Ref. No.3403

ONKYO SERVICE MANUAL

SYNTHESIZED
FM STEREO/AM TUNER
MODEL T-407

Black and Silver models

BHUD,BHUDN	120V AC,60Hz
BHUP,BHUPF,UP,UPF	230V AC,50/60Hz
BHUW,UW	120/220V AC,50/60Hz
BHUQA,UQA	240V AC,50Hz

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY MARK ⚠ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

TABLE OF CONTENTS

ONKYO
AUDIO COMPONENTS

SPECIFICATIONS

FM:

Tuning Range:	87.50 – 108.00 MHz (50/25kHz steps) and/or 88.00 – 108.00MHz
Usable Sensitivity:	Mono: 10.8dBf, 0.95μV, IHF 0.8μV DIN (75 ohms) Stereo: 17.2dBf, 2.0μV, IHF 20μV DIN (75 ohms)
50dB Quieting Sensitivity:	Mono: 16.1dBf, 1.7μV (75 ohms) Stereo: 36.1dBf, 17μV (75 ohms)
Capture Ratio:	1.3dB (Wide)
Image Rejection Ratio:	90dB
IF Rejection Ratio:	90dB
Signal-to-Noise Ratio:	Mono: 85dB, IHF Stereo: 80dB, IHF
Selectivity:	55dB DIN (Narrow)
Alternate Channel Attenuation:	50dB IHF (±400kHz)
AM Suppression Ratio:	50dB DIN (Narrow)
Total Harmonic Distortion:	Mono: 0.1% (Wide) Stereo: 0.2% (Wide)
Frequency Response:	30 – 15,000Hz (+0.5 – 1.0dB)
Stereo Separation:	45dB at 1kHz (Wide) 30dB at 70 – 10,000Hz (Wide)
Output Voltage:	0.75V
Muting Level:	17.2dBf, 2.0μV (75ohms)

AM:

Tuning Range:	European models: 522 – 1611kHz (9kHz steps) Canadian and USA models: 530 – 1710kHz (10kHz steps) Saudi Arabia & Worldwide models: 531 – 1602kHz (9kHz steps)
Usable Sensitivity:	25μV
Image Rejection Ratio:	40dB
IF Rejection Ratio:	40dB
Signal-to-Noise Ratio:	40dB
Total Harmonic Distortion:	0.7%
Output Voltage:	150mV

General

Dimensions (W×H×D):	455×90×364mm 17-5/6"×3-5/8"×14-1/13"
Weight:	4.8kg, 10.6lbs
Supplied accessories:	• AM loop antenna×1 • FM T-shaped antenna×1 • Connecting cable×1 • **RI** remote control cable×1 • 75/300ohm antenna adapter×2 (Except 220V model) • Remote control transmitter

Specifications and features are subejct to change without notice.

SERVICE PROCEDURES

1. Safety-check out

(Only U.S.A. model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer.

Connect the insulating-resistance tester between the plug of power supply cord and chassis.

Specifications: 3.3Mohm ±10% at 500V.

2. Memory preservation

This unit does not require memory preservation batteries. A built-in memory power back-up system preserves contents of the memory during power failures and even when the unit is unplugged. The unit must be plugged in and the power switch turned on and off once in order to change the back-up system. Note that since this is not a permanent memory, the power switch must be turned on and off a few times each month to keep the back-up system operative. The period of time during which memory contents are preserved after power has last been turned off varies depending on climate and placement of the unit.

On the average, memory contents are protected over a period of 3 to 4 weeks (a minimum of 2 weeks) after the last time power has been turned off. This period is shorter when the unit is exposed to very high humidity or used in an area with an extremely humid climate.

3. Voltage Selector (Back Panel)

W 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. This switch is set to 220V at the factory. 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. Models without a voltage selector can only be used in areas where the power supply is the same as that of the unit.

4. Tunign Step Frequency Switch (Bottom Panel)

W models are equipped with a switch for the AM (9kHz/10kHz) band. The switch should be set to the proper steps for the raido broadcast frequencies in your area.

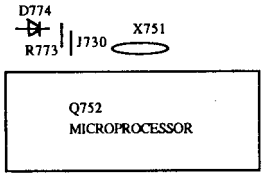
5. Changing the AM band step

With the exception of the worldwide model, AM BAND STEP selector switch is not provided.

When change the band step, refer the table as shown below.

