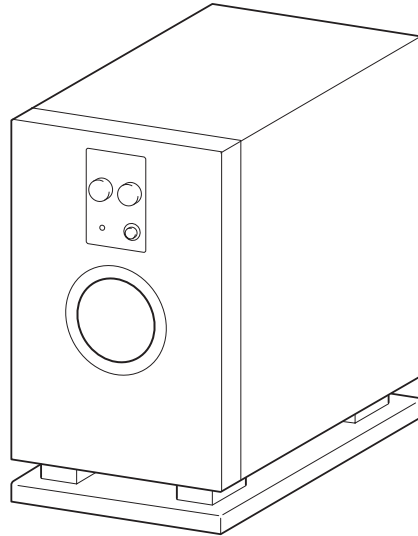
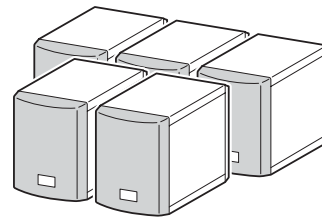


ONKYO® SERVICE MANUAL**SUB WOOFER SYSTEM*****SL-105 / HTP-2***

**SL-105
POWERED SUBWOOFER**



**D-L5 x 5
SATELLITE SPEAKERS**

Black color : MPP model
Yellow color : MDT, MGT models

MPP	230-240V AC, 50Hz
MDT	120V AC, 60Hz
MGT	220-230V AC, 50/60Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle 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.

SERVICE NOTE

1. Replacing the fuses



This symbol located near the fuses indicates that the fuse used is fast operating type. For continued protection against fire hazard, replace with same type fuse. For fuse rating refer to the marking adjacent to the symbol.



Ce symbole indique que le fusible utilise est a rapide. Pour une protection permanente, n'utiliser que fusibles de meme type. Ce dernier est la qu le present symbol est appse.

CIRCUIT NO. PART NO. DESCRIPTION

CIRCUIT NO.	PART NO.	DESCRIPTION
F901,F903	252069 or 252236	0.8A-SE-EAK or 800MA-SE-TL250V <MPP,MGT>
F902	252159 or 252253	2A-UL/T-237 or 2A-T/UL-ST2 <MDT>

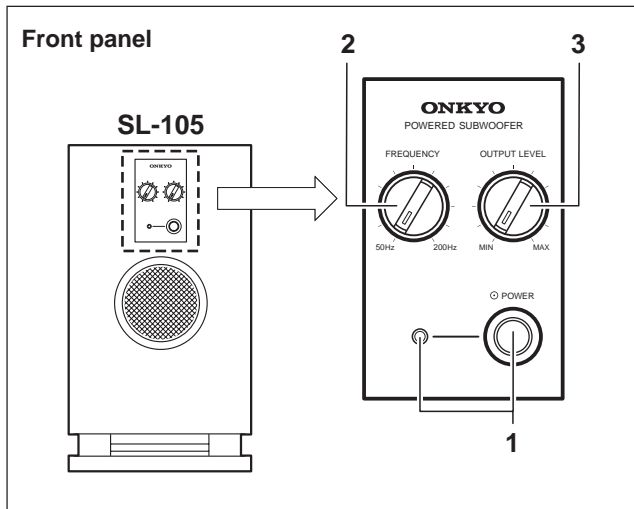
2. Safety-check out

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 screw on the back panel.

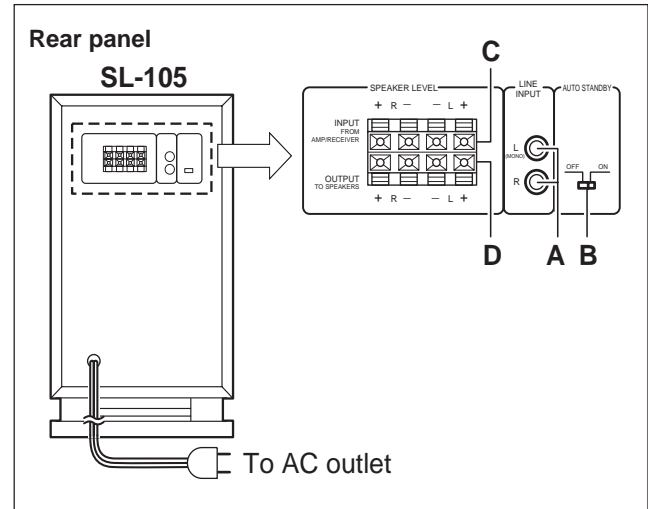
Specifications: 3.3Mohm \pm 10% at 500V.

PANEL VIEW

Subwoofer SL-105



- 1 Power switch (POWER) and indicator**
Pressing this button turns the power on (the indicator lights). Pressing the button again turns the power off (the indicator goes out).
Red: Unit is in standby mode
Green: Unit is in operation
- 2 Frequency adjusting knob (FREQUENCY)**
Use this knob to select the high-frequency range at which you wish to cut off the signal to the subwoofer. You can select any frequency between 50 Hz and 200 Hz depending on the characteristics of the speaker system being used with the SL-105.
- 3 Output level adjusting knob (OUTPUT LEVEL)**
Use this knob to adjust the output level of the subwoofer.



- A Low-level input jacks (LINE INPUT)**
Connect these jacks to the LINE OUT jacks of the amplifier etc.
- B Auto standby switch (AUTO STANDBY)**
This switch is used to turn on and off the auto standby function.
ON: This activates the auto standby function. If a constant level signal is not received from the amplifier (or receiver) over a period of a few minutes, the SL-105 automatically enters the standby state. If a constant level signal is later received from the amplifier (or receiver), the power is automatically turned back on.
OFF: Deactivates the auto standby function.

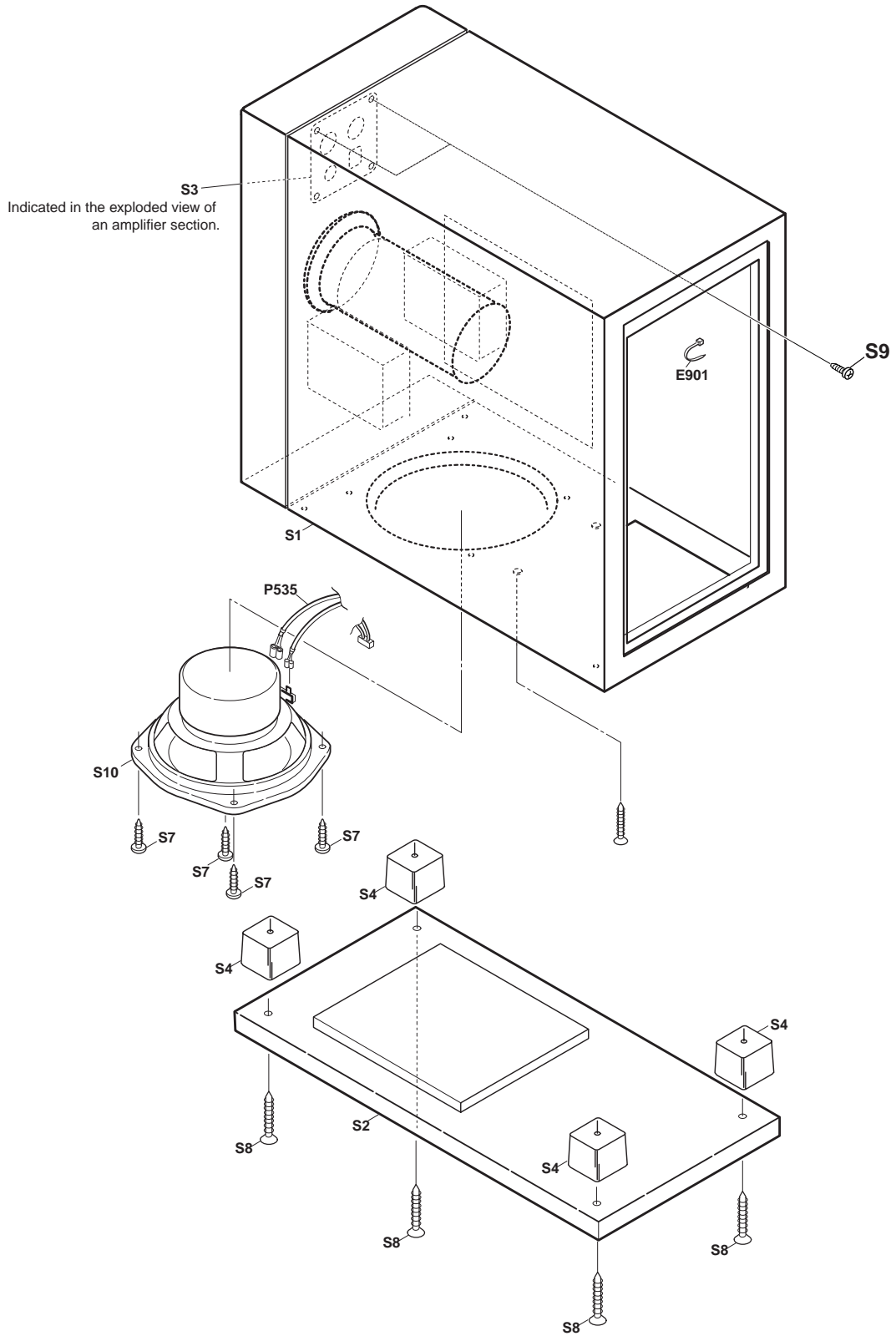
Notes:

