	R172	06S44593P81	4.7K 1/4W Rd
R115	06S44593P53	330 1/4W Rd	R173	06S44593P57	470 1/4W Rd
R116	06S44593P73	2.2K 1/4W Rd	R174	06S44593P89	10K 1/4W Rd
R117	06S44593P69	1.5K 1/4W Rd	R175	06S44594P06	47K 1/4W Rd
R118	06S44593P53	330 1/4W Rd	R176	06S44594P06	47K 1/4W Rd
R119	06S44593P17	10 1/4W Rd	R177	06S44594P97	22K 1/4W Rd
R120	06S44593P57	470 1/4W Rd	R178	06S44593P89	10K 1/4W Rd
R121	06S44593P53	330 1/4W Rd	R179	06S44593P89	10K 1/4W Rd
R122	06S44593P53	330 1/4W Rd	R180	06S44593P89	10K 1/4W Rd
R123	06S44593P71	1.8K 1/4W Rd	R181	06S44594P14	100K 1/4W Rd
R124	06S44593P63	820 1/4W Rd	R182	06S44593P81	4.7K 1/4W Rd
R125	06S44593P63	820 1/4W Rd	R183	06S44593P85	6.8K 1/4W Rd
R126	06S44593P63	820 1/4W Rd	R184	06S44593P65	1K 1/4W Rd
R127	06S44593P71	1.8K 1/4W Rd	R185	06S44593P89	10K 1/4W Rd
R128	06S44593P41	100 1/4W Rd	R186	06S44594P89	10K 1/4W Rd
R129	06S44593P53	330 1/4W Rd	R187	06S44593P65	1K 1/4W Rd
R130	06S44593P53	330 1/4W Rd	R188	06S44593P97	22K 1/4W Rd
R131	06S44594P06	47K 1/4W Rd	R189	06S44593P97	22K 1/4W Rd
R132	06S44593P83	5.6K 1/4W Rd	R190	06S44593P73	2.2K 1/4W Rd
R133	06S44593P95	18K 1/4W Rd	R191	06S44593P73	2.2K 1/4W Rd
R134	06S44593P49	220 1/4W Rd	R192	06S44593P87	8.2K 1/4W Rd
R135	06S44593P73	2.2K 1/4W Rd	R193	06S44593P65	1K 1/4W Rd
R136	06S44593P41	100 1/4W Rd	R194	06S44593P77	3.3K 1/4W Rd
R137	06S44593P81	4.7K 1/4W Rd	R195	06S44593P41	100 1/4W Rd
R138	06S44593P41	100 1/4W Rd	R196	06S44593P97	22K 1/4W Rd
R139	06S44594P06	47K 1/4W Rd	R197	06S44594P14	100K 1/4W Rd
R140	06S44593P89	10K 1/4W Rd	R198	06S44594P14	100K 1/4W Rd
R141	06S44593P89	10K 1/4W Rd	R199	06S44594P06	47K 1/4W Rd
R142	06S44593P89	10K 1/4W Rd	R200	06S44594P06	47K 1/4W Rd
R143	06S44594P22	220K 1/4W Rd	R201	06S44593P97	22K 1/4W Rd
R144	06S44594P24	270K 1/4W Rd	R202	06S44594P06	47K 1/4W Rd
R145	06S44593P65	1K 1/4W Rd	R203	06S44593P89	10K 1/4W Rd
R146	06S44594P14	100K 1/4W Rd	R204	06S44593P89	10K 1/4W Rd
R147	06S44593P73	2.2K 1/4W Rd	R205	06S44594P06	47K 1/4W Rd
R148	06S44594P04	39K 1/4W Rd	R206	06S44594P06	47K 1/4W Rd
R149	06S44594P04	39K 1/4W Rd	R207	06S44593P89	10K 1/4W Rd
R150	06S44593P89	10K 1/4W Rd	R208	06S44594P06	47K 1/4W Rd
R151	06S44594P02	33K 1/4W Rd	R209	06S44594P06	47K 1/4W Rd
R152	06S44594P14	100K 1/4W Rd	R210	06S44593P57	470 1/4W Rd
R153	06S44593P85	6.8K 1/4W Rd	R211	06S44593P57	470 1/4W Rd
R154	06S44593P65	1K 1/4W Rd	R212	06S44594P16	120K 1/4W Rd
R155	06S44594P06	47K 1/4W Rd	R213	06S44594P08	56K 1/4W Rd (UZ)
R156	06S44593P81	4.7K 1/4W Rd		06S44594P10	68K 1/4W Rd (SK)
R157	06S44593P99	27K 1/4W Rd	R214	06S44593P81	4.7K 1/4W Rd
R158	06S44593P71	1.8K 1/4W Rd	R215	06S44593P81	4.7K 1/4W Rd
R159	06S44594P06	47K 1/4W Rd	R216	06S44593P81	4.7K 1/4W Rd
R160	06S44594P06	47K 1/4W Rd	R217	06S44593P97	22K 1/4W Rd
R161	06S44593P53	330 1/4W Rd	R218	06S44593P81	4.7K 1/4W Rd
R162	06S44593P71	1.8K 1/4W Rd	R219	06S44593P89	10K 1/4W Rd
R163	06S44593P99	27K 1/4W Rd	R220	06S44593P89	10K 1/4W Rd
R164	06S44593P77	3.3K 1/4W Rd	R221	06S44593P97	22K 1/4W Rd
R165	06S44593P77	3.3K 1/4W Rd	R222	06S44593P89	10K 1/4W Rd
R166	06S44593P97	22K 1/4W Rd	R223	06S44593P65	1K 1/4W Rd
R167	06S44593P97	22K 1/4W Rd	R225	06S44593P89	10K 1/4W Rd
R168	06S44593P77	3.3K 1/4W Rd	R226	06S44594P06	47K 1/4W Rd
R169	06S44593P77	3.3K 1/4W Rd	R227	06S44593P89	10K 1/4W Rd