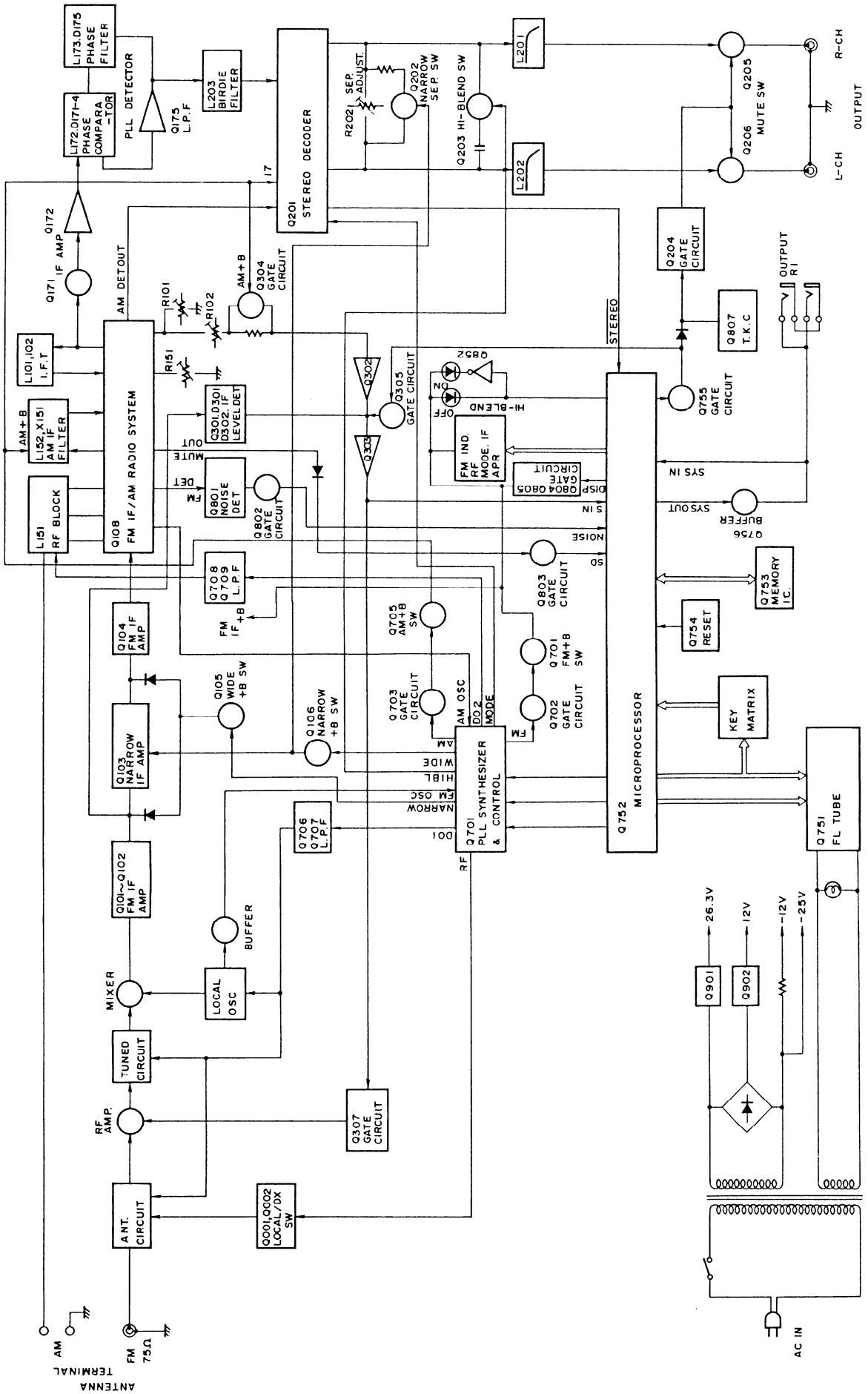
Band Step	D774	R773	J730
10kHz → 9kHz	Add	Add	Cut
9kHz → 10kHz	Remove	Remove	Short