- * The auto standby function operates on the existence or absence of a constant level input signal. If the auto standby function does not operate properly, try slightly increasing (or decreasing) the output level of the amplifier or receiver. (Note that output levels of some amplifiers and receivers cannot be adjusted. For more details regarding your components, refer to the instruction manual supplied with them.)
- * If noise from peripheral components causes the incorrect operation of the auto standby function, or if outputting low volumes (i.e., during the nighttime) causes the auto standby function to activate, turn off the auto standby function.
- * The auto standby function only operates while the power switch for the SL-105 is turned on.

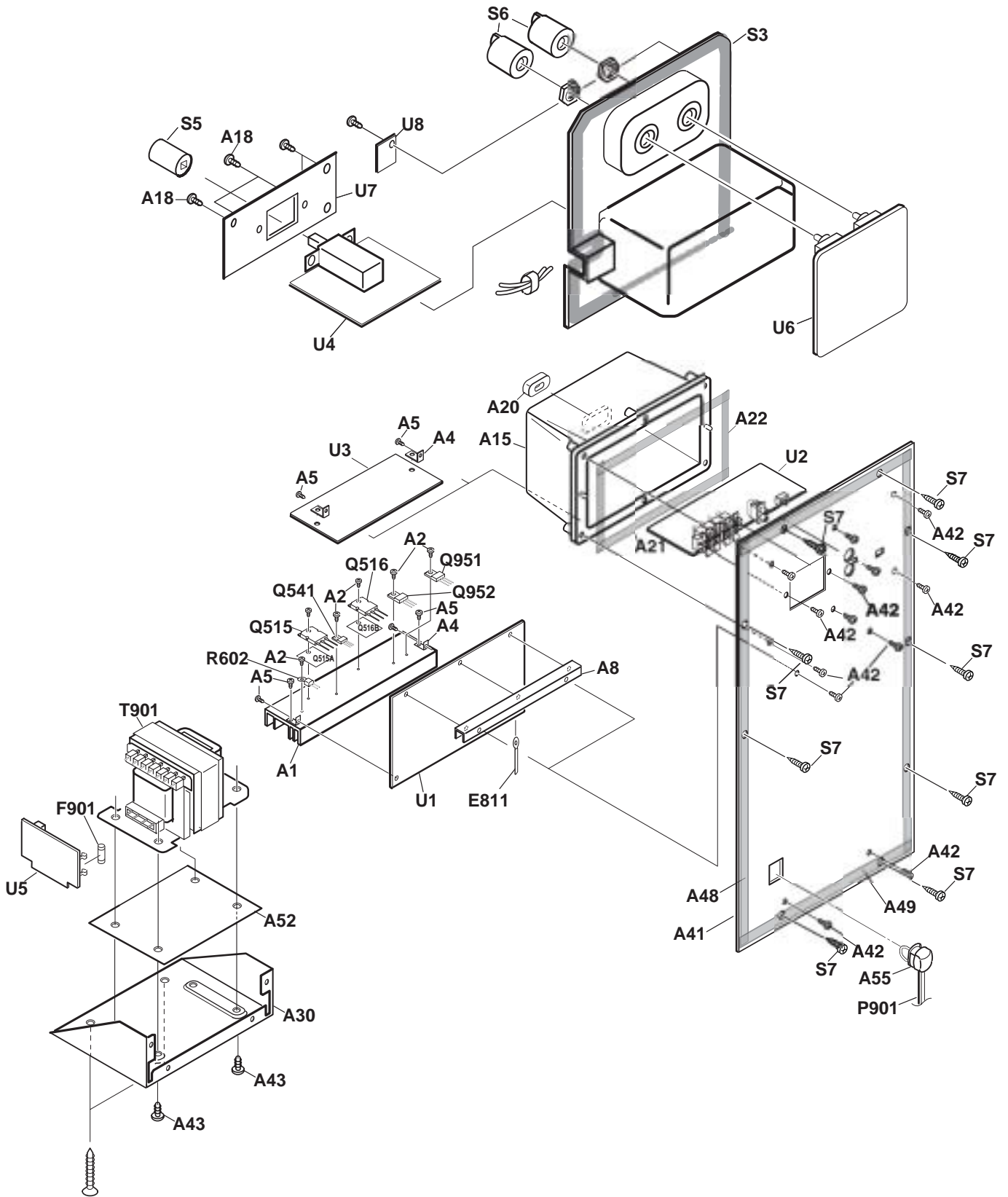
- C Speaker-level input terminals (INPUT FROM AMP/RECEIVER)**
Connect these input terminals to the speaker output terminals of your amplifier or receiver.

- D Speaker-level output terminals (OUTPUT TO SPEAKERS)**
The speaker-level signal to the front speakers is output from these terminals.

