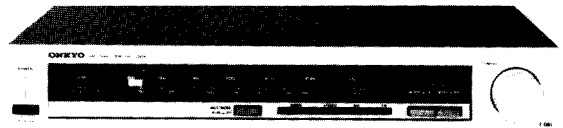
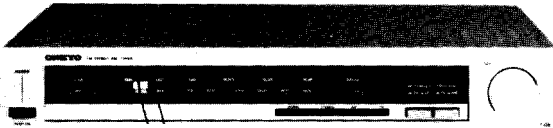


ONKYO®**SERVICE MANUAL****FM STEREO/AM TUNER
MODEL T-06****FM STEREO/MW/LW TUNER
MODEL T-06L****TABLE OF CONTENTS**

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ONKYO®
AUDIO COMPONENTS

SPECIFICATIONS

T-06

FM Section

Tuning Range : 87.5 — 108 MHz
 Usable Sensitivity : Mono : 2 μ V, 11.2 dBf IHF
 1.8 μ V (S/N 26 dB, 40 kHz,
 Devi.) DIN
 Stereo : 4 μ V, 17.2 dBf IHF
 50 μ V (S/N 46dB, 40 kHz Devi.)
 DIN

50 dB Quieting

Sensitivity : Mono : 18.3 dBf, 4.5 μ V
 Stereo : 39.2 dBf, 50 μ V

Capture Ratio : 1.5 dB

Image Rejection Ratio : 35 dB

IF Rejection Ratio : 80 dB

Signal-to-Noise Ratio : Mono : 70 dB

Stereo : 63 dB

Alternate Channel Att.: 55 dB IHF (\pm 400 kHz) (D/W model)

Selectivity : 50 dB (DIN)-
 (\pm 300 kHz, 40 kHz Devi.) (G model)

AM Suppression Ratio : 50 dB

Harmonic Distortion : Mono : 0.15%

Stereo : 0.4%

Stereo Separation : 40 dB at 1 kHz

30 dB at 100 — 10,000 Hz

Muting Level : 17.2 dBf, 4 μ V

Frequency Response : 40 — 15,000 Hz \pm 1.5 dB

AM Section

Tuning Range : 530 — 1,620 kHz

Usable Sensitivity : 25 μ V

Image Rejection Ratio : 40 dB

IF Rejection Ratio : 30 dB

Signal-to-Noise Ratio : 40 dB

Harmonic Distortion : 0.8%

GENERAL

Power Supply Rating : AC 120 V, 60 Hz (D model)
 AC 220 V, 50 Hz (G model)
 AC 120/220 V, 50/60 Hz, (W model)
 AC 240 V, 50 Hz (Q model)

Output Voltage : FM : 500 mV

AM : 150 mV

Antennas : FM : 300 ohms balanced and 75
 ohms unbalanced
 AM : built-in loop antenna and exter-
 nal terminal

Semiconductors : 1 FET, 3 ICs, 4 transistors, 5 diodes, 7
 LEDs (D/W models)

1 FET, 3 ICs, 5 transistors, 5 diodes,
 7 LEDs (G/Q models)

Dimensions : 418(W) x 72(H) x 286(D) mm

16-1/2" x 2-7/8" x 11-1/4"

Weight : 2.9 kg (6.4 lbs)

Due to further product improvements, specifications are subject to
 change without notice.

T-06L

FM Section

Tuning Range : 87.5 — 108 MHz
 Usable Sensitivity : Mono : 2 μ V, 11.2 dBf IHF
 1.8 μ V (S/N 26 dB, 40 kHz,
 Devi.) DIN
 Stereo : 4 μ V, 17.2 dBf IHF
 50 μ V (S/N 46 dB, 40 kHz
 Devi.) DIN

50 dB Quieting

Sensitivity : Mono : 4.5 μ V, 18.3 dBf
 Stereo : 50 μ V, 39.2 dBf

Capture Ratio : 1.5 dB

Image Rejection Ratio : 35 dB

IF Rejection Ratio : 80 dB

Signal-to-Noise Ratio : Mono : 70 dB

Stereo : 63 dB

Selectivity : 50 dB (DIN)
 (\pm 300 kHz, 40 kHz Devi.)

AM Suppression Ratio : 50 dB

Harmonic Distortion : Mono : 0.15%

Stereo : 0.4%

Stereo Separation : 40 dB at 1 kHz

30 dB at 100 — 10,000 Hz

Frequency Response : 40 — 15,000 Hz \pm 1.5 dB

AM Section (MW/LW)

Tuning Range : MW : 525 — 1620 kHz

LW : 150 — 370 kHz

Usable Sensitivity : MW : 25 μ V

LW : 60 μ V

Image Rejection Ratio : MW : 40 dB

LW : 40 dB

IF Rejection Ratio : MW : 30 dB

LW : 25 dB

Signal-to-Noise Ratio: MW : 40 dB

LW : 36 dB

Harmonic Distortion : MW/LW : 0.8%

GENERAL

Output voltage : FM : 500 mV

MW/LW ; 150 mV

Antennas : FM : 300 ohms balanced and 75
 ohms unbalanced.

AM

(MW/LW) : built-in loop antenna and
 external terminal

Semiconductors : 2FETs, 3 ICs, 4 transistors, 5 diodes, 8
 LEDs

Dimensions : 418(W) x 72(H) x 286(D) mm

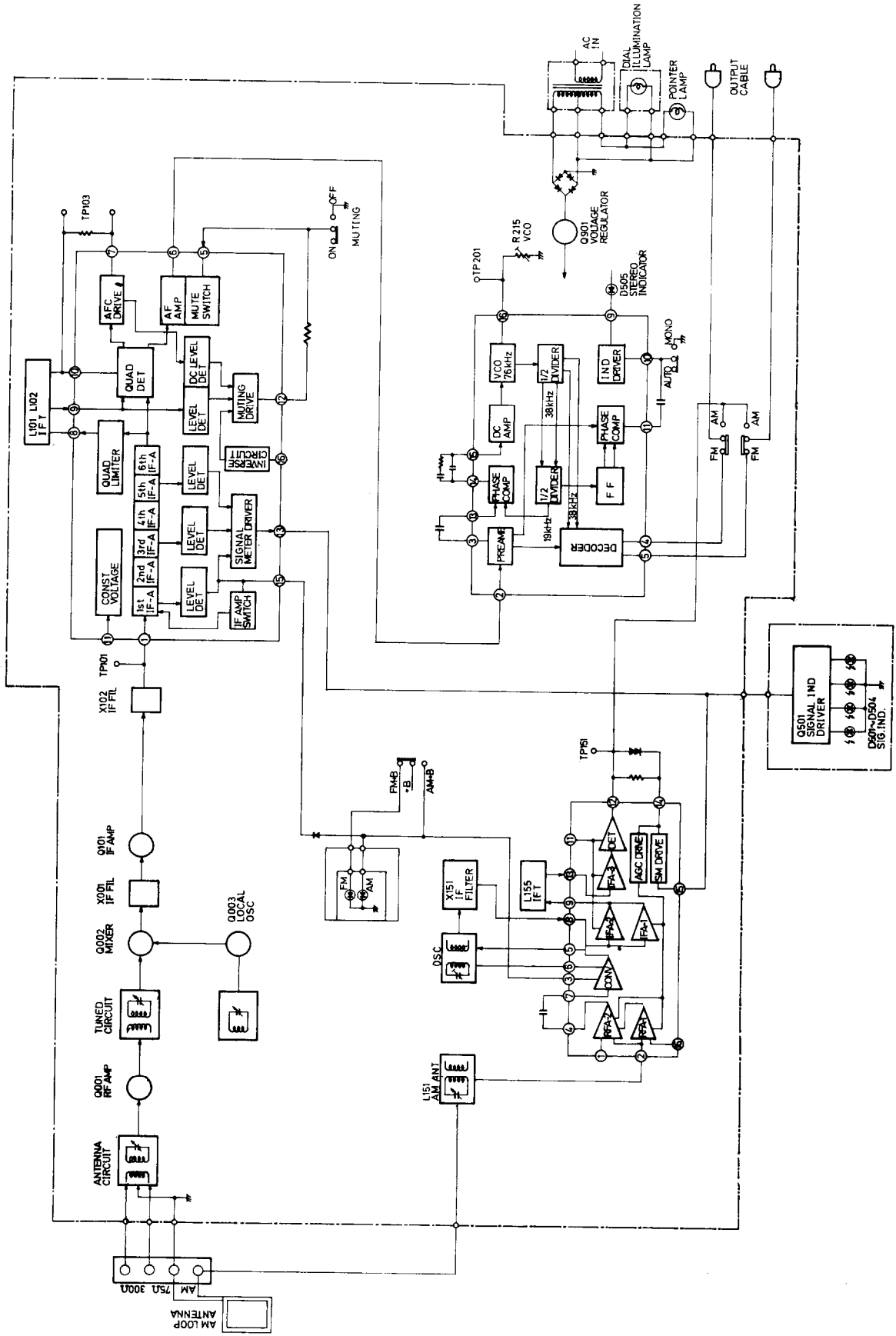
16-1/2" x 2-7/8" x 11-1/4"

Weight : 2.9 kg (6.4 lbs.)