D775 1SS133 Part No. 223163
R775 R16J-10K Part No. 417341034

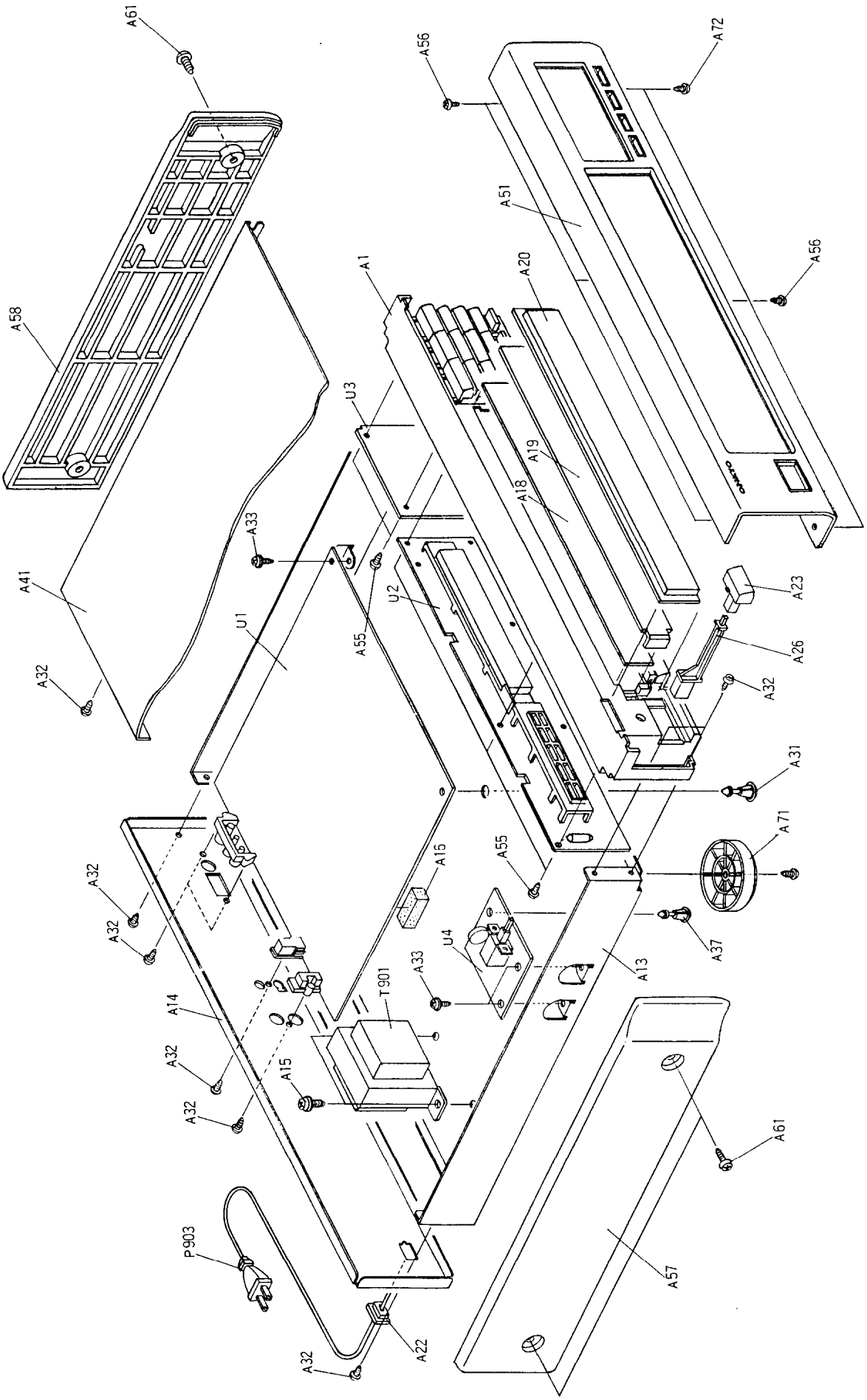


DISPLAY PC BOARD

BLOCK DIAGRAM



EXPLODED VIEW



PARTS LIST

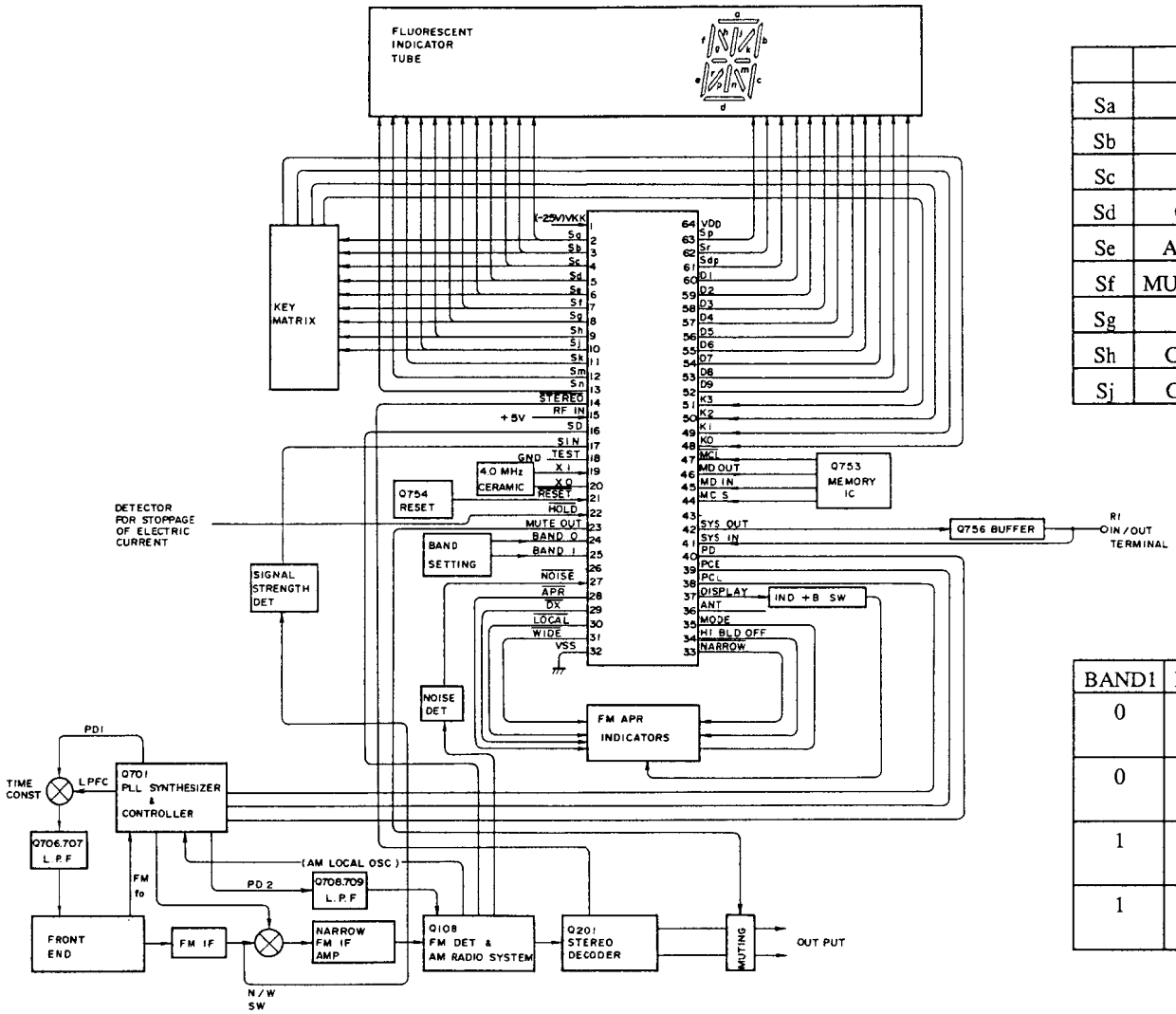
REF NO.	PART NO.	DESCRIPTION
A1	27110643	Front bracket ass'y <B>
	27110644	Front bracket ass'y <S>
A13	27100241	Chassis
A14	27121456	Back panel <D>
	27121457	Back panel <P>
	27121459	Back panel <W>
	27121460	Back panel <Q>
A15	830440069	4TTC+6C(BC),Self-tapping screw
A16	28140881	14×50×15,Cushion
A18	28133263	Back plate
A19	38130261A	Dial plate
A20	28191598	Clear plate
A22	27300750	⚠ Bushing ,cord
A23	28324397	Knob, power <B>
	28324398	Knob, power <S>
A26	27273069A	Joint,power
A31	27190524	KGLS-14R,Holder
A32	834430088	3TTS+8B(BC),Self-tapping screw
A33	831130088	3TTW+8B,Self-tapping screw
A35	834230108	3TTS+10B(Ni),Self-tapping screw
A37	27190511	KGLS-16R,Holder
A41	28184490A	Top cover
A51	1A283121	Front panel ass'y <B>
	1A284121	Front panel ass'y <S>
A55	833430080	3TTP+8P(BC),Self-tapping screw
A56	801230	3TTS+8BQ(BC),Self-tapping screw
A57	28185369	Side panel L
A58	28185370	Side panel R
A61	837440169	4TTT+16C(BC),Self-tapping screw
A62	28135199	Badge
A71	27175254	Leg
A72	834430088	3TTS+8B(BC),Self-tapping screw