EXPLODED VIEW (CABINET SECTION)



CHASSIS EXPLODED VIEW (AMPLIFIER SECTION)



EXPLODED VIEW PARTS LIST

<AMPLIFIER ASSEMBLY PARTS LIST>

REF. NO.	PART NO.	DESCRIPTION
A1	27160467	Heat sink, SKW-205AMP
A2	801433	3SMS8W.SW+14B(BC), Self tapping screw
A4	27130745	Bracket
A5	838130088	3TTB+8B, Self tapping screw
A8	27141661	Retainer
A15	28184777	Cover
A18	82143010	3P+10FN(BC), PAN head screw
A20	28141322A	Cushion
A21	28141417	Cushion, P t1x5x160
A22	28141418	Cushion, Q t1x5x80
A30	27100412	Chassis
A41	27122929	Rear panel <MPP>
	27122930	Rear panel <MDT>
	27122931	Rear panel <MGT>
A42	838430088	3TTB+8B(BC), Self tapping screw
A43	830440109	4TTC+10C(BC), Self tapping screw
A48	28141479	Cushion, t1X5X335
A49	28141416	Cushion, O t1x5x195
A52	28141334	Insulation sheet
A55	△ 27301941	Cord bushing, KF-41
E811,E814	27255004	Clip
E901	260208	Wire tie
F901	△ 252069	0.8A-SE-EAK or
	△ 252236	800MA-SE-TL250V, Fuse <MPP.MGT>
	△ 252159	2A-UL/T-237 or
	△ 252253	2A-T/UL-ST2, Fuse <MDT>
P535	2009990611UL	NSAS-2P0833, Socket assy
P901	△ 253175	AS-CEE ZA, Power cord <MPP,MGT>
	△ 253272HIT	AS-UC-6#18, Power cord <MDT>
Q515	* 2203063	2SC5198-O or
	* 2202523	2SC4468-O or
	* 2202524	2SC4468-Y or
	* 2202526	2SC4468-P or
	* 2203062	2SC5198-R, Transistor
Q515A,Q516A	223021	TBM-51W 9043, Isolation plate
Q516	* 2203053	2SA1941-O or
	* 2202513	2SA1695-O or
	* 2202514	2SA1695-Y or
	* 2202516	2SA1695-P or
	* 2203052	2SA1941-R, Transistor
Q541	2202104	2SC3423-Y or
	2202103	2SC3423-O, Transistor
Q951	2202754	2SD1266-P, Transistor
Q952	2202764	2SB941-P, Transistor
R602	4000144	PTH9M04-2.2K, Thermistor
T901	△ 2301460	NPT-1396P, Power transformer <MPP>
	△ 2301487	NPT-1396D, Power transformer <MDT>
	△ 2301562	NPT-1396G, Power transformer <MGT>

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

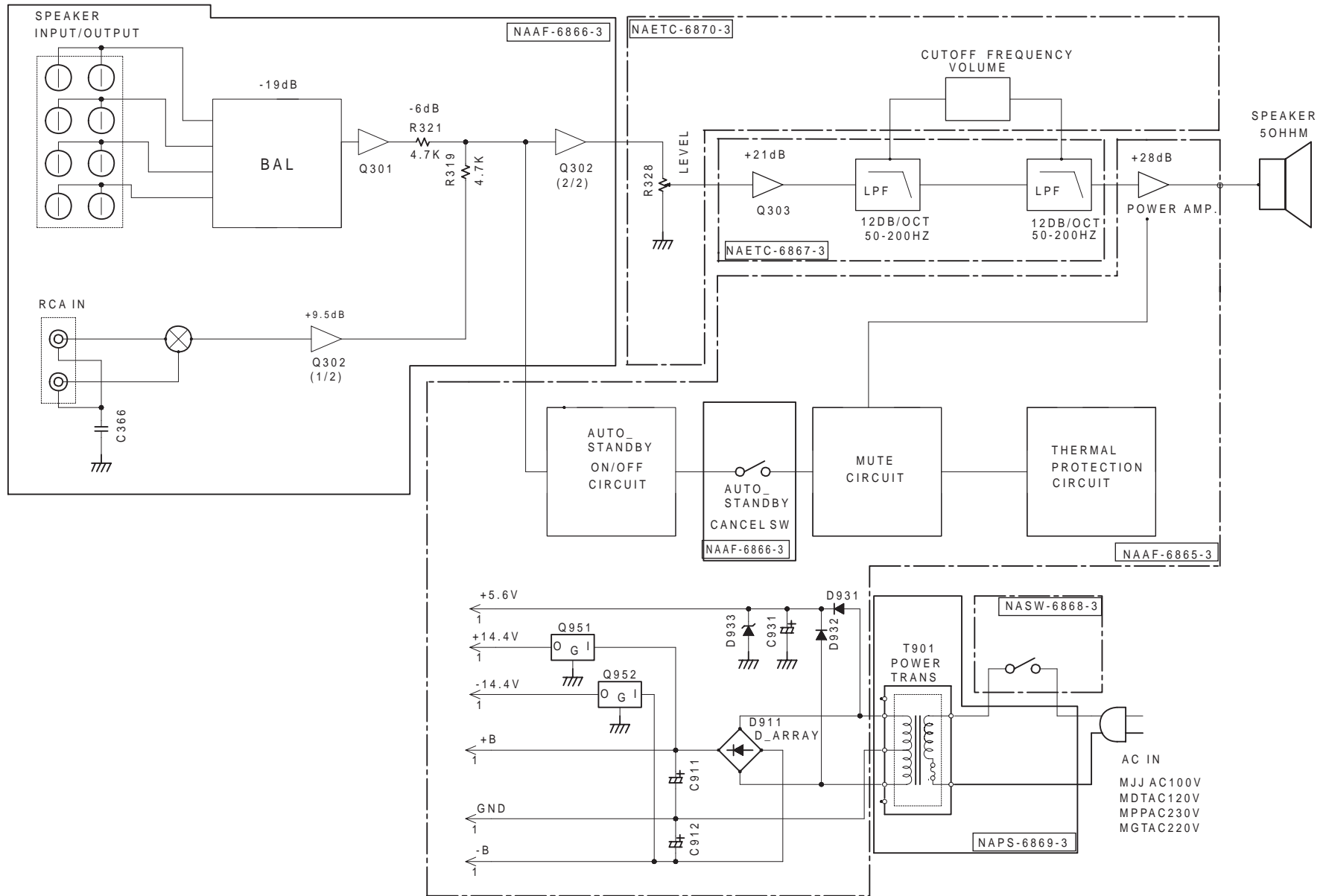
CAUTION:

Replacement of the transistor of mark *, if necessary must be made from the same beta group (HFE) as the original type.

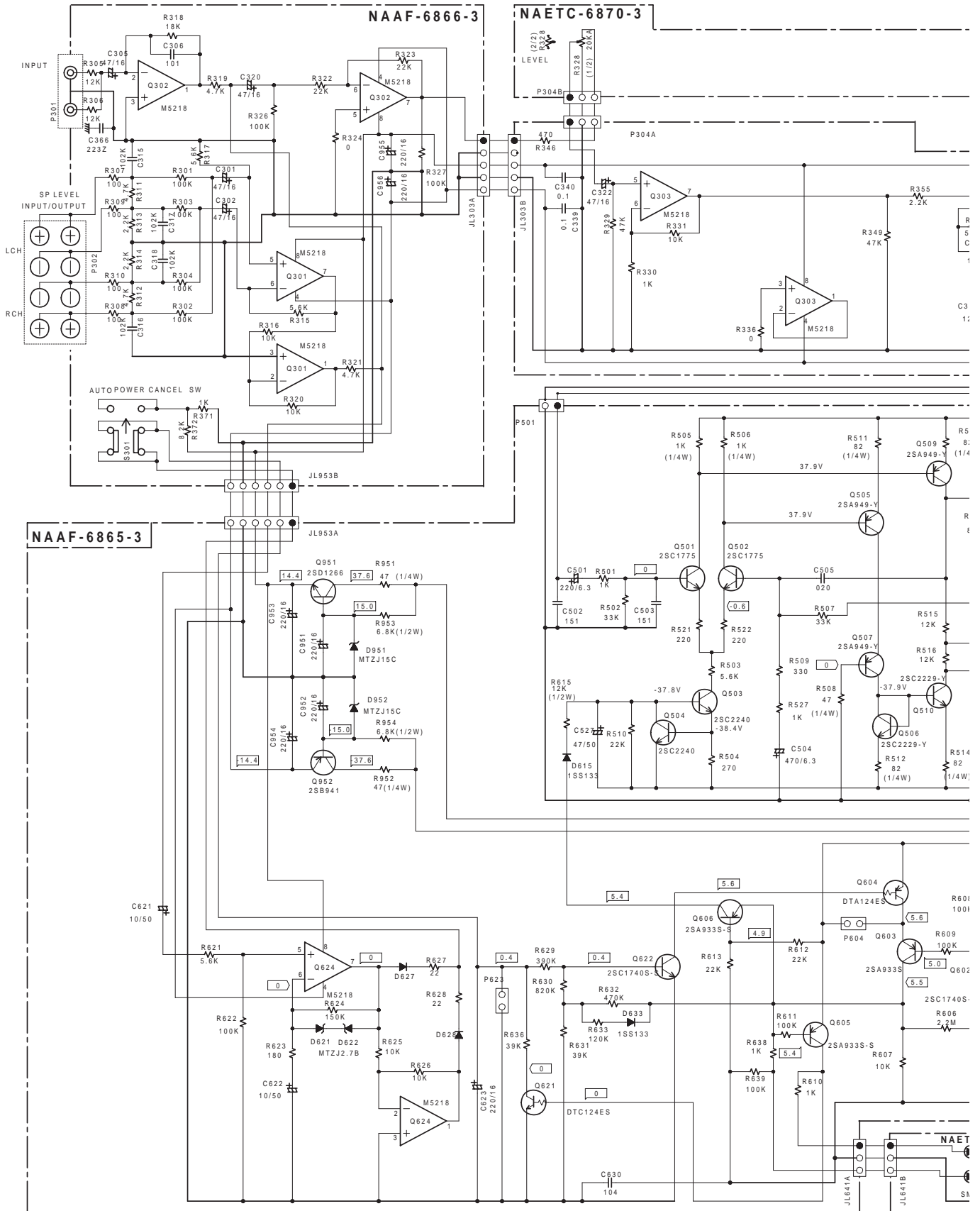
NOTE:

<MPP> European model
 <MDT> Taiwanese model only
 <MGT> Asian model only
 <Y> Yellow color model
 Black color model MPP only





BLOCK DIAGRAM



SCHEMATIC DIAGRAM



NOTE

- THE COMPONENTS IDENTIFIED BY MARK  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH ) IS DCVOLTAGE. (NO INPUT SIGNAL)
- ELECTROLYTIC CAPACITORS () ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.
EX) 030+3pF 330+ 33pF 331 330pF 333+0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX)  PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

CAUTION



FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

ATTENTION



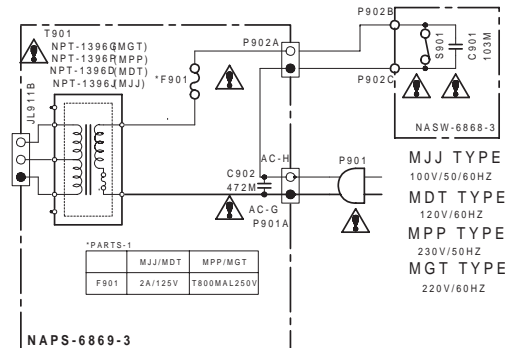
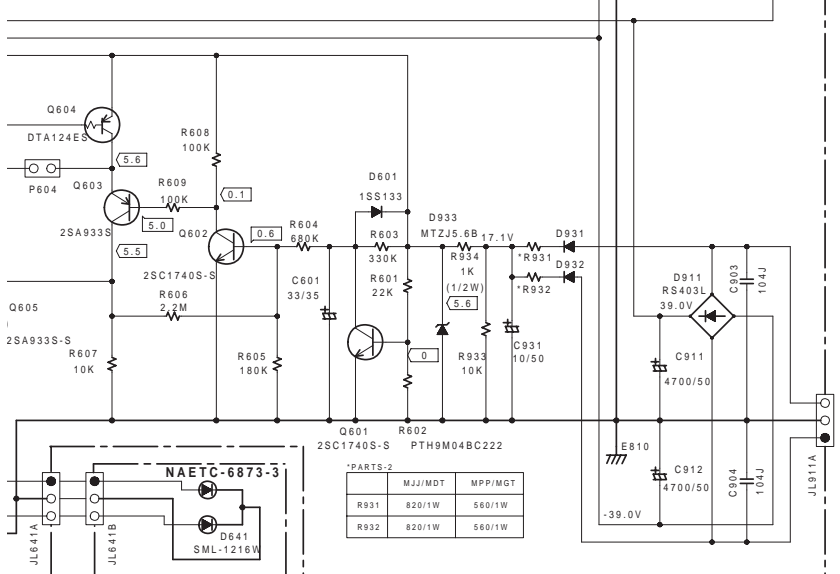
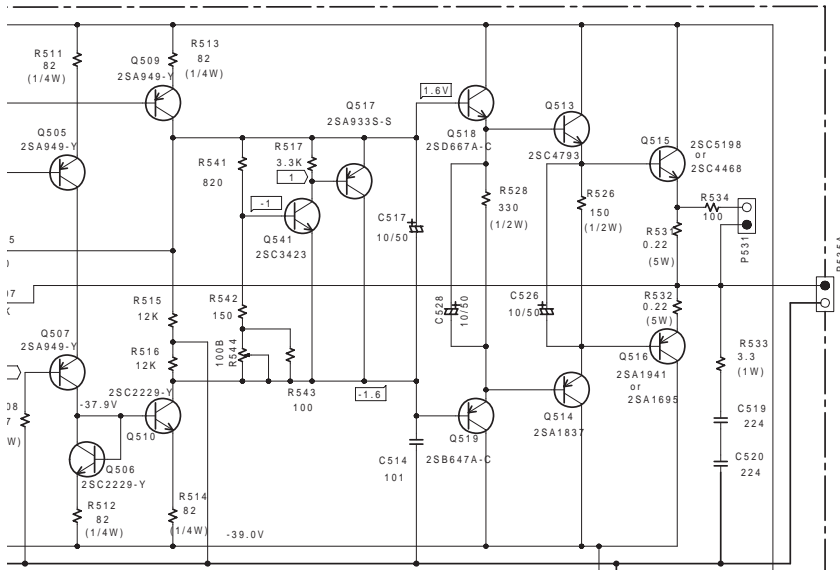
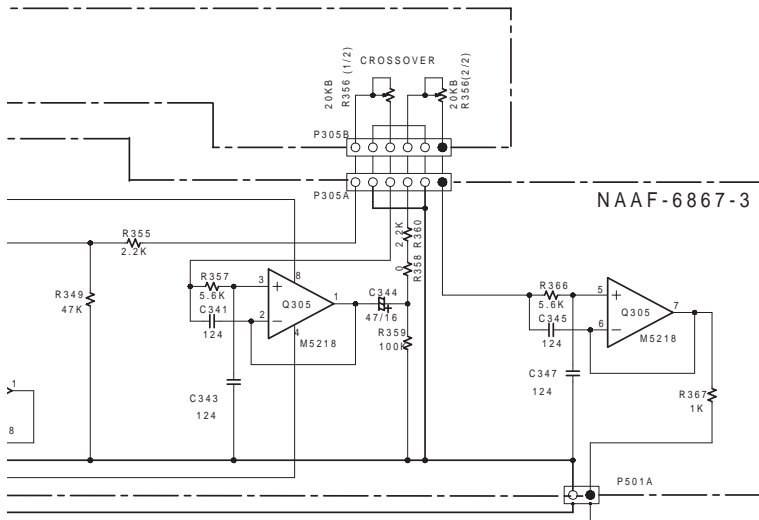
AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRATION COMME INDIQUE.