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Symbol No.	Stock No.	Description	Symbol No.	Stock No.	Description
R228	06S44593P89	10K 1/4W Rd	R268	06S44594P06	47K 1/4W Rd
R229	06S44593P89	10K 1/4W Rd	R269	06S44593P49	220 1/4W Rd
R230	06S44594P06	47K 1/4W Rd	R270	06S44593P49	220 1/4W Rd
R231	06S44593P89	10K 1/4W Rd	R271	06S44594P22	220K 1/4W Rd
R232	06S44593P73	2.2K 1/4W Rd	R272	06S44593P81	4.7K 1/4W Rd
R233	06S44593P81	4.7K 1/4W Rd	R273	06S44593P59	560 1/4W Rd
R234	06S44593P81	4.7K 1/4W Rd	R274	06S44593P65	1K 1/4W Rd
R235	06S44594P06	47K 1/4W Rd	R275	06S44593P65	1K 1/4W Rd
R236	06S44593P89	10K 1/4W Rd	R276	06S44593P73	2.2K 1/4W Rd
R237	06S44594P06	47K 1/4W Rd	R277	06S44593P97	22K 1/4W Rd
R238	06S44593P06	47K 1/4W Rd	R278	06S44593P89	10K 1/4W Rd
R239	06S44593P14	100K 1/4W Rd	R279	06S44593P89	10K 1/4W Rd
R240	06S44594P30	470K 1/4W Rd	R280	06S44594P14	100K 1/4W Rd
R241	06S44593P81	4.7K 1/4W Rd	R281	06S44594P14	100K 1/4W Rd
R243	06S44593P89	10K 1/4W Rd	R282	06S44593P41	100 1/4W Rd
R244	06S44594P06	47K 1/4W Rd	R283	06S44593P83	5.6K 1/4W Rd
R245	06S44593P41	100 1/4W Rd	R284	06S44593P69	1.5K 1/4W Rd
R246	06S44594P06	47K 1/4W Rd	R285	06S44593P57	470 1/4W Rd
R250	06S44594P06	47K 1/4W Rd	R286	06S44593P89	10K 1/4W Rd
R251	06S44593P65	1K 1/4W Rd	R287	06S44593P45	150 1/4W Rd
R252	06S44593P85	6.8K 1/4W Rd	R288	06S44594P41	100 1/4W Rd
R253	06S44594P06	47K 1/4W Rd	R289	06S44593P89	10K 1/4W Rd
R254	06S44594P06	47K 1/4W Rd	R290	06S44593P89	10K 1/4W Rd
R255	06S44594P14	100K 1/4W Rd	R291	06S44593P75	2.7K 1/4W Rd
R256	06S44594P06	47K 1/4W Rd	R292	06S44593P99	27K 1/4W Rd
R257	06S44594P73	2.2K 1/4W Rd	R293	06S44594P14	100K 1/4W Rd
R258	06S44593P51	270 1/4W Rd	R294	06S44593P49	220 1/4W Rd
R259	06S44593P51	270 1/4W Rd	R295	06T55175F49	22 1/2W Rm
R260	06S44593P51	270 1/4W Rd	R296	06S44593P06	47K 1/4W Rd
R261	06S44593P51	270 1/4W Rd	R297	06S44594P14	100K 1/4W Rd
R262	06S44593P51	270 1/4W Rd	R298	06D40802G44	2.2M 1/2W Rd
R263	06S44593P51	270 1/4W Rd	R299	06S44593P41	100 1/4W Rd
R264	06S44593P51	270 1/4W Rd	R300	06S44593P89	10K 1/4W Rd
R265	06S44593P89	10K 1/4W Rd	R301	06S44594P06	47K 1/4W Rd
R266	06T55175F75	2.7K 1/2W Rm	R302	06S44593P97	22K 1/4W Rd
R267	06S44594P10	68K 1/4W Rd	R303	06S44593P77	3.3K 1/4W Rd