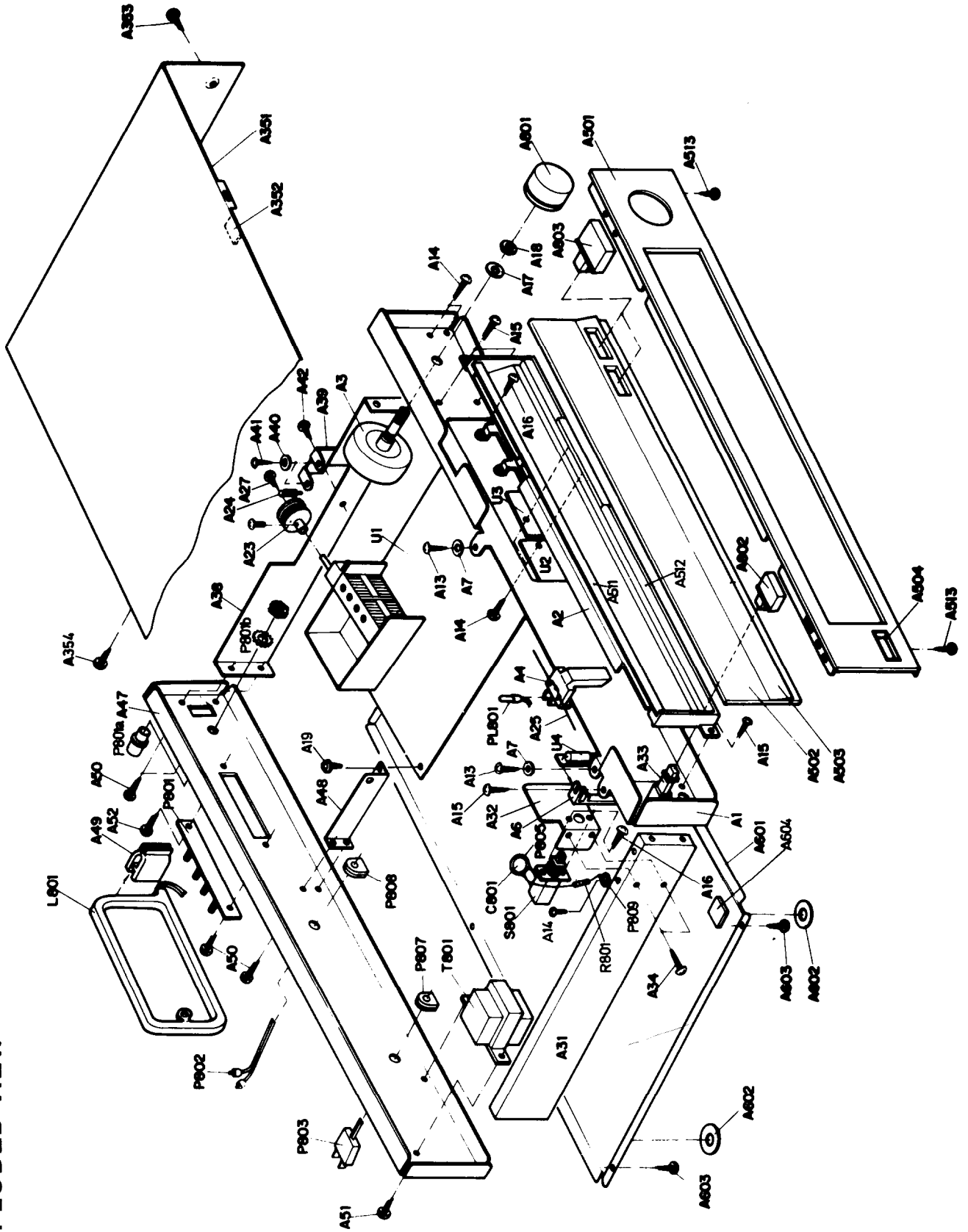
Power supply : AC 220V, 50 Hz

Due to further product improvements, specifications are subject to
 change without notice.