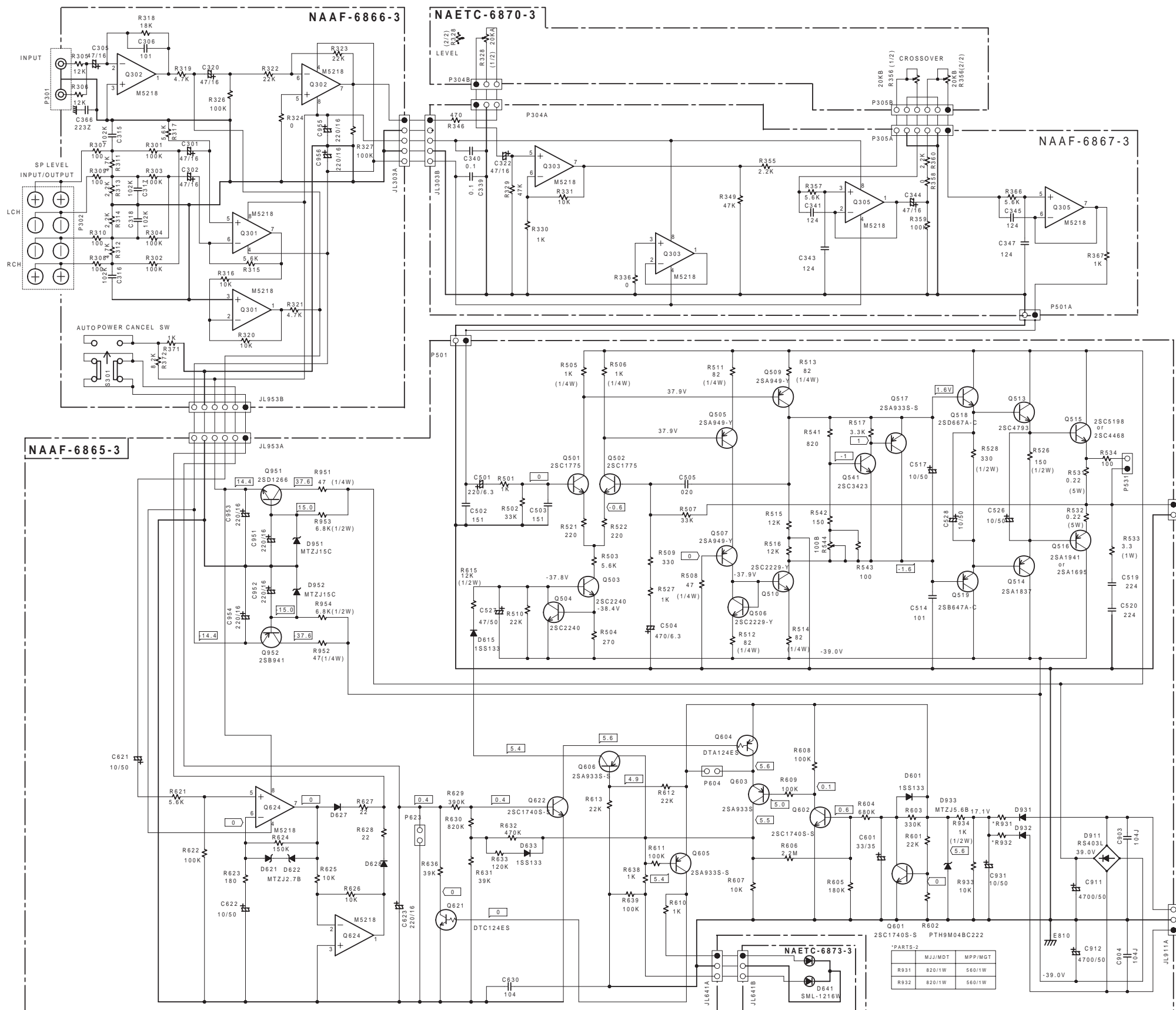
THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE HAZARD. REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MARKING ADJACENT TO THE SYMBOL.



CE SYMBOLE INDIQUE QUE LE FUSIBLE UTILISE EST E LENT. POUR UNE PROTECTION PERMANENTE, N'UTILISER QUE DES FUSIBLES DE MEME TYPE. CE DERNIER EST INDIQUE LA QU LE PRESENT SYMBOLE EST APPOSE.



SCHEMATIC DIAGRAM



NOTE

- THE COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH) IS DC VOLTAGE. (NO INPUT SIGNAL)
- ELECTROLYTIC CAPACITORS () ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
- EX) 030-3pF 330-33pF 331 330pF 333-0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
- EX) PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

CAUTION

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

ATTENTION

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1

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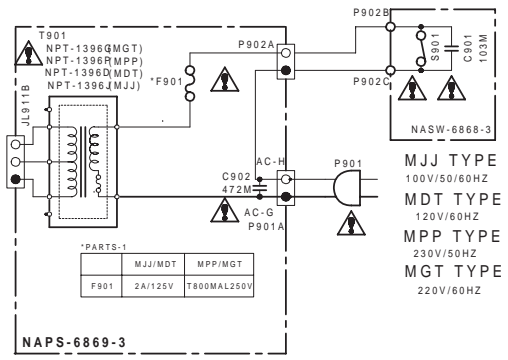
5