Remarks

Resistor : Rd...Carbon, Rm...Metal Film

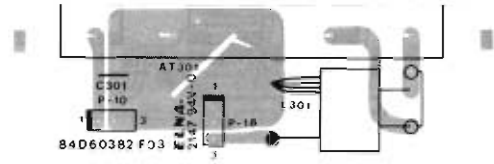
Capacitor: El...Electrolytic, Ce...Ceramic, My...Mylar, Pp...Polypropylene

(UZ) : 120V for U.S.A. , Canada

(SK) : 220V for Europe , etc

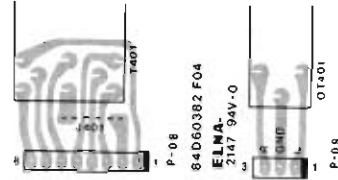
ANT. Terminal PCB Parts List

Symbol No.	Stock No.	Description
(Terminal,ANT.)		
AT301	09T60383F01	5P
(Baloon)		
L301	24T53408F01	LA1052



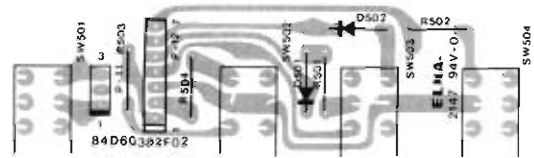
Rem. & OP PCB Parts List

Symbol No.	Stock No.	Description
(Plate,Phone)		
OT401	09T50231F01	2P
(Jack,Control)		
T401	09T50261F01	



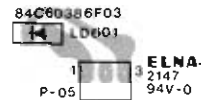
Push SW PCB Parts List

Symbol No.	Stock No.	Description
(SW,Push)		
SW501	40T60385F01	SUL 1KEY-2 IF BAND
SW502-504	40T60384F01	SUL 3KEY-2 TUNING MUTING C.A.T.
(Diode)		
D501	48T43189F01	1S1555
D502	48T43189F01	1S1555
(Resistor)		
R501	06S44593P97	22K 1/4W Rd
R502	06S44593P97	22K 1/4W Rd
R503	06S44593P89	10K 1/4W Rd
R504	06S44593P65	1K 1/4W Rd