REF NO.	PART NO.	DESCRIPTION
P903	253142A	⚠ AS-UC-7#18,Power supply cord <D>
	253148	⚠ AS-CEE,Power supply cord <P/W>
	253118	⚠ AS-SAA,Power supply cord <Q>
P904	25065123	⚠ NPS-1258P,Voltage selector switch <W>
T901	2300682A	⚠ NPT-1114D,Power transformer <D>
	2300683A	⚠ NPT-1114P,Power transformer <P>
	2300684A	⚠ NPT-1114DG,Power transformer <W>
	2300685A	⚠ NPT-1114Q,Power transformer <Q>
U1	1A283581-1	NARF-4181-1,Main circuit pc board ass'y <D>
	1A283581-1A	NARF-4181-1A,Main circuit pc board ass'y <P/Q>
	1A283581-1B	NARF-4181-1B,Main circuit pc board ass'y <W>
U2	1A283582-1	NADIS-4182-1,Display circuit pc board ass'y <D>
	1A283582-1A	NADIS-4182-1A,Display circuit pc board ass'y <P/Q>
	1A283582-1B	NADIS-4182-1B,Display circuit pc board ass'y <W>
U3	1A283583-1	NASW-4183-1,Operation switch pc board ass'y
U4	1A283585-1	NAPS-4185-1,Power supply pc board ass'y <D>
	1A283585-1A	NAPS-4185-1A,Power supply pc board ass'y <P/W/Q>

NOTE: <D>:Only 120V model
<P>:Only 230V model
<W>:Only Worldwide model
<Q>:Only 240V model
<B>:Only Black model
<S>:Only Silver model

NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

MICROPROCESSOR DESCRIPTIONS



CONNECTION DIAGRAM

	K0	K1	K2	K3
Sa	TEN-1	TEN-2	TEN-3	TEN-4
Sb	TEN-5	TEN-6	TEN-7	TEN-8
Sc	TEN-9	TEN-0	MEMORY	DIRECT
Sd	CABLE	PRESET SCAN	DISPLAY	CHARACTER
Se	APR OPE.	RF MODE	IF BAND	HI BLEND
Sf	MUTE/MODE	ANTENNA	TUNNING LEVEL	
Sg	FM	AM	DOWN/LAST	UP/NEXT
Sh	CLASS-A	CLASS-B	CLASS-C	CLASS-D
Sj	CLASS-E	CLASS-F	CLASS-G	CLASS-H

Key Matrix

BAND1	BAND0	MODEL	BAND	FREQUENCY RANGE	STEP
0	0	120V	FM	87.50-108.00MHz	50kHz
			AM	530-1710kHz	10kHz
0	1	230V/ 240V	FM	87.50-108.00MHz	50kHz
			AM	522-1611kHz	9kHz
1	0	Worldwide	FM	87.50-108.00MHz	50kHz
			AM	531-1602kHz	9kHz
1	1		FM	87.50-108.00MHz	50kHz
			AM	531-1710kHz	9kHz

Band Step Setting

Terminal Description

REF.NO.	Symbol	I/O	Description
1	VKK	O	Power supply terminal for driver of FL tube.
2	S0	O	Segment and key matrix signal output terminals. L when active.
3	S1	O	
4	S2	O	
5	S3	O	
6	S4	O	
7	S5	O	
8	S6	O	
9	S7	O	
10	S8	O	
11	S9	O	
12	S10	O	
13	S11	O	
14	STEREO	I	Stereo broadcast detection input terminal. L when active.
15	RFIN	I	RF input terminal.H when DX.
16	SD	I	Broadcast detection input terminal.
17	SIN	I	Signal strength input terminal.
18	TEST		Test terminal. Connect to the terminal VSS.
19	XIN		Connect to the 4.0MHz ceramic oscillator.
20	XOUT		
21	RESET	I	Reset input terminal.
22	POFF	I	Detection input terminal for stoppage of electric current.
23	MUTE OUT	O	Muitng output terminal for tuner section.
24	BAND0	I	Initializing input terminal for band region setting.
25	BAND1	I	
27	NOISE	I	Noise detection input terminal.
28	APR	O	APR ON/OFF indication output terminal.
29	DX	O	RF DX indication output terminal.
30	LOCAL	O	RF LOCAL indication output terminal.
31	IF WIDE	O	IF WIDE indication output terminal.
32	VSS		Ground terminal.
33	IF NARROW	O	IF NARROW indication output terminal.
34	HI BLEND	O	HI-BLEND ON/OFF indication output terminal.