*PARTS-1

R931	820/1W	560/1W
R932	820/1W	560/1W

*PARTS-2

MJJ/MDT	MPP/MDT
R931	820/1W
R932	820/1W



MJJ TYPE 100V/50/60HZ

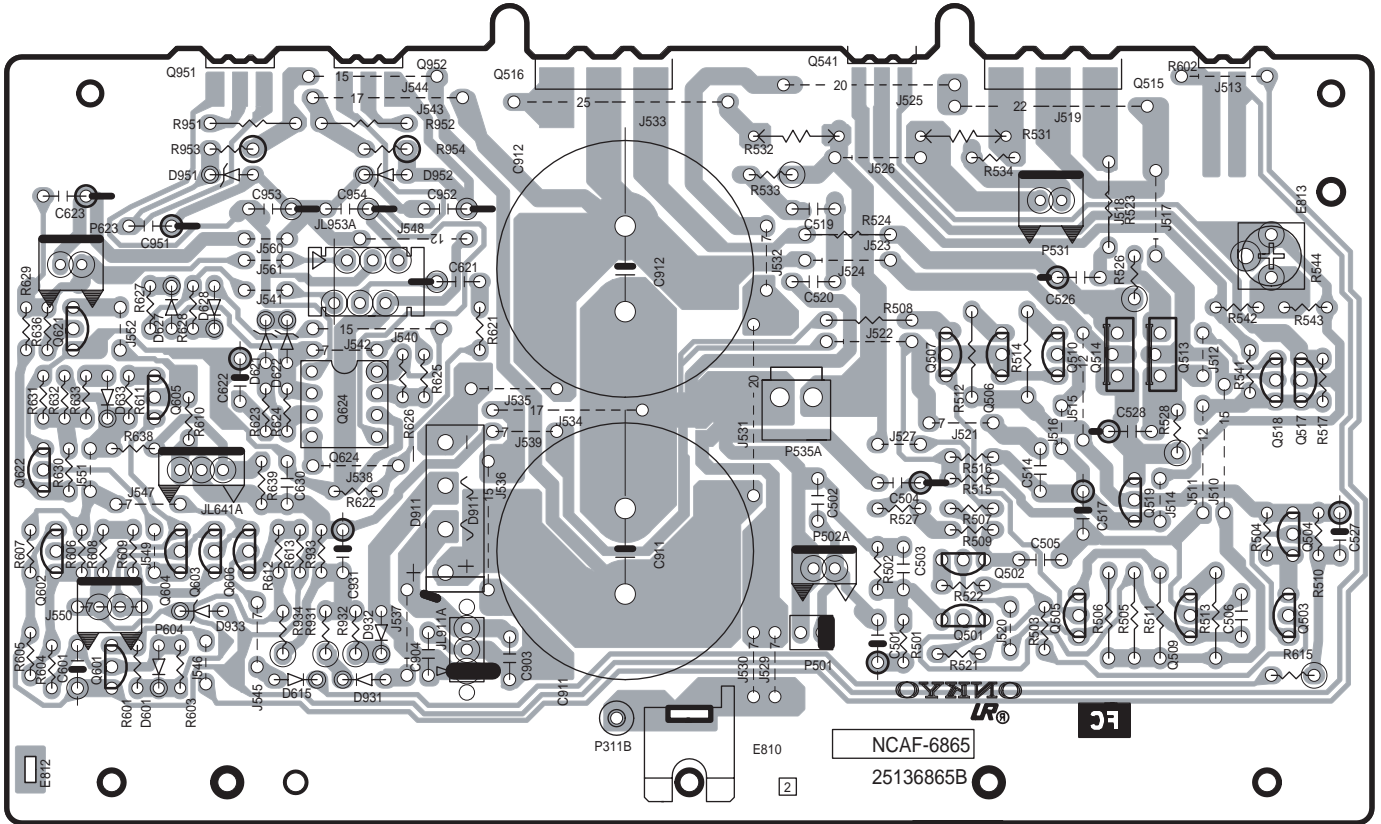
MDT TYPE 120V/60HZ

MPP TYPE 230V/50HZ

MGT TYPE 220V/60HZ

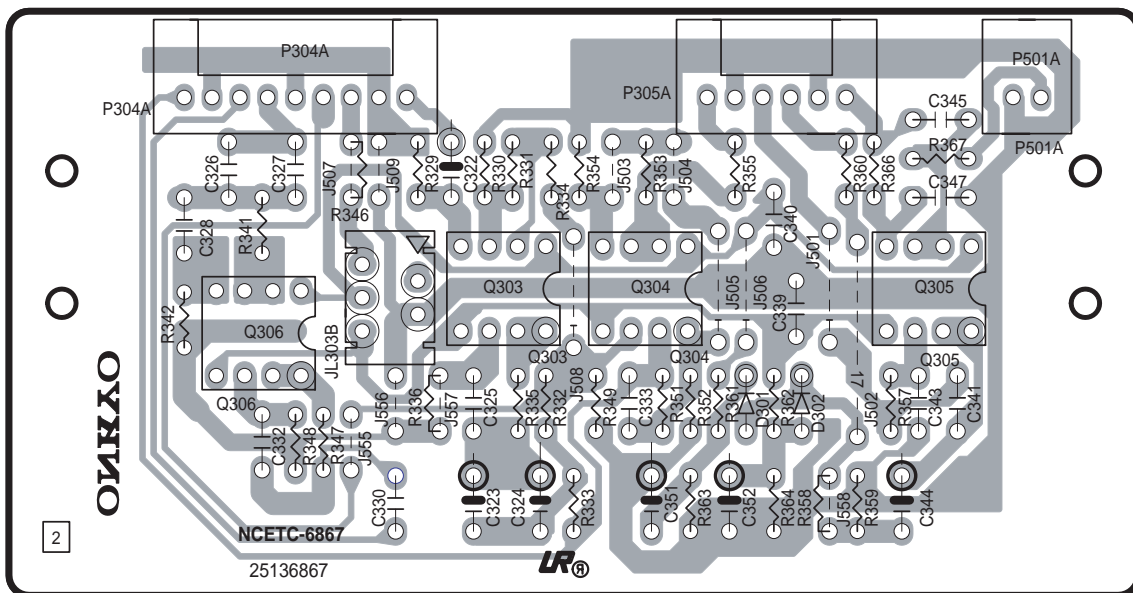
PRINTED CIRCUIT BOARD VIEWS

U1: Main circuit PC board NAAF-6865



Component side view

U3: Filter circuit PC board NAETC-6867

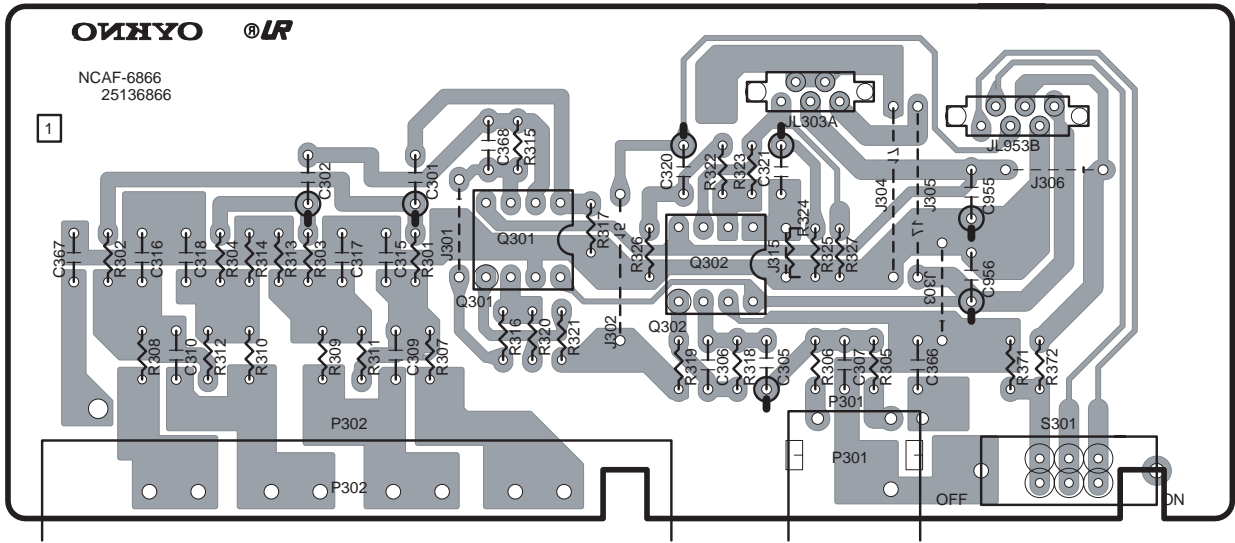


Component side view

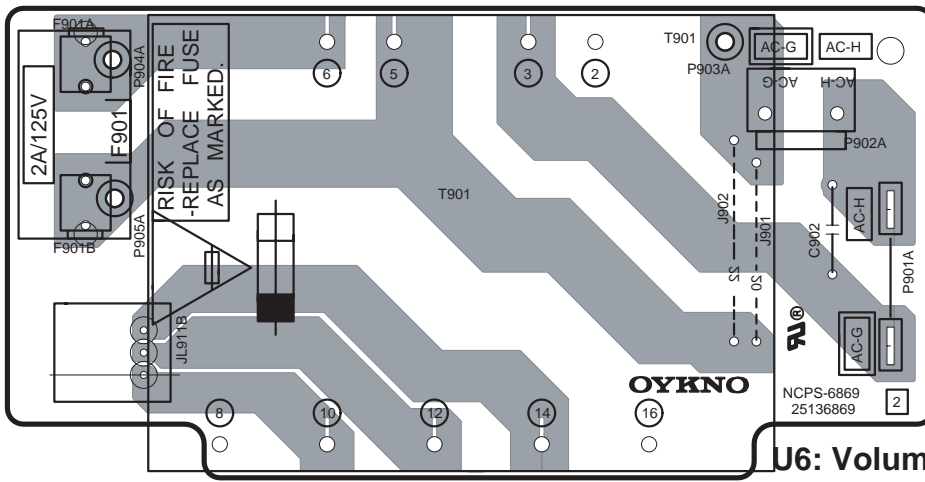
PRINTED CIRCUIT BOARD VIEWS

U2: Input terminal PC board NAAF-6866

Component side view

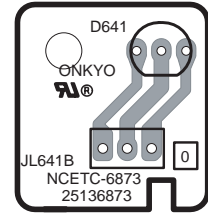


U5: Power transformer PC board NAPS-6869



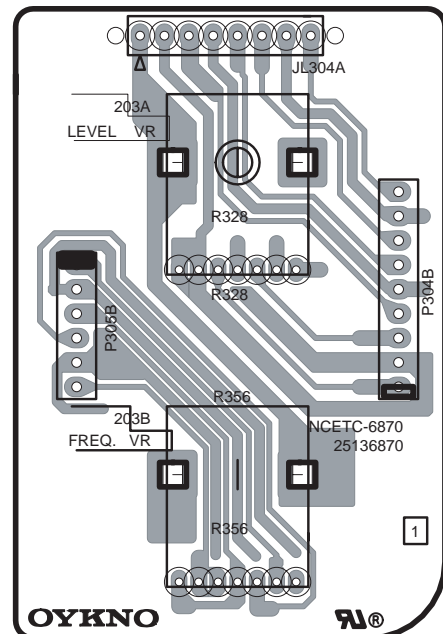
Component side view

U8: Power indicator PC board NAETC-6873



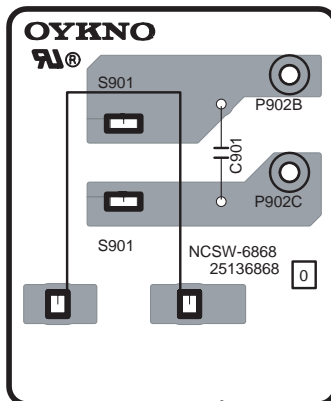
Component side view

U6: Volume control PC board NAETC-6870



Component side view

U4: Power switch PC board NASW-6868



Component side view