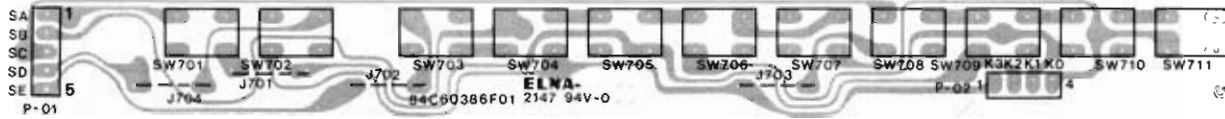


LED PCB Parts List

Symbol No.	Stock No.	Description
(LED)		
LD601	48T52238F04	AA5552K org IF BAND



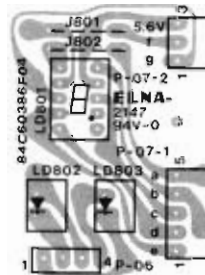
Memory SW PCB Parts List



Symbol No.	Stock No.	Description
(Switch)		
SW701	40T51411F02	Tact blk MEMORY SCAN
SW702	40T51411F02	Tact blk MEMORY A/B
SW703	40T51411F02	Tact blk MEMORY STORE
SW704	40T51411F02	Tact blk MEMORY 1
SW705	40T51411F02	Tact blk MEMORY 2
SW706	40T51411F02	Tact blk MEMORY 3
SW707	40T51411F02	Tact blk MEMORY 4
SW708	40T51411F02	Tact blk MEMORY 5
SW709	40T51411F02	Tact blk MEMORY 6
SW710	40T51411F02	Tact blk MEMORY 7
SW711	40T51411F02	Tact blk MEMORY 8

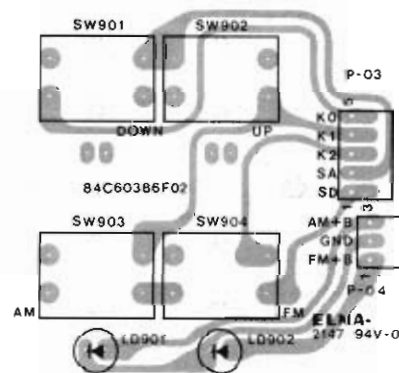
Memory LED PCB Parts List

Symbol No.	Stock No.	Description
(LED)		
LD801	48T60387F01	7 Seg grn Memory No.
LD802	48T60388F01	LD101MG Memory A
LD803	48T60388F01	LD101MG Memory B



Tact SW PCB Parts List

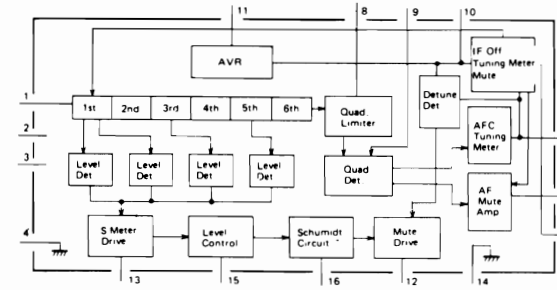
Symbol No.	Stock No.	Description
(Switch)		
SW901	40T52952F01	KHC10903 DOWN
SW902	40T52952F01	KHC10903 UP
SW903	40T52952F01	KHC10903 AM
SW904	40T52952F01	KHC10903 FM



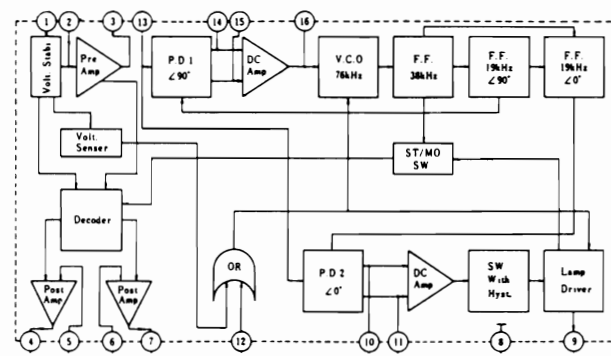
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IC Handling Guide