BLOCK DIAGRAM D/W models



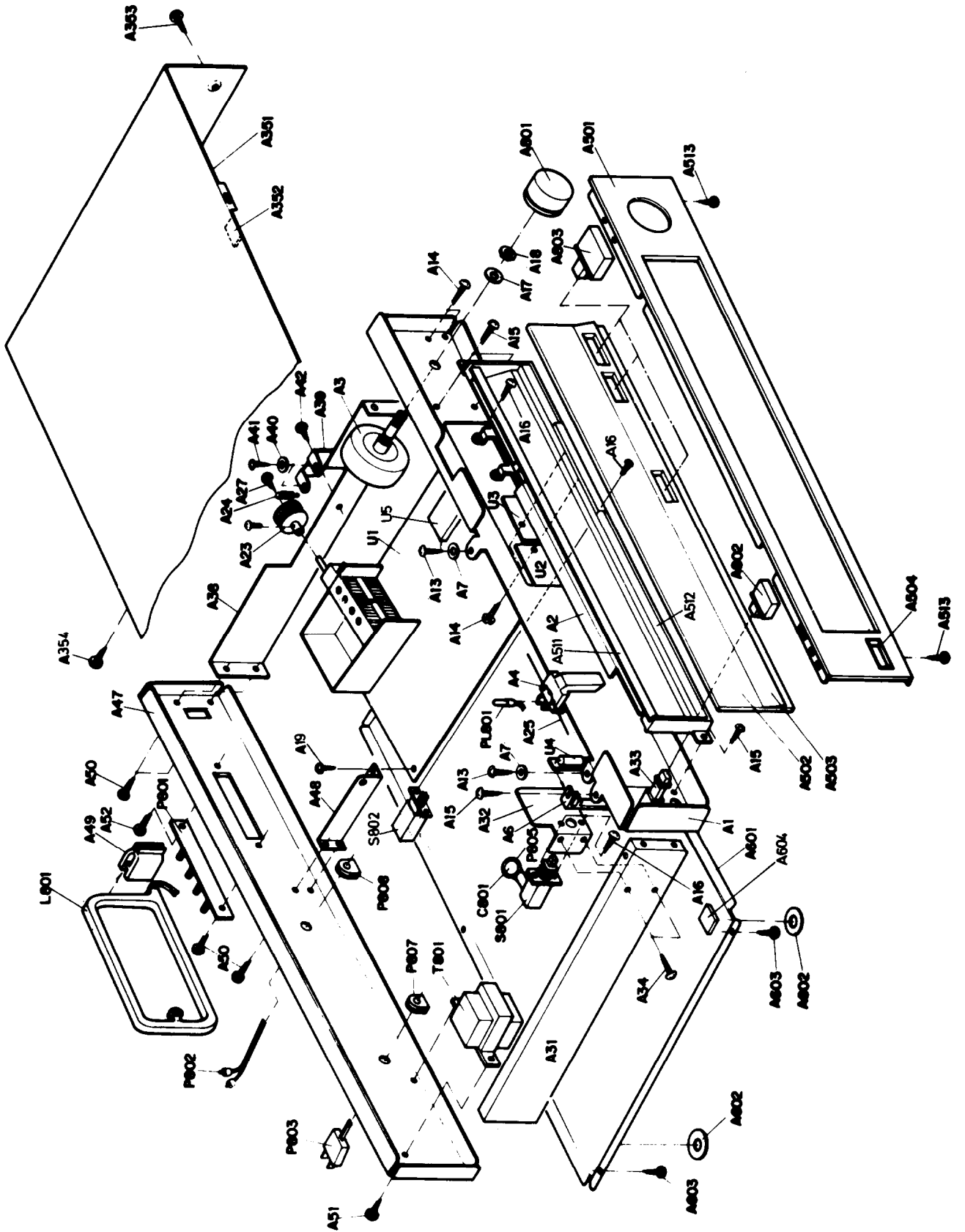
EXPLODED VIEW



PARTS LIST

REF. NO.	PARTS NO.	DESCRIPTION	REF. NO.	PARTS NO.	DESCRIPTION	REF. NO.	PARTS NO.	DESCRIPTION
A1	27110139B	Front bracket	A501	13238121	Front panel ass'y	U1	13238525E	NARF-1125e, FM/AM tuner pc board
A2	27190118B	Holder	A502	13238901	Dial plate ass'y			ass'y (D)
A3	27205026	Drive shaft	A503	27262107A	Plate A		13244525F	NARF-1125f, FM/AM tuner pc board
A4	28165057A	Pointer	A504	27267109	Guide, power			ass'y (G/Q)
	28140345A	Cushion	A511	27262108B	Plate B		13240525G	NARF-1125g, FM/AM tuner pc board
A6	27190071	Holder, lamp	A512	28133052B	Back plate			ass'y (W)
A7	27185002A	DP-16, Dial pulley	A513	834130068	3TTS + 6B, Tapping screw	U2	13238526A	NADIS-1126a, Signal and stereo in-
A13	801147A	Special screw	A601	27170093A	Bottom board (D/G/Q)			dicator pc board ass'y
A14	834130068	3TTS + 6B, Tapping screw	A602	27170105	Bottom board (W)	U3	13238512	NALED-1412, AM/FM indicator pc
A15	838130068	3TTB + 6B, Tapping screw		27175011C	Leg			board ass'y
A16	82113006	3P + 6FN, Pan head screw	A603	831130068	3TTW + 6B, Tapping screw	U4	13238513	NAPL-1413, Dial illumination lamp pc
A17	87619014	W9x14F, Washer	A604	28140044	2x12x12mm, Cushion			board ass'y
A18	8631901	N-9F, Nut	A801	28320542	Knob, tuning	Note :		
A19	831130088	3TTW + 8B, Tapping screw	A802	28320573	Knob, push	(D) : Only 120V model		
A23	27200023	Dial drum	A803	28320569	Knob, selector	(G) : Only 220V model		
A24	27180044	Spring	C801	3500065A	0.01 μ F, 400V, Capacitor IS (D/G/W)	(W) : Only 120/220V model		
A25	273903	Stringing	C801, C802	3500065A	0.01 μ F, 400V, Capacitor IS (Q)	(Q) : Only 240V model		
A27	834130068	3TTS + 6B, Tapping screw		27300080	Cover, capacitor			
A28	834130088	3TTS + 8B, Tapping screw	L801	232085	NMA-3034, AM loop antenna			
A31	27115105	Side bracket, left	PL801	210119	PL6.3V50mA W2.5, Pointer lamp			
A32	27140526	Bracket, switch	P801	25060035	NTM-4PRMC06, Antenna terminal			
A33	27260062	Shaft, switch	P801a	25045088	Antenna connector (G)			
A34	838130068	3TTB + 6B, Tapping screw	P801b	870057	Toothed washer (G)			
A38	27115078A	Side bracket, right	P802	2010039	Output cable			
A39	27140403	Bracket, dial pulley	P803	253099A	AS-UC-3, Power supply cable (D)			
A40	27185002A	DP-16, Dial pulley		253083	AS-CEE, Power supply cable (G/W)			
A41	801147A	Special screw		253077-1	Power supply cable (Q)			
A42	838130068	3TTB + 6B, Tapping screw	P807	270025	SR-3P-4, Strainrelief (D)			
A47	27120396	Back panel (D)		270280	SR-4K-4, Strainrelief (G/W)			
	27120397	Back panel (G)		27300349	SR-6W-1, Strainrelief (Q)			
	27120398	Back panel (W)	P808	270025	SR-3P-4, Strainrelief			
	27120405	Back panel (Q)	P809	223004	Terminal (D)			
A48	27140444	Bracket, pc board	R801	431523355	3.3M Ω , 1/2W, Solid resistor (D)			
A49	26190105	Holder, antenna	S801	25035135	NPS-111-L100P, Power switch (D)			
A50	834130068	3TTS + 6B, Tapping screw		25035051	NPS-112-L16P, Power switch (G)			
A51	831130088	3TTW + 8B, Tapping screw (D)		25035136	NPS-121-L101P, Power switch (W/Q)			
A52	834140108	4TTS + 10B, Tapping screw (G/W/Q)	S802	25065123	NSS-1258P, Voltage selector (W)			
A351	834230108	3TTS + 10B(Ni), Tapping screw	T801	230506A	NPT-723D, Power transformer (D)			
A352	28184104	Top cover		230507	NPT-723G, Power transformer (G)			
A353	28140020	14x10x40mm, Cushion		230508	NPT-723DG, Power transformer (W)			
A354	834430068	3TTT + 6B(BC), Tapping screw		230514	NPT-723Q, Power transformer (Q)			
	831430088	3TTW + 8B(BC), Tapping screw						