REF.NO.	Symbol	I/O	Description
35	MU MO	O	MUTING MODE MONO/AUTO indication output terminal.
36	ANT	O	Antenna indication and changeover circuit driver output terminal.
37	DISPLAY	O	Segment output terminal of FL tube.
38	PCL	O	Clock output terminal to PLL IC TC9217P.
39	PCE	O	Chip selector output terminal to PLL IC TC9217P.
40	PDOUT	O	Data output terminal to PLL IC TC9217P.
41	SYSIN	I	System code input terminal.
42	SYSOUT	O	System code output terminal.
44	MCS	O	Chip selector output terminal to the memory IC TC89102P.
45	MDI	I	Data input terminal from the memory IC.
46	MDO	O	Data output terminal to the memory IC.
47	MCLK	O	Clock output terminal to the memory IC.
48	K0	I	Key matrix input terminals.
49	K1	I	
50	K2	I	
51	K3	I	
52	D9	O	Digit output terminals.
53	D8	O	
54	D7	O	
55	D6	O	
56	D5	O	
57	D4	O	
58	D3	O	
59	D2	O	
60	D1	O	
61	S14	O	Segment output terminals.
62	S13	O	
63	S12	O	
64	VDD		Power supply terminal.(5V)

ADJUSTMENT PROCEDURES

- Preparation
  FM mono: 1kHz, 75kHz devi. 60dBμ (65dBf)
  FM stereo: 1kHz, L+R 67.5kHz devi.,
  Pilot signal 19khz 7.5kHz devi.
  AM: 400Hz, 30% mod.

- Set the operation keies as shown below.
  HI-BLEND: OFF
  RF MODE: DX MODE: AUTO
  IF BAND: WIDE CABLE/MUTE: CABLE

FM section

Item	Step	Connection of instrument	FM SC output	Stereo modulaotr output	Tuned frequency	Output indicator	Adjustment point	Adjust for	Remarks
FM RF/IF	1	Fig. 1	98.1MHz, 1kHz 75kHz devi. 25dB (30dBf)	—	98.1MHz	AC voltmeter	IFT core on front end	Maximum	
	2		60dB (65dBf)			DC voltmeter	L101	0±20mV	Repeat the steps 2 and 3 until no further adjustment is necessary.
	3					Distortion analyzer	L102	Minimum	
FM DET		Fig. 2	98.1MHz, No mod. 60dB (65dBf)	—	98.1MHz	DC voltmeter	L173	0±0.1V	RF MODE:DX
STEREO DISTROTION		Fig. 3	98.1MHz, Ext. mod. 60dB (65dBf)	L+R 67.5kHz devi. Pilot signal 7.5kHz devi.	98.1MHz	Distortion analyzer	IFT core on front end	Minimum	Don't turn more than 180°
STEREO SEPARATION		Fig. 3	98.1MHz, Ext. mod. 60dB (65dBf)	Channel L	98.1MHz	AC voltmeter of righ channel	R202	Minimum	Maximum and same separation.
				Channel R		AC voltmeter of left channel		Minimum	
MUTING LEVEL		Fig. 2	98.1MHz, 1kHz, 75kHz devi. 13dB (18.2dBf)	—	98.1MHz	Oscilloscope	R101	Output: ON	CABLE/MUTE SW: OFF CABLE indicator is turned off.
			12dB (17.2dB)					Output:OFF	
SIGNAL STRENGTH		Fig. 2	60dB (65dBf)	—		10th signal strength	R102	Light on	

AM section

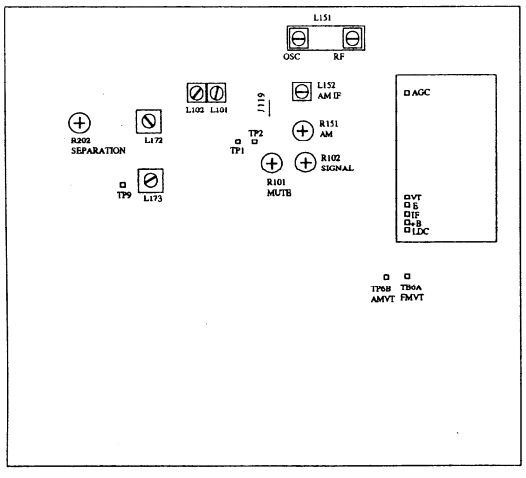
Step	AM SG output	Tuned frequency	Output indicator	Adjustment point	Adjustment for
1		530kHz (522kHz) <531kHz>	DC voltmeter	OSC coil on L151	1.3±0.1V
2	600kHz (603kHz) 400Hz,30% mod.	600kHz (603kHz)	AC voltmeter	RF coil on L151	Maximum
3	990kHz 60dB/m	990kHz	AC voltmeter	L152	Maximum
4	990kHz 55dB/m	990kHz	6th signal indicator	R151	Light on

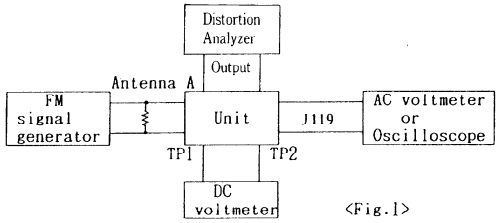
( ):9kHz step models < >:Worldwide models

Reference specifications

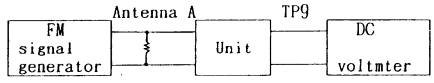
Tuned voltage AM:10kHz step models
1.3±0.4V~7.5±0.4V(530kHz~1710kHz)
9kHz step models(European models)
1.3±0.4V~7.0±0.4V(522kHz~1611kHz)
9kHz step models(Wolrdwide models)
1.3±0.4V~7.0±0.4V(531kHz~1602kHz)
FM:5±0.4V~25±0.4V(87.50MHz~108.00MHz)