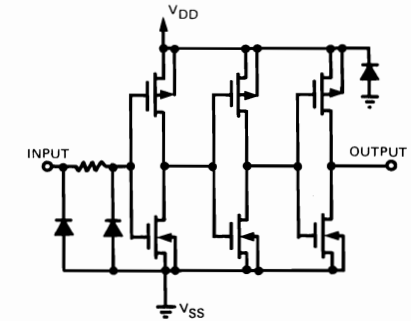
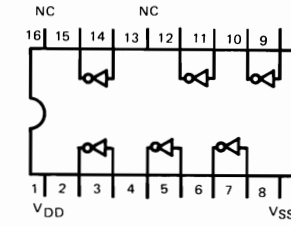
LA-1235 (MONOLITHIC LINEAR IC)



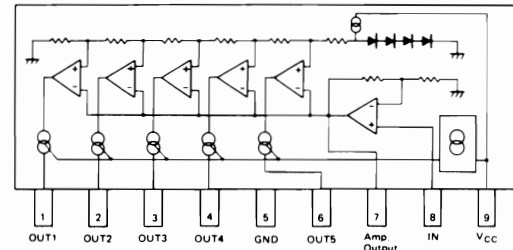
HA-12016 (FM STEREO MULTIPLEX DECODER)



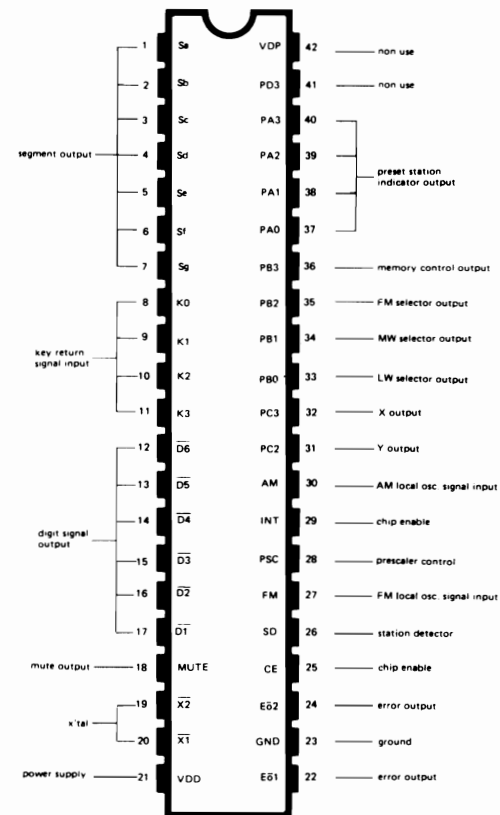
TC4049BP (HEX BUFFER/CONVERTER INVERTING TYPE)



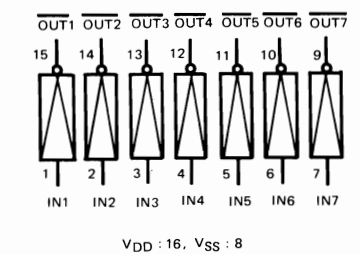
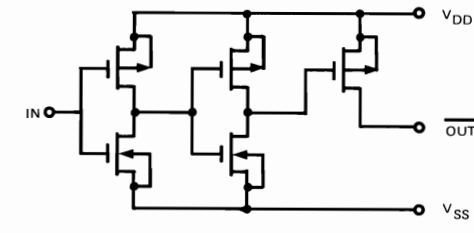
BA-6125 (LED LINEAR LEVEL METER DRIVE)



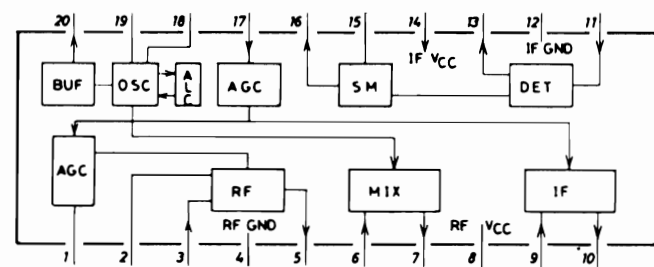
μPC1704 (SYNTHESIZER IC)