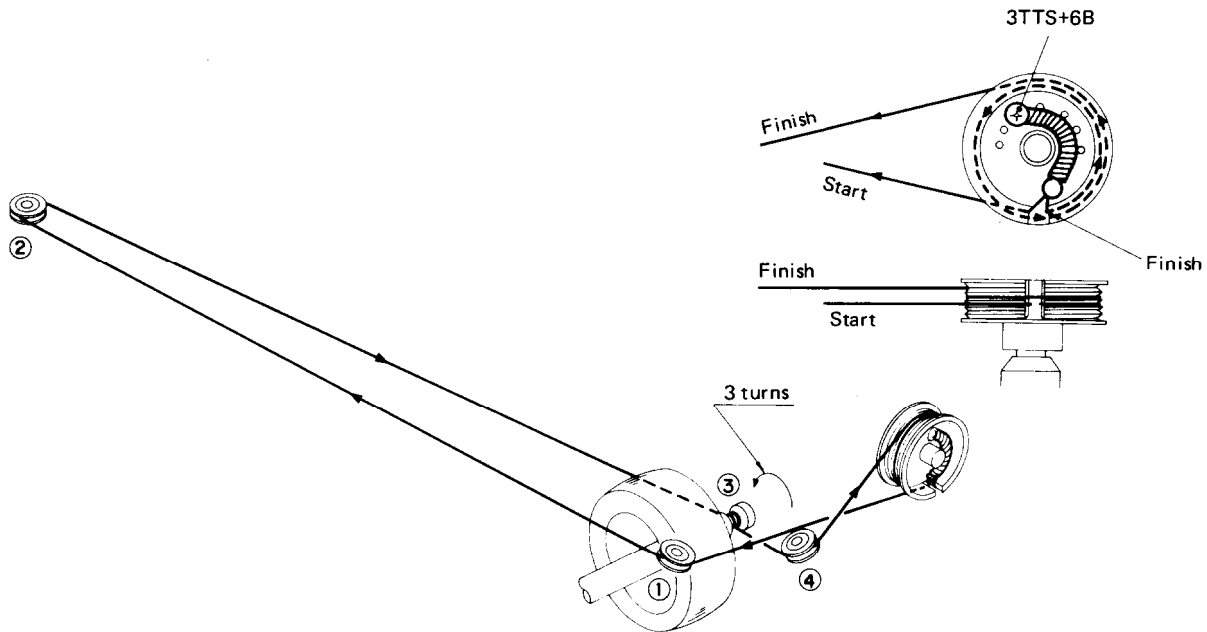
EXPLODED VIEW



PARTS LIST

REF. NO.	PARTS NO.	DESCRIPTION	REF. NO.	PARTS NO.	DESCRIPTION
A1	27110139B	Front bracket	A501	13460121	Front panel ass'y
A2	27190118B	Holder	A502	28130153A	Dial plate
A3	27205026	Drive shaft	A503	27262178B	Plate A
A4	28165057A	Pointer	A504	27267109	Guide, power
	28140345A	Cushion	A511	27262108B	Plate B
A6	27190071	Holder, lamp	A512	28133052B	Back plate
A7	27185002A	DP-16, Dial pulley	A513	834130068	3TTS + 6B, Tapping screw
A13	801147A	Special screw	A601	27170093A	Bottom board
A14	834130068	3TTS + 6B, Tapping screw	A602	27175011C	Leg
A15	838130068	3TTB + 6B, Tapping screw	A603	831130068	3TTW + 6B, Tapping screw
A16	82113006	3P + 6FN, Pan head screw	A604	28140044	2x12x12mm, Cushion
A17	87619014	W9x14F, Washer	A801	28320542	Knob, tuning
A18	8631901	N-9F, Nut	A802	28320573	Knob, push
A19	831130088	3TTW + 8B, Tapping screw	A803	28320569	Knob, selector
A23	27200023	Dial drum	C801	3500065A	0.01μF, 400V, Capacitor IS
A24	27180044	Spring	P805	27300080	Cover, capacitor
A25	273903	Stringing	L801	232085	NMA-3034, AM loop antenna
A27	834130068	3TTS + 6B, Tapping screw	PL801	210119	PL6.3V50mA/W2.5, Pointer lamp
A28	834130088	3TTS + 8B, Tapping screw	P801	25060035	NTM-4PRMC06, Antenna terminal
A31	27115105	Side bracket, left	P802	2010039	Output cable
A32	27140526	Bracket, switch	P803	253083	AS-CEE, Power supply cable
A33	27260062	Shaft, switch	P807	270280	SR-4K-4, Strainrelief
A34	838130068	3TTB + 6B, Tapping screw	P808	270025	SR-3P-4, Strainrelief
A38	27115078A	Side bracket, right	S801	25035051	NPS-111-L16P, Power switch
A39	27140403	Bracket, dial pulley	T801	230507	NPT-723G, Power transformer
A40	27185002A	DP-16, Dial pulley	S802	25035248	NPS-122-L212, Muting switch
A41	801147A	Special screw	U1	13460525H	NARF-1125h, FM/AM tuner pc board ass'y
A42	838130068	3TTB + 6B, Tapping screw	U2	13238526A	NADIS-1126a, Signal and stereo indicator pc board ass'y
A47	27120399	Back panel	U3	13238512	NALED-1412, AM/FM indicator pc board ass'y
A48	27140444	Holder	U4	13238513	NAPL-1413, Dial illumination lamp pc board ass'y
A49	27190105	Holder, antenna	U5	13374532	NASW-1132, Muting circuit pc board ass'y
A50	834130068	3TTS + 6B, Tapping screw			
A51	831130088	3TTW + 8B, Tapping screw			
A52	834230108	3TTS + 10B(NI), Tapping screw			
A351	28184104	Top cover			
A352	28140020	t4x10x40mm, Cushion			
A353	834430068	3TTS + 6B(BC), Tapping screw			
A354	831430088	3TTW + 8B(BC), Tapping screw			

STRINGING DIAGRAM



1. Close the variable capacitor completely and tie the dial cord to the spring of the drum.
2. Thread the dial cord in the direction of arrow from ① to ③ and wind the dial cord three turns around the tuning shaft counter clockwise.
3. Thread the dial cord to ④.
4. Wind the dial cord 1-1/2 turns around the dial drum.

PRECAUTIONS

1. DE-EMPHASIS SWITCH (ONLY W MODEL)

The 50 μ sec/75 μ sec selector switch employed in the W (120/220V) model is located on the bottom board. When shipped from the factory, this switch is set to the 50 μ sec position. For use in 75 μ sec regions, switch over to the 75 μ sec position.

2. VOLTAGE SELECTOR (REAR PANEL)

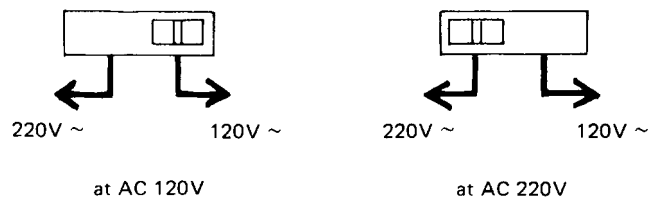
Some models are equipped with a voltage selector to conform with local power supplies.

Be sure to set this switch to match the voltage of the power supply in your area before turning the power switch on.

When changing the voltage setting, remove the lock plate covering the switch, then set the voltage to the correct value.

Voltage is changed by sliding the groove in the switch with a screwdriver to the right or left. Confirm that the switch has been moved all the way to the right or left before turning the power switch on.

If there is no voltage selector switch on the unit you have purchased, it can only be used in areas where the power supply voltage is the same as that of the unit.



ADJUSTMENT PROCEDURES

INSTRUMENTS REQUIRED

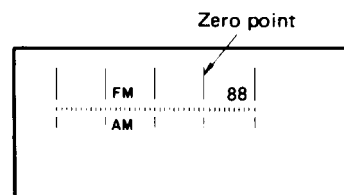
1. AM sweep generator
2. AM/FM signal generator
3. AC VTVM
4. Oscilloscope
5. Monitor scope
6. Distortion analyzer
7. Frequency counter

GENERAL ALIGNMENT CONDITIONS

1. Signal input should be kept as low as possible.
2. Standard modulation is 400Hz 30%, (AM), 1kHz 75kHz devi. (FM MONO), pilot 6.75kHz devi. sub and main 68.25kHz devi. (FM STEREO)

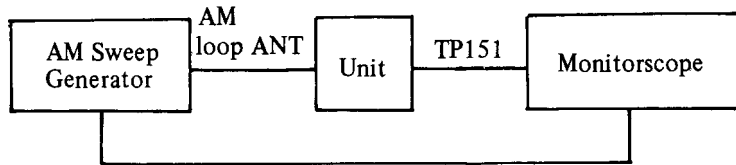
(1) Attachment of dial pointer

1. Close the variable capacitor completely.
2. Set the radio dial pointer to zero point on dial scale and secure the stringing and pointer with the bond.



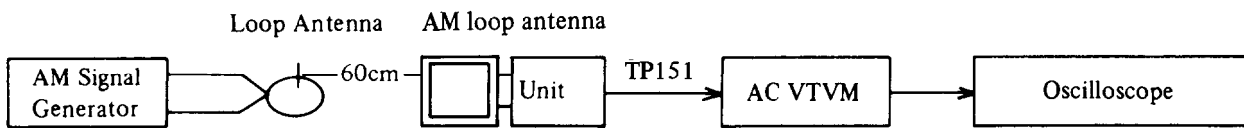
(2) AM IF ALIGNMENT

1. Set selector switch to AM.
2. Set radio dial to quiet point.



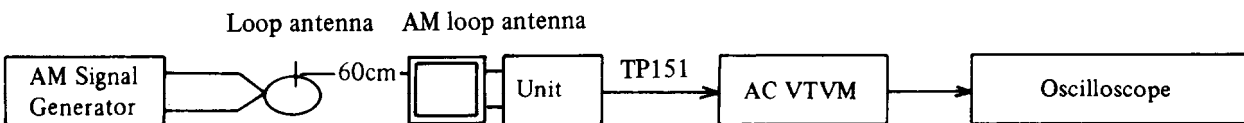
Set signal	Adjust	Monitor scope	Remarks
455kHz	X151	Maximum Symmetrical Response	Usually not necessary to adjust