Auto stop level AM:Less than 68dB/m
FM:Less than 16dBμ

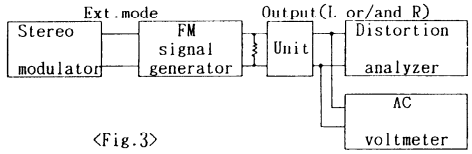




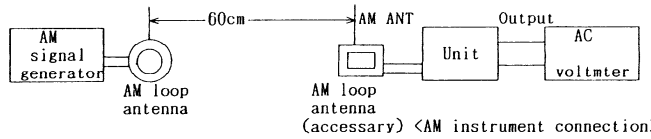
<Fig.1>



<Fig.2>

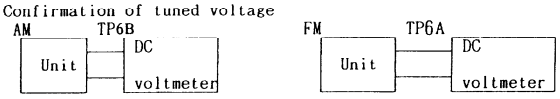


<Fig.3>



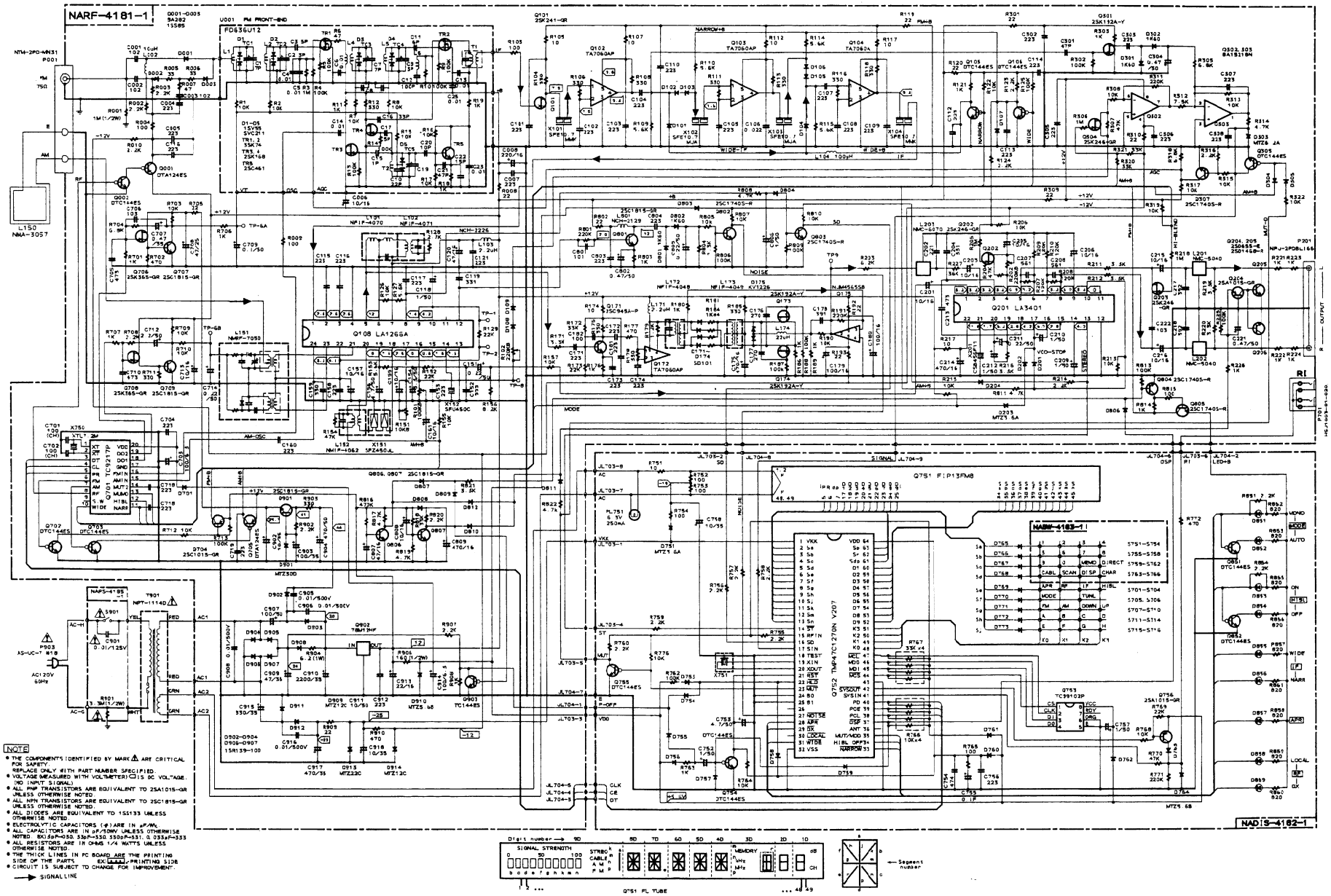
<AM instrument connection>

Confirmation of tuned voltage



SCHEMATIC DIAGRAM

–120V MODEL–



ONKYO CORPORATION

PRINTED CIRCUIT BOARD VIEW FROM BOTTOM SIDE

MAIN CIRCUIT PC BOARD(NARF-4181-1/1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Front end	
U001	240062	BFD636U12
	ICs	
Q102-Q104	222407	TA7060AP
Q107	22240214	LA1226A
Q172	222407	TA7060AP
Q175	22240213	NJM4565S-B
Q201	22240252	LA3401
Q302,Q303	22240247	BA15218N
Q701	22240474	TC9217P
Q902	222780125NEC	78M12HF
	Transistors	
Q001	2212600	DTA124ES
Q002	221282	DTC144ES
Q101	2212194 or	2SK241-Y or
	2212195	2SK241-GR
Q105,Q106	221282	DTC144ES
Q171	2210746	2SC945A-P
Q173,Q174	2212274	2SK192A-Y
Q202,Q203	2211945	2SK246-GR
Q204	2211455	2SA1015-GR
Q205,Q206	2211705 or	2SD655-E or
	2212794	2SD1468-R
Q301	2212274	2SK192A-Y
Q304	2211945	2SK246-GR
Q305	221282	DTC144ES
Q307	2213284	2SC1740S-R
Q702,Q703	221282	DTC144ES
Q704,Q705	2212600	DTA124ES
Q706,Q708	2212445	2SK365-GR
Q707,Q709	2211255	2SC1815-GR
Q801	2211255	2SC1815-GR
Q802-Q805	2213284	2SC1740S-R
Q806,Q807	2211255	2SC1815-GR
Q901	2211255	2SC1815-GR
Q903	221282	DTC144ES