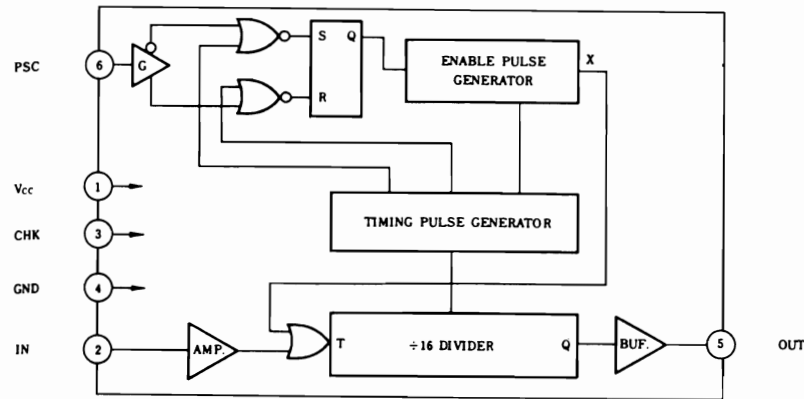
TC5067BP (7-HIGH VOLTAGE BUFFER/INVERTING TYPE)



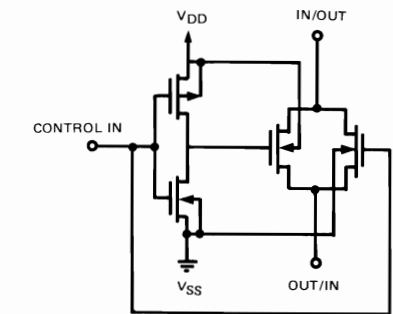
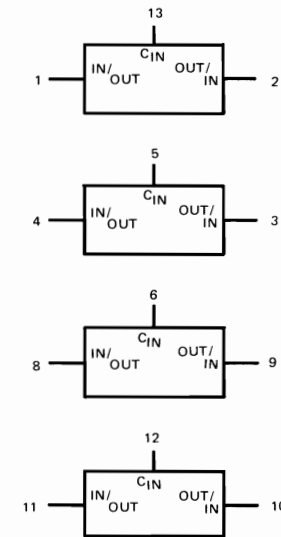
LA-1245 (AM IC)