(3) AM(MW) RF ALIGNMENT



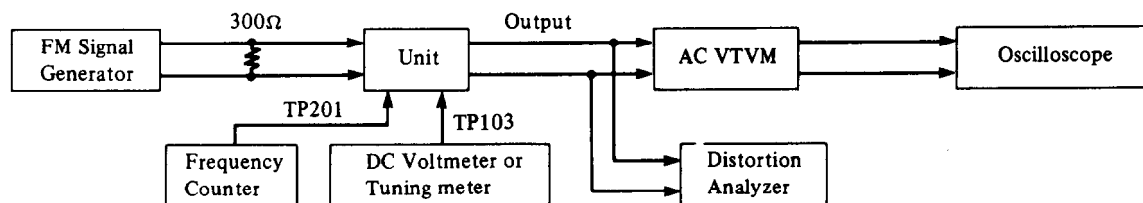
Step	Set Signal	Set Radio Dial	Adjust	VTVM reading	Remarks
1	515kHz 400Hz 30%	Lower end (515kHz)	L153	Maximum	Repeat steps 1 and 2 as necessary
2	1680kHz 400Hz 30%	Upper end (1680kHz)	TC153	Maximum	
3	600kHz 400Hz 30%	600kHz	L151	Maximum	Repeat steps 3 and 4 as necessary
4	1400kHz 400Hz 30%	1400kHz	TC151	Maximum	

(4) LW RF ALIGNMENT

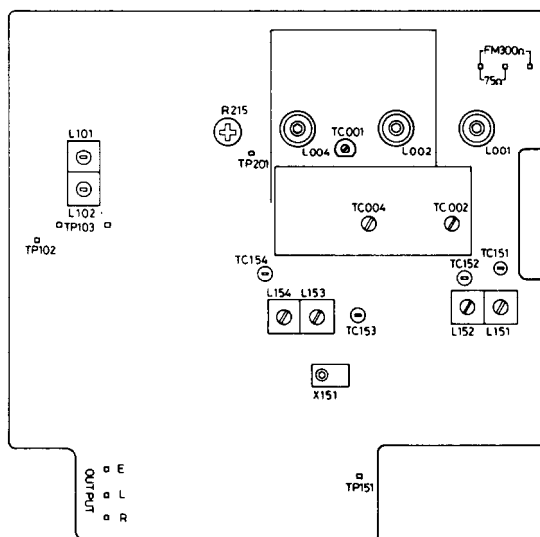


Step	Set Signal	Set Radio Dial	Adjust	VTVM reading	Remarks
1	160kHz 400Hz 30%	160kHz	L154	Maximum	Repeat steps 1 and 2 as necessary
2	360kHz 400Hz 30%	360kHz	TC154	Maximum	
3	160kHz 400Hz 30%	160kHz	L152	Maximum	Repeat steps 3 and 4 as necessary
4	360kHz 400Hz 30%	360kHz	TC152	Maximum	

(5) FM ALIGNMENT



	Step	FM Signal Generator	Dial to set	Adjust	Output Indicator	Adjust for	Remarks
IF	1	No signal	Quiet Point	L101	DC Voltmeter	0V	Repeat Steps 1 and 2 as necessary
	2	98MHz 65dBf (60dB) 1kHz 75kHz devi.	98MHz	L102	Distortion Analyzer	Minimum	
Frequency range	3	87.5MHz 65dBf (60dB)	Lower end	L004	AC VTVM or Oscilloscope	Maximum	Repeat Steps 3 and 4 as necessary
	4	108MHz 65 dBf (60dB)	108MHz	TC001		Maximum	
RF	5	90MHz 1kHz 75kHz devi.	90MHz	L001 L002	AC VTVM or Oscilloscope	Maximum	Repeat Steps 5 and 6 as necessary Signal input should be kept as low as possible. muting ... off
	6	106MHz 1kHz 75kHz devi.	106MHz	TC002 TC003		Maximum	
MPX	7	98MHz 65dBf (60dB) no mod.	98MHz	R215	Frequency counter	76kHz	

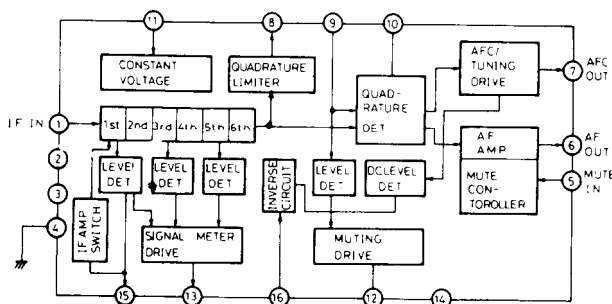


PRINTED CIRCUIT BOARD — PARTS LIST

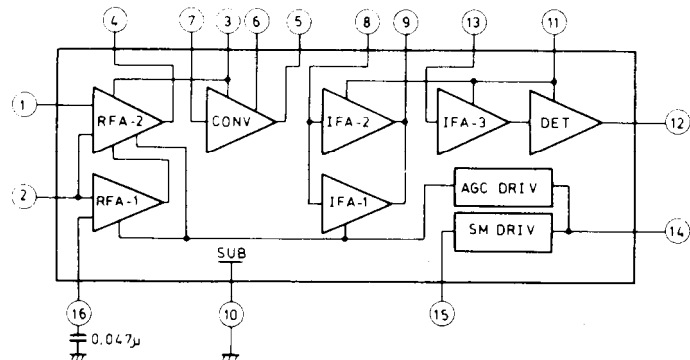
D model

CIRCUIT NO.	PARTS NO.	DESCRIPTION	CIRCUIT NO.	PARTS NO.	DESCRIPTION
ICs			Capacitors		
Q103	222595	LA1231N	VC001	3050004	NVC2-327SA, Variable
Q151	222497	LA1240	TC001	3060003	NTC-10P-02, Trimmer
Q201	222453	HA1196	C015, C114	352741009	10 μ F, 16V, Elect.
Q501	222541	LB1426	C105	352780339	3.3 μ F, 50V, Elect.
Transistors			C107, C112	352784799	0.47 μ F, 50V, Elect.
Q001	2211815	2SK19TM (GR)	C108	352780109	1 μ F, 50V, Elect.
Q002, Q003	2211723	2SC1923 (O)	C153	370133614	360pF \pm 5%, 100V, APS
Q101	2210823	2SC1675 (L-1)	C159	352741009	10 μ F, 16V, Elect.
Q901	2201034 or 2201035	2SD325 (D) or 2SD325 (E)	C164	352784799	0.47 μ F, 50V, Elect.
Diodes			C165	352744709	47 μ F, 16V, Elect.
D101, D151	223145,	1S2076TD	C167	352780339	3.3 μ F, 50V, Elect.
	223105 or	1S1555 or	C168	352750479	4.7 μ F, 25V, Elect.
	223133	DS442X	C171	352741009	10 μ F, 16V, Elect.
D152	4000001 or	KB269 or	C201	352780229	2.2 μ F, 50V, Elect.
	4000068	VD1222	C207, C208	352784799	0.47 μ F, 50V, Elect.
D901	223862	WL01	C211, C212	352741009	10 μ F, 16V, Elect.
D902	223910 or	WZ120 or	C213	352741019	100 μ F, 16V, Elect.
	224111	GZA12-L	C214	370133614	360pF \pm 5%, 100V, APS
L.E.Ds			C216	352780339	3.3 μ F, 50V, Elect.
D501—D504	225048	SLP-252B-04	C217	352780229	2.2 μ F, 50V, Elect.
D505	225046	SLP151B	C218	352780109	1 μ F, 50V, Elect.
D506, D507	225047	SLP251B	C501	352741009	10 μ F, 16V, Elect.
Lamp			C902	352754719	470 μ F, 25V, Elect.
PL101	210054B	250mA, 6.3V	C903	352742219	220 μ F, 16V, Elect.
Coils & transformers			C904	352751019	100 μ F, 25V, Elect.
L001	233106 or	NFA-3009 or	R215	5225015	N10HR10KBD, Semi-fixed
	233088-1	NFA-3001	R501	441625604	56 Ω , 1W, Metal oxide film
L002	233178	NFRF-3015	Switches		
L003	233232	NCH-1049	S1, S2	25035259	NPS-242-L223, AM/FM selector
L004	233090	NFO-3003			Muting
L101	233148	NFIF-6010P	Shielded plate		
L102	233149	NFIF-6010S	27150102		Front end
L103	233105 or	NCH-1005 or	Screws		
	233024	NCH-1501	831130088		3STW + 8BQ, Tapping screw
L151	232086	NMA-3035	Holder		
L153	232073	NMO-2008	27190121		L.E.D
L155	232041	NIT-0509	Ceramic filters		
X001	3010057 or	SFE-10, 7MA5Z or			
X102	3010003	SFE10.7MA			
X151	3010053	SFL-455B			