ADJUSTMENT PROCEDURES AND SETTING POSITION

1 Adjustment of idling current

- Set the voltage at P531 to 0.25mV by adjusting R544 under the condition of no input and no load.
(Auto standby switch is off position.)
- Set the voltage at P531 to 6mV by adjusting R544 after 5 minutes heat running.

2 Confirming operations

- Confirming operation of auto standby On / Off.
 - Auto standby switch is On position.
 - After 10 seconds when the input signal is no signal and power switch is ON, shorting for P604, check the LED color changes red to green.
 - When the unit is POWER ON and LED color is green, shorting for P623, check the LED color changes green to red.

3 The setting position before shipment.

(Front panel)

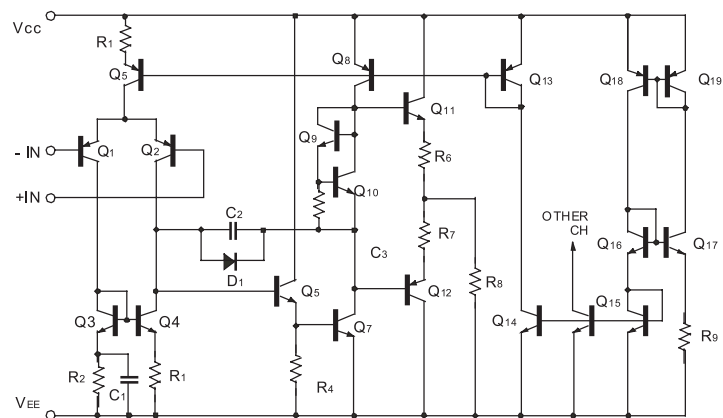
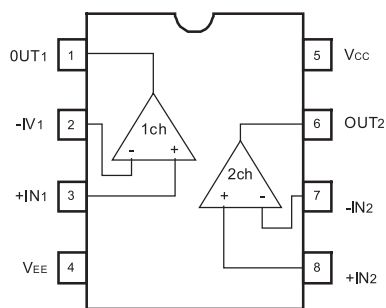
OUTPUT LEVEL	MIN
CROSSOVER FREQUENCY	MAX
POWER SWITCH	OFF

(Rear panel)

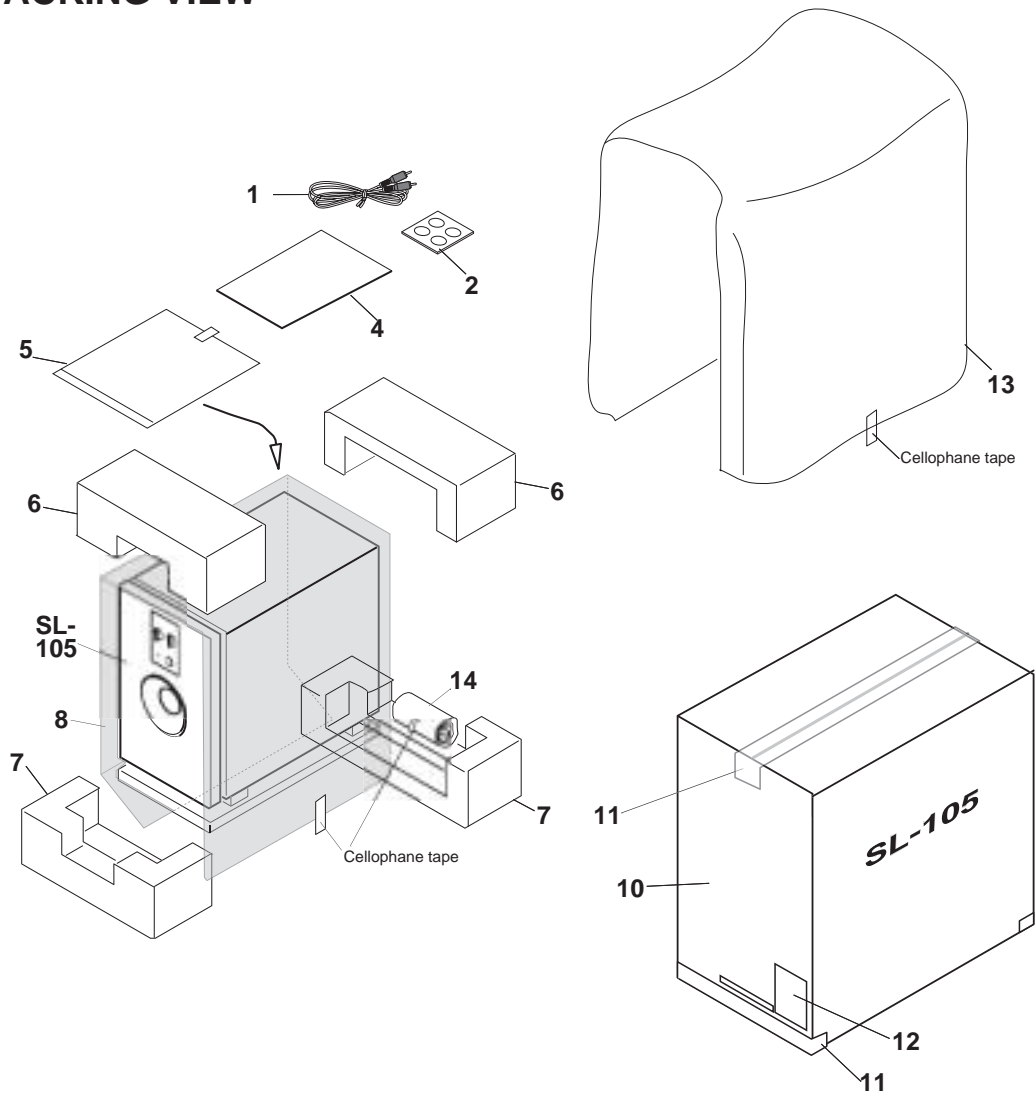
AUTO STANDBY SWITCH	ON
---------------------	----