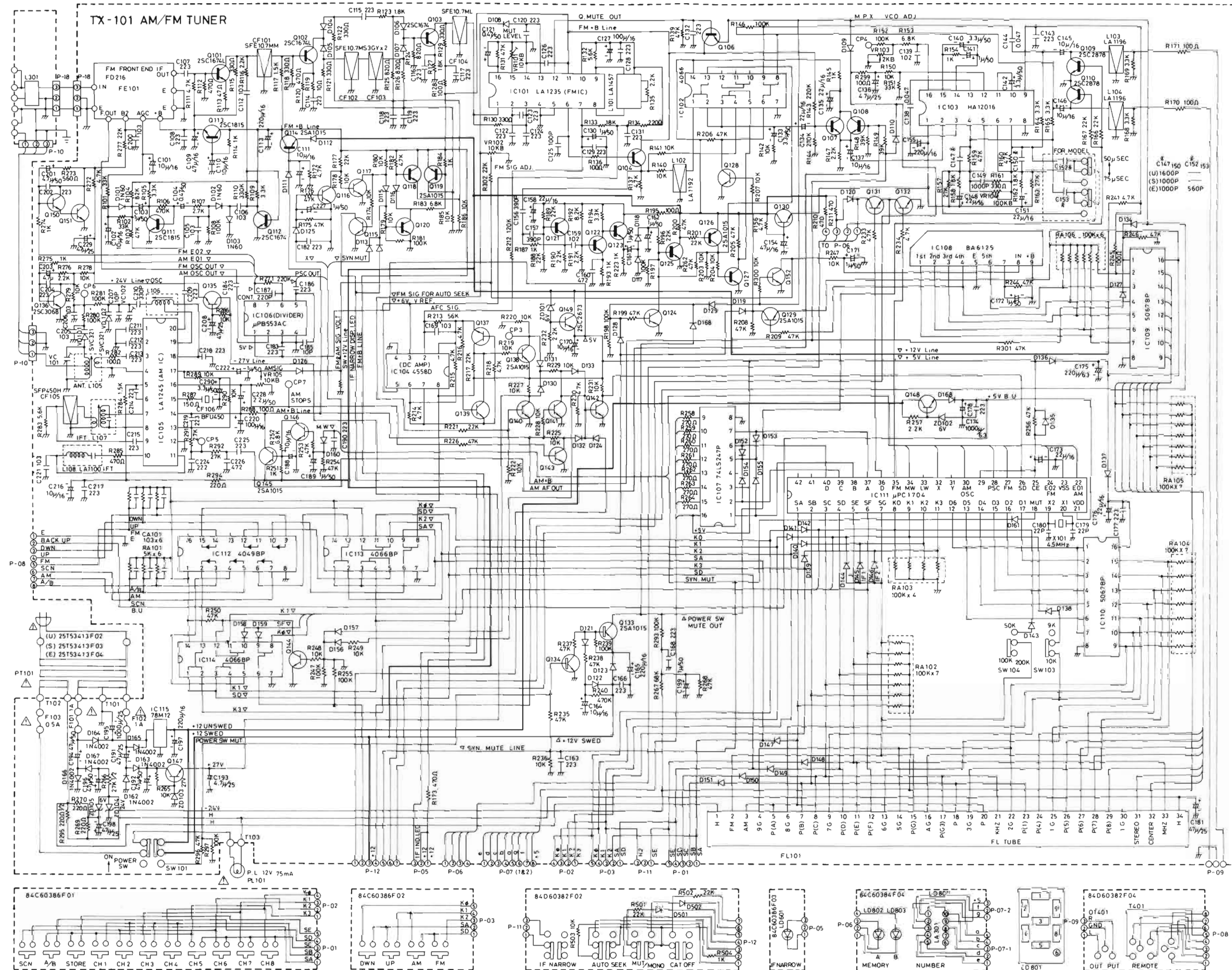
μPB553AC (150MHz PRESCALER)



TC4016BP (QUAD BILATERAL SWITCH)



Schematic Diagram



Specifications

[FM SECTION]

(IEEE/IHF Standard)

Usable Sensitivity	10.3dBf 1.8uV
50dB Quieting Sensitivity	13.2dBf 2.5uV
Alternate Channel Selectivity (Narrow)	80dB
S/N (Signal to Noise Ratio)	78dB
Stereo Separation at 1.000Hz (Wide)	50dB
Capture Ratio (Wide)	1.2dB
Image Rejection	75dB
IF Rejection	100dB
Spurious Response Ratio	85dB
Frequency Response	30 to 15KHz \pm 1dB
Distortion at 65dBf (Wide)	1.000Hz : Mono 0.06%
	1.000Hz : Stereo 0.07%
Subcarrier Product Ratio	60dB
SCA Rejection Ratio	60dB
Output Level	700mV

[AM SECTION]

Usable Sensitivity at 1MHz, 400Hz 30% Modulation	700uV/m
Image Response Ratio at 1MHz	40dB
IF Response Ratio at 1MHz	50dB
Signal to Noise Ratio at 1MHz	50dB
Distortion at 1MHz 10uV/m 400Hz/ 30% Modulation	0.3%

[GENERAL]

Dimensions	17-13/16"(W)x3-3/16"(H)x12-3/8"(D) 453mmx81mmx315mm
Weight (Net)	4.4kg 9 lb 7 oz

Specifications and design are subject to change without notice.

TX-101

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LUX CORPORATION, JAPAN

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