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D001-D003	223165 or	BA282 or
	223149	1SS85
D101-D109	223163	1SS133
D171-D174	223191	SD101
D175	223136	KV1226
D201,D202	223163	1SS133
D203	224450361	MTZ3.6A
D204	223163	1SS133
D301,D302	223132	1K60
D303	224450621	MTZ6.2A
D304,D305	223163	1SS133
D701	223163	1SS133
D801-D804	223163	1SS133
D806-D812	223163	1SS133
D901	224453004	MTZ30D
D902-D908	22380032	1SR139-100
D910	224450562	MTZ5.6B
D911,D912	22380032	1SR139-100
D913	224452204	MTZ22D
D914	224451203	MTZ12C
	Coils	
L001	233312	NFA-3051 <P/W>
L002	233411K100	NCH-1383
L103,L171	233411M022	NCH-1375
L104	233411K101	NCH-1395
L174	233411K220	NCH-1387
L201,L202	233294	NMC-5040
L203	233383	NMC-6070
L801	231081	NCH-2129
	RF block	
L151	232148	NMRF-7050
	Transformers	
L101	233396	NFIF-4070
L102	233397	NFIF-4071
L152	232139	NMIF-4062
L172	233296	NFIF-4048
L173	233297	NFIF-4049

CIRCUIT NO.	PART NO.	DESCRIPTION
	Ceramic filters	
X101,X104	3010137	SFE10.7MMK
X102,X103	3010087	SFE10.7MJA
X151	3010123	SFZ450JL
X152	3010076	SFU450C
	Ceramic oscillator	
X201	3010152	CSB456F11
	Crystal oscillator	
X751	3010181	XTL-7.2M
	Capacitors	
C006	354741009	10 μF,16V,Elect.
C008	354742219	220 μF,16V,Elect.
C118	354780109	1 μF,50V,Elect.
C120	354744709	47 μF,16V,Elect.
C151,C211	354782299	0.22 μF,50V,Elect.
C152	371123334	0.033 μF±5%,50V,Mylar
C154	354780339	3.3 μF,50V,Elect.
C155,C157	354741009	10 μF,16V,Elect.
C156	354780479	4.7 μF,50V,Elect.
C161	354741009	10 μF,16V,Elect.
C175,C214	354744719	470 μF,16V,Elect.
C179,C180	354741019	100 μF,16V,Elect.
C201,C203	354741009	10 μF,16V,Elect.
C205,C206	354741009	10 μF,16V,Elect.
C207,C208	370135614	560pF±5%,100V,Plastic <D>
	370132714	270pF±5%,100V,Plastic <P/W>
C209,C210	354780109	1 μF,50V,Elect.
C212,C806	354780109	1 μF,50V,Elect.
C213	371124734	0.047 μF±5%,50V,Mylar
C215,C216	354741009	10 μF,16V,Elect.
C217,C218	371123924	3900pF±5%,50V,Mylar
C221,C304	354784799	0.47 μF,50V,Elect.
C222,C706	371121034	0.01 μF±5%,50V,Mylar
C224,C225	370131514	150pF±5%,100V,Plastic <W>
C703,C914	354721019	100 μF,6.3V,Elect.
C705,C710	371124734	0.047 μF±5%,50V,Mylar
C707,C802	354784799	0.47 μF,50V,Elect.

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C708	354754709	47 μ F,25V,Elect.
C709	354781099	0.1 μ F,50V,Elect.
C712	354780229	2.2 μ F,50V,Elect.
C714,C805	354782299	0.22 μ F,50V,Elect.
C807	354744709	47 μ F,16V,Elect.
C808	354741009	10 μ F,16V,Elect.
C809	354744719	470 μ F,16V,Elect.
C902,C918	354761009	10 μ F,35V,Elect.
C903	354761019	100 μ F,35V,Elect.
C904	354784719	470 μ F,50V,Elect.
C907	354781019	100 μ F,50V,Elect.
C909	354764709	47 μ F,35V,Elect.
C910	354762229	2200 μ F,35V,Elect.
C911	354781009	10 μ F,50V,Elect.
C913	354742209	22 μ F,16V,Elect.
C915	354763319	330 μ F,35V,Elect.
C917	354764719	470 μ F,35V,Elect.
	Resistors	
R001	431521055	1MΩ,1/2W,Solid <D>
R101	5210070 or	N06HR100KBD or
	5210221	N06HR100KBC,Semi-fixed
R102,R202	5210072 or	N06HR220KBD or
	5210124	N06HR200KBC,Semi-fixed
R151	5210064 or	N06HR10KBD or
	5210119	N06HR10KBC,Semi-fixed
R904	441620624	6.2Ω,1W,Metal oxide film
R906	442521614	160Ω,1/2W,Metal oxide film
	Terminals	
P001	25060087	NTM-2PDMN31
P201	25045307	NPJ-2PDBL166 <D>
	25045333	NPJ-2PDBL185 <P/W>
P701	25045172	HSJ1003-01-020
P703	25050272	NSCT-8P-100
P704	25050273	NSCT-9P101
	Radiator	
P901	27160179	RAD-57
	Screw	
P902	82143006	3P+6FN(BC)
	Switch	
S201	25065286	NSS-22112 <W>