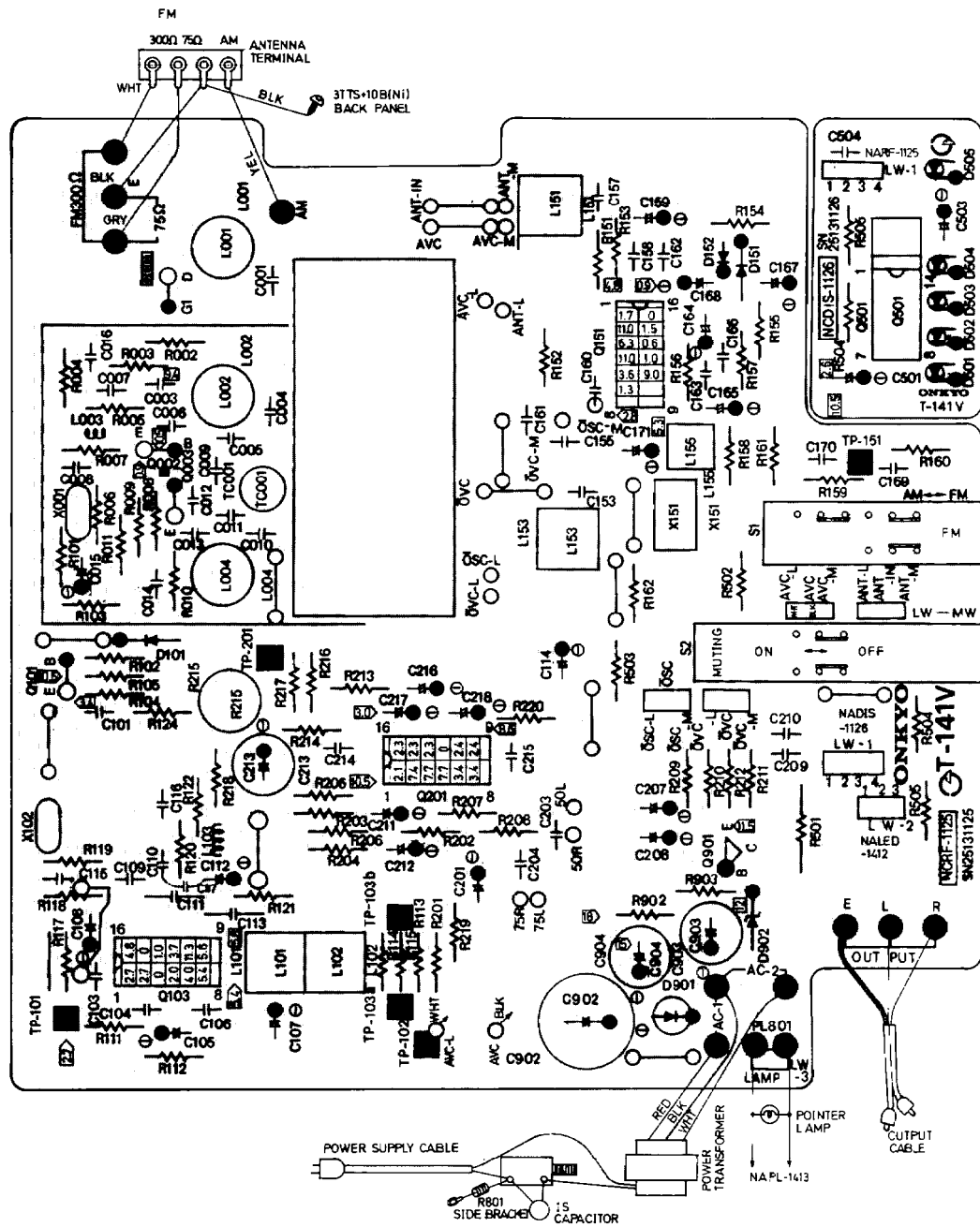
LA 1231N (FM IF system)



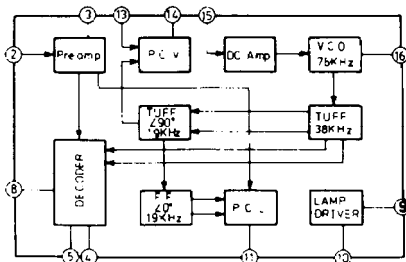
LA-1240 (AM radio system)



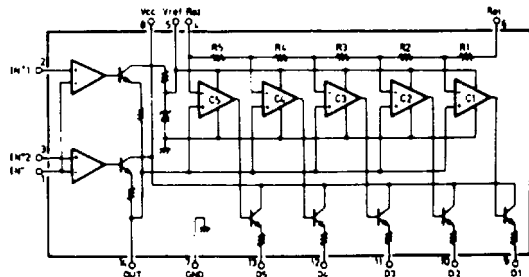
PRINTED CIRCUIT BOARD VIEW FROM COMPONENT SIDE D model



HA1196 (MPX decoder)



LB1426 (Signal indicator drive)