DISPLAY CIRCUIT PC BOARD(NADIS-4182-1/1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	FL tube	
Q751	212100	FIP13FM8
	ICs	
Q752	22240543	TMP47C1270N-V209 TMP47C1270N-V207 or 8 (Before modification)
Q753	22240475	TC89102P
	Transistors	
Q754,Q755	221282	DTC144ES
Q756	2211455	2SA1015-GR
Q851,Q852	221282	DTC144ES
	Lamp	
PL751	210064B	PL6.3V250mA

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D751	224450472	MTZ4.7B
D753-D763	223163	1SS133
D764	224450562	MTZ5.6B
D765-D773	223163	1SS133
D774	223163	1SS133 <P>
D775	223163	1SS133 <W>
	L.E.Ds	
D851,D853	225137CG,	SEL2413ECG,
D855,D857	225137DG or	SEL2413EDG or
D858	225137DY	SEL2413EDY
D852,D854	225142	SEL2913K
D856,D859	225142	SEL2913K
	Ceramic oscillator	
X751	3010150	CST4.00MGW
	Capacitors	
C752	353780109	1 μ F,50V,Elect.
C753	353780479	4.7 μ F,50V,Elect.
C754	375524744	0.47 μ F±5%,50V,Plastic
C755	3000057	0.1F,5.5V,Super
C757	353780109	1 μ F,50V,Elect.
C758	353761009	10 μ F,35V,Elect.
	Resistors	
R766	49163103404	10kΩ×4,1/10W,Network
R767	49163333404	33kΩ×4,1/10W,Network
	Switches	
S751-S768	25035548	NPS-111-S510,Push
S791	25065286	NSS-22112 <W>
	Holder	
	27190845A	LED-10

OPERATION SWITCH PC BOARD(NASW-4183-1)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Switches	
S771-S786	25035548	NPS-111-S510,Push

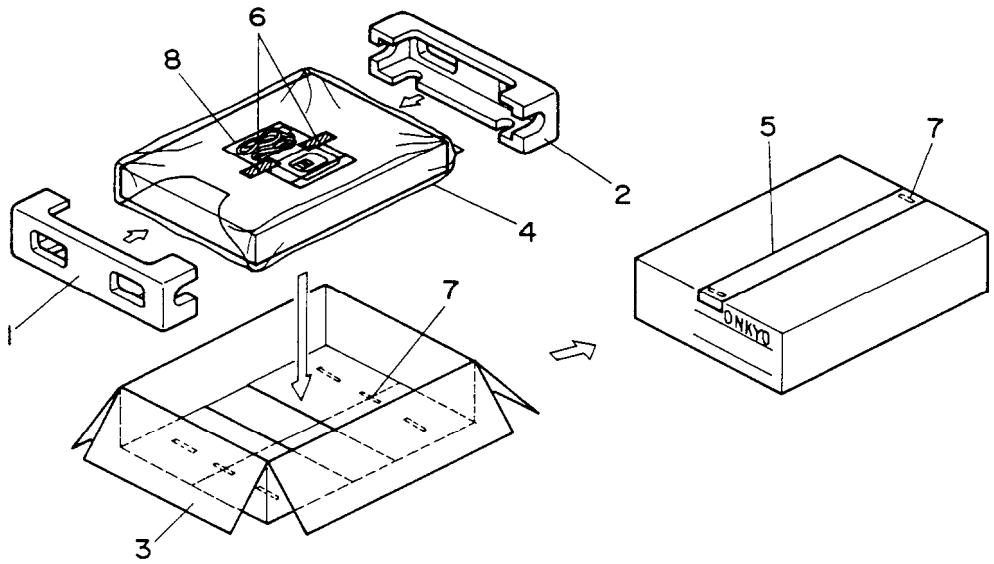
POWER SUPPLY PC BOARD(NAPS-4185-1/1A)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitor	
C901	3500065A	⚠ DE7150FZ103PAC400V/125V,IS
	Resistor	
R901	431523355	⚠ 3.3MΩ,1/2W,Solid <D>
	Switch	
S901	25035636	⚠ NPS-111-L590P

NOTE: <D>:Only 120V model
<P>:Only 230V/240V models
<W>:Only Worldwide model

NOTE: THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

PACKING VIEW



REF.NO.	PART NO.	DESCRIPTION
1	29091495	Pad L
2	29091496	Pad R
3	29052208	Master carton box <B>
	29052211	Master carton box <S>
4	29100037A	650×500,Styrene bag
5	29110071	Damplon tape
6	261504	Adhesive tape
7	282301	Sealing hook
8	Accessary bag ass'y	
	29341636	Instruction manual <D>
	29341638	Instruction manual <P/W/Q>
	29100097	350×250,Styrene bag
	25060123	FM adaptor <D/F/W/Q>
	292092	FM antenna
	232140	NMA-3057,AM loop antenna
	2010098	Connection cord
	2010200	Connection cord RI
	29365019A	Warranty card <N>
	29365024A	Warranty card <F>
	29100107	Styrene bag for warranty card <F>
	29358002J	Service station list <N>
	25055018	CV-K-1,Conversion plug <W>

NOTE: <D>:Only 120V model
<P>:Only 230V model
<W>:Only Worldwide model
<Q>:Only 240V model
<B>:Only Black model
<S>:Only Silver model
<F>:Only French model
<N>:Only U.S.A model

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PN0M3403 A105 Printed in Japan