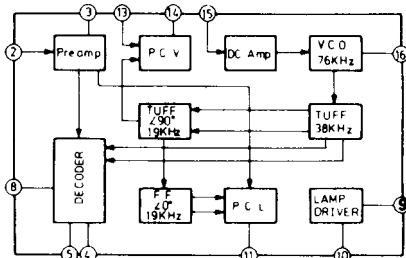


PRINTED CIRCUIT BOARD — PARTS LIST

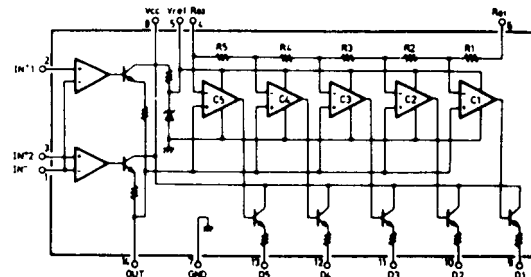
G/Q model

CIRCUIT NO.	PARTS NO.	DESCRIPTION	CIRCUIT NO.	PARTS NO.	DESCRIPTION
	ICs			Capacitors	
Q103	222595	LA1231N	VC001	3050004	NVC2-327SA, Variable
Q151	222497	LA1240	TC001	3060003	NTC-10P-02, Trimmer
Q201	222453	HA1196	C015, C114	352741009	10 μ F, 16V, Elect.
Q501	222541	LB1426	C105	352780339	3.3 μ F, 50V, Elect.
	Transistors		C107, C112	352784799	0.47 μ F, 50V, Elect.
Q001	2211713	3SK73 (GR)	C108	352780109	1 μ F, 50V, Elect.
Q002, Q003	2211723	2SC1923 (O)	C153	370133614	360pF \pm 5%, 100V, APS
Q101, Q102	2210823	2SC1675 (L-1)	C159	352741009	10 μ F, 16V, Elect.
Q901	2201034 or 2201035	2SD325 (D) or 2SD325 (E)	C164	352784799	0.47 μ F, 50V, Elect.
	Diodes		C165	352744709	47 μ F, 16V, Elect.
D101, D151	223145,	1S2076TD	C167	352780339	3.3 μ F, 50V, Elect.
	223105 or	1S1555 or	C168	352750479	4.7 μ F, 25V, Elect.
	223133	DS442X	C171	352741009	10 μ F, 16V, Elect.
D152	4000001	KB269	C201	352780229	2.2 μ F, 50V, Elect.
D901	223862	WL01	C207, C208	352784799	0.47 μ F, 50V, Elect.
D902	223910 or 224111	WZ120, or GZA12-L	C211, C212	352741009	10 μ F, 16V, Elect.
	L.E.Ds		C213	352741019	100 μ F, 16V, Elect.
D501—D504	225048	SLP-252B-04	C214	370133614	360pF \pm 5%, 100V, APS
D505	225046	SLP151B	C216	352780339	3.3 μ F, 50V, Elect.
D506, D507	225047	SLP251B	C217	352780229	2.2 μ F, 50V, Elect.
	Lamp		C218	352780109	1 μ F, 50V, Elect.
PL101	210054B	250mA, 6.3V	C501	352741009	10 μ F, 16V, Elect.
	Coils & transformers		C902	352754719	470 μ F, 25V, Elect.
L001	233106 or 233088-1	NFA-3009 or NFA-3001	C903	352742219	220 μ F, 16V, Elect.
L002	233178	NFRF-3015	C904	352751019	100 μ F, 25V, Elect.
L003	233232	NCH-1049			
L004	233090	NFO-3003			
L101	233148	NFIF-6010P			
L102	233149	NFIF-6010S			
L103	233105 or 233024	NCH-1005 or NCH-1501			
L151	232086	NMA-3035			
L153	232073	NMO-2008			
L155	232041	NIT-0509			
L201	233236	NMC-6027			
	Ceramic filters				
X001, X101	3010057 or	SFE-10.7MA5Z or			
X102	3010003	SFE10.7MA			
X151	3010053	SFL-455B			

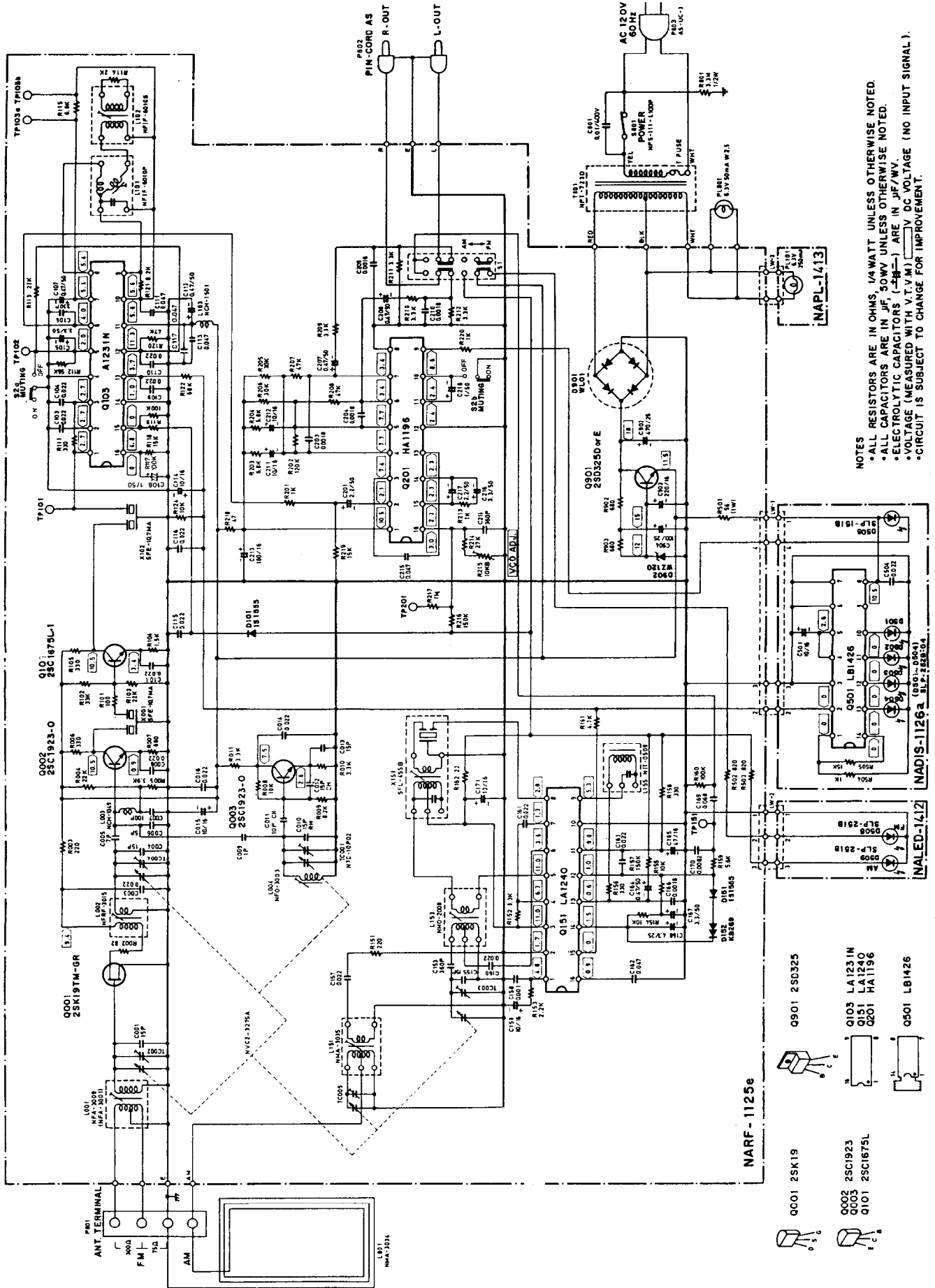
HA 1196 (MPX decoder)



LB1426 (Signal indicator drive)



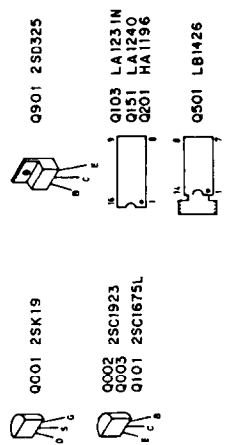
SCHEMATIC DIAGRAM
120V model



NOTES

- ALL RESISTORS ARE IN OHMS, 1/4 WATT UNLESS OTHERWISE NOTED.
- ALL CAPACITORS ARE IN µF 50 WV UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (—E—) ARE IN µF/WV.
- VOLTAGE (MEASURED WITH V.T.M.) IS IN VDC UNLESS OTHERWISE NOTED.
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

NARE-1125e

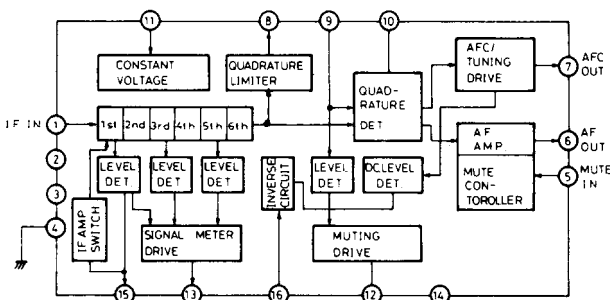


PRINTED CIRCUIT BOARD — PARTS LIST

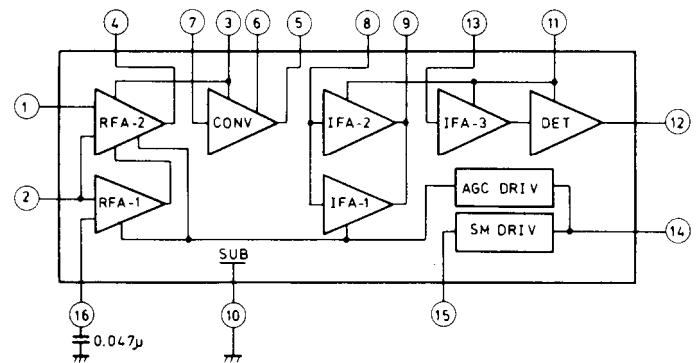
CIRCUIT NO.	PARTS NO.	DESCRIPTION	CIRCUIT NO.	PARTS NO.	DESCRIPTION
ICs			Capacitors		
Q103	222595	LA1231N	VC001	3050008	NVC20FT327WD04, Variable
Q151	222626	HA1197	TC001	3060003	NTC-10P-02, Trimmer
Q201	222453	HA1196	C015, C114	352741009	10 μ F, 16V, Elect.
Q501	222541	LB1426	C105	352780339	3.3 μ F, 50V, Elect.
Transistors			C107, C112	352784799	0.47 μ F, 50V, Elect.
Q001, Q152	2211815	2SK19TM (GR)	C108	352780109	1 μ F, 50V, Elect.
Q002, Q003	2211723	2SC1923 (O)	TC151, TC153	3060010	NTC-20P09, Trimmer
Q101	2210823	2SC1675 (L-1)	TC152, TC154	3060011	NTC-45P10, Trimmer
Q153	2211254	2SC1815 (Y)	C153	370133614	360pF \pm 5%, 100V, APS
Q154	2211454	2SA1015 (Y)	C154	372521514	150pF \pm 5%, 50V, Styrol
Q901	2201034 or 2201035	2SD325 (D) or 2SD325 (E)	C159	352741009	10 μ F, 16V, Elect.
Diodes			C164	352784799	0.47 μ F, 50V, Elect.
D101, D151	223145,	1S2076TD	C165	352741009	10 μ F, 16V, Elect.
	223105 or	1S1555 or	C167	352780339	3.3 μ F, 50V, Elect.
	223133	DS442X	C168	352750479	4.7 μ F, 25V, Elect.
D152	4000001 or	KB269 or	C171	352741009	10 μ F, 16V, Elect.
	4000068	VD1222	C181, C182	352741009	10 μ F, 16V, Elect.
D901	223862	WL01	C201	352780229	2.2 μ F, 50V, Elect.
D902	223910 or	WZ120 or	C207, C208	352784799	0.47 μ F, 50V, Elect.
	224111	GZA12-L	C211, C212	352741009	10 μ F, 16V, Elect.
L.E.Ds			C213	352741019	100 μ F, 16V, Elect.
D501—D504	225048	SLP-252B-04	C214	370133614	360pF \pm 5%, 100V, APS
D505	225046	SLP151B	C216	352780339	3.3 μ F, 50V, Elect.
D508, D509	225047	SLP251B	C217	352780229	2.2 μ F, 50V, Elect.
Lamp			C218	352780109	1 μ F, 50V, Elect.
PL101	210054B	250mA, 6.3V	C501	352741009	10 μ F, 16V, Elect.
Coils & transformers			C902	352754719	470 μ F, 25V, Elect.
L001	233106 or	NFA-3009 or	C903	352742219	220 μ F, 16V, Elect.
	233088-1	NFA-3001	C904	352751019	100 μ F, 25V, Elect.
L002	233178	NFRF-3015	Resistors		
L003	233232	NCH-1049	R215	5225015	N10HR10KBD, Semi-fixed
L004	233090	NFO-3003	R501	441625604	56 Ω , 1W, Metal oxide film
L101	233148	NFIF-6010P	Switches		
L102	233149	NFIF-6010S	S1, S2	25035261	NPS-142-162-L225, LW/MW/FM selector
L103	233105 or	NCH-1005 or	Shielded plate		
	233024	NCH-1501	27150102	Front end	
L151	232086	NMA-3035	Screws		
L152	232091	MLMA-3038	831130082	3STW + 8BQ, Tapping screw	
L153	232073	NMO-2008	Holder		
L154	232094	NLO-2021	27190121	L.E.D	
L155	232041	NIT-0509	Ceramic filters		
X001	3010057 or	SFE-10.7MA5Z or			
X102	3010003	SFE10.7MA			
X151	3010053	SFL-455B			

BLOCK DIAGRAM

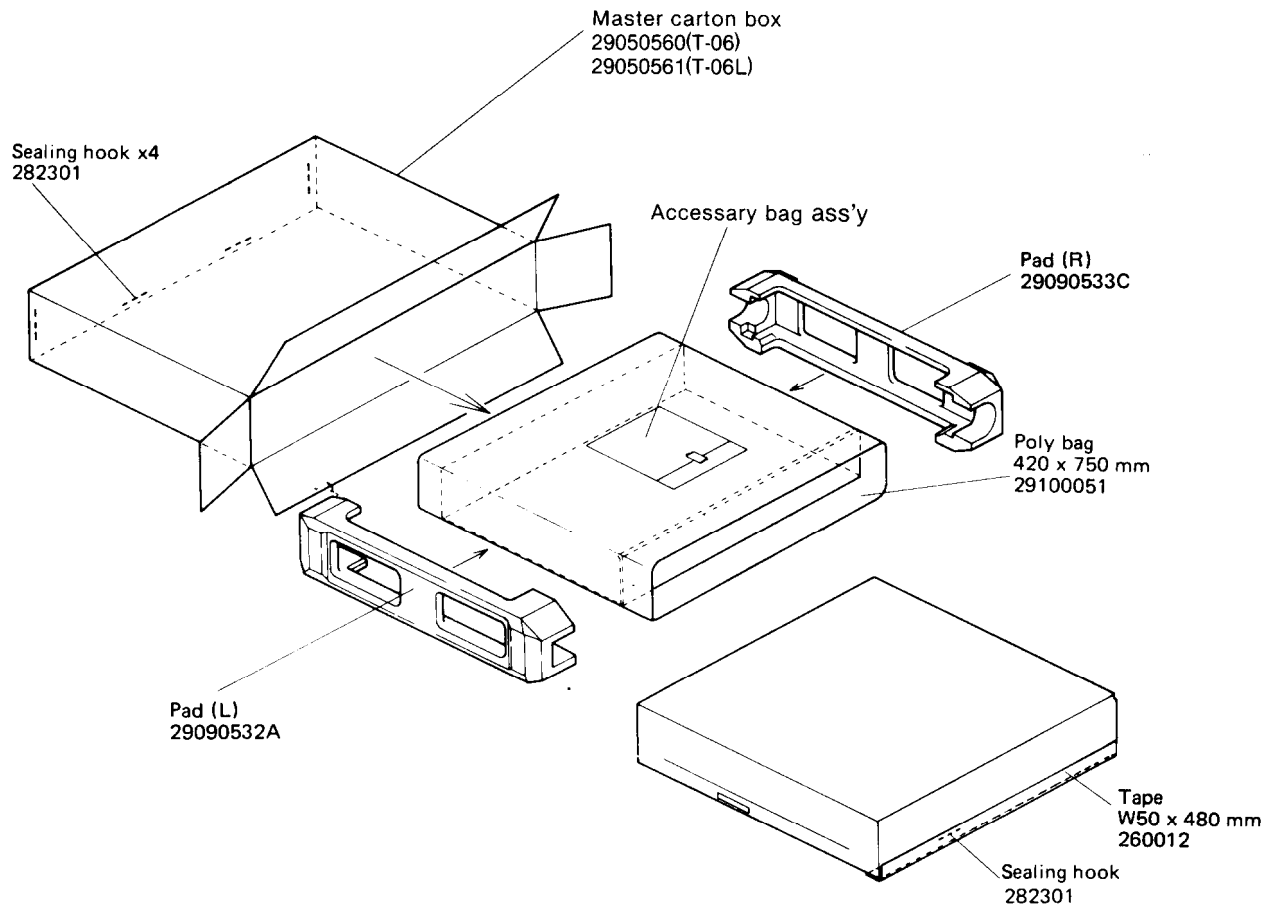
LA 1231N (FM IF system)



HA-1197 (AM radio system)



PACKING PROCEDURES



Accessory bag ass'y	U.S.A.	120V	West Germany	220V (T-06/L)	120/220V
Model	29340611	29340611	29340612	29340612	29340612
Instruction manual	292064A	292064A	292064A	292064A	292064A
FM antenna	29365003	—	29365005-3	—	—
Warranty card	29358002	—	—	—	—
Service station list	—	—	—	—	—
Conversion plug	—	—	—	—	25055040