IC BLOCK DIAGRAM

BA15218



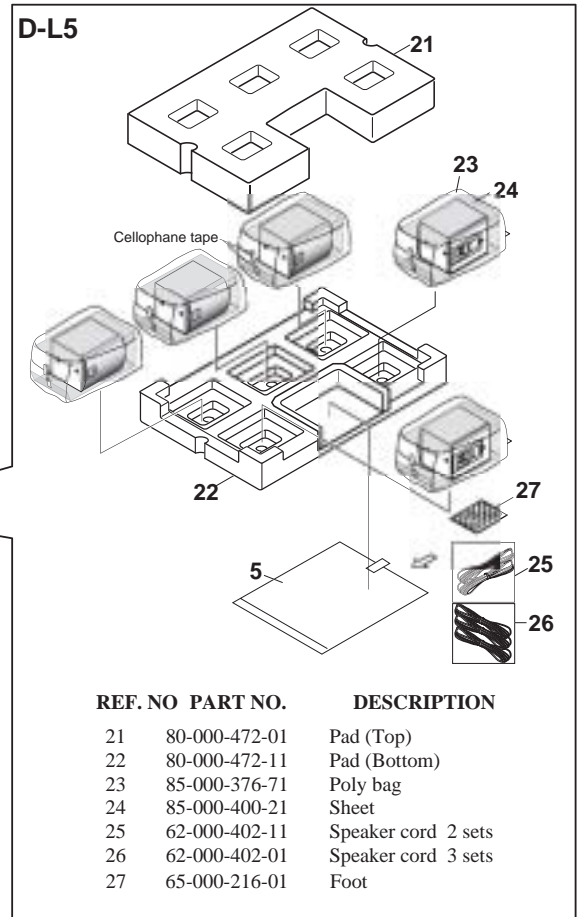
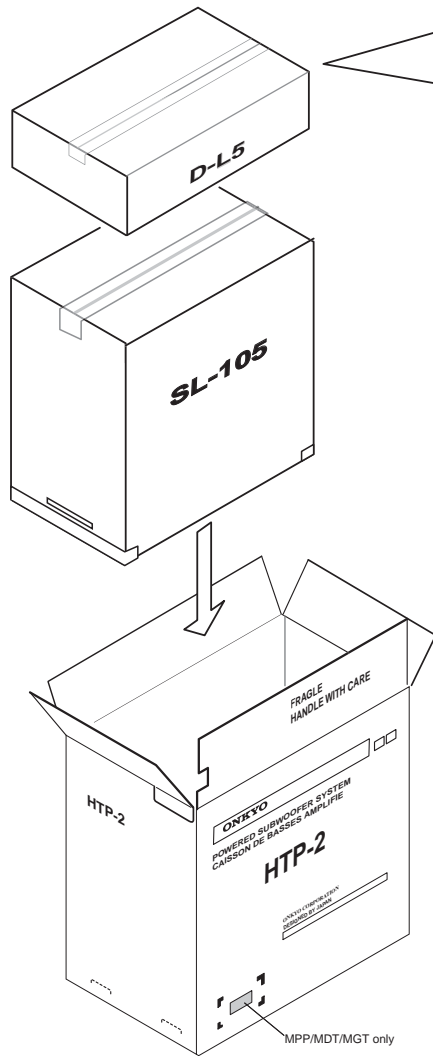
PACKING VIEW



PACKING PARTS LIST

REF. NO	PART NO.	DESCRIPTION	REF. NO	PART NO.	DESCRIPTION
1	62-000-394-01	RCA PIN cord	21	80-000-472-01	Pad (Top)
2	65-000-204-01	Foot	22	80-000-472-11	Pad (Bottom)
4	87-001-005-01	Instruction manual	23	85-000-376-71	Poly bag
		(Y) MDT/MGT/MPP	24	85-000-400-21	Sheet
	87-001-012-01	(B)MPP	25	62-000-402-11	Speaker cord 2 sets
5	85-000-198-11	Poly bag	26	62-000-402-01	Speaker cord 3 sets
6	80-000-471-01	Pad (Top)	27	65-000-216-01	Foot
7	80-000-471-11	Pad (Bottom)			
8	85-000-400-11	Sheet			
10	84-001-935-11	Carton box (Y)			
	84-001-935-21	Carton box (B)			
11	29110071	PP tape			
12	29362977	Label EAN (Y)			
	29363002	Label EAN (B)			
13	85-000-376-61	Poly bag			
14	85-000-354-21	Sheet			

PACKING VIEW
HTP-2 (SL-105 + D-L5)



For details, refer to the service manual of D-L5.
 (Ref. No. SS0123)

PARTS LIST

REF. NO	PART NO.	DESCRIPTION
1	84-001-928-11	Master carton
2	87-001-001-01	Instruction manual
3	89-000-488-01	Label EAN

ONKYO CORPORATION

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Tel: 089-849-320 Fax: 089-849-3265 E-mail: info@onkyo.de

ONKYO CHINA LIMITED

Units 2102-2107, Metroplaza Tower I, 223 Hing Fong Road, Kwai Chung,
N.T., HONG KONG Tel: 852-2429-3118 Fax: 852-2428-9039

PRINTED CIRCUIT BOARD PARTS LIST 2/2

U5: Power transformer PC board assy, NAPS-6869-3B/3C/3D

REF. NO.	PART NO.	DESCRIPTION
	Socket AS	
P902	2009990603UL	NSAS-2P0817
	Socket	
JL911B	25050280	NSCT-3P108
	Terminal	
P901A	⚠ 25060092	NTM-1S33, AC cord
	Plug	
P902A	25055676	NPLG-2P632
	Capacitor	
C902	⚠ 3300054	DE1310E472M-KH, ISC
	Fuse holders	
F901A,F901B	25052133	NSCT-1P2031
	Other	
C902A	⚠ 27301216	SB1925A, ISC cover
F901C	⚠ 29362519	T800mAL250V, Fuse label <MPP,MGT>

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

<MPP> : European model
<MDT> : Taiwanese model
<MGT> : Asian model

U6: Volume control PC board assy, NAETC-6870-3B/3C/3D

REF. NO.	PART NO.	DESCRIPTION
	Resistors	
R328	5132475	N14RGL20KA25Z, Level
R356	5132476	N14RGL20KB25Z, Cross over
	Other	
R328A,R356A	8631901	N-9F(P 0.75), Nut

U8: Power indicator PC board assy, NAETC-6873-3B/3C/3D

REF. NO.	PART NO.	DESCRIPTION
	LED	
D641	225295	SML1216W

EXPLODED VIEW PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
U1	1W204565-3B <MPP>	Main circuit PC board assy, NAAF-6865-3B
	1W204565-3C <MDT>	Main circuit PC board assy, NAAF-6865-3C
	1W204565-3D <MGT>	Main circuit PC board assy, NAAF-6865-3D
U2	1W204566-3B <MPP>	Input terminal PC board assy, NAAF-6866-3B
	1W204566-3C <MDT>	Input terminal PC board assy, NAAF-6866-3C
	1W204566-3D <MGP>	Input terminal PC board assy, NAAF-6866-3D
U3	1W204567-3B <MPP>	Filter circuit PC board assy, NAETC-6867-3B
	1W204567-3C <MDT>	Filter circuit PC board assy, NAETC-6867-3C
	1W204567-3D <MGP>	Filter circuit PC board assy, NAETC-6867-3D
U4	1W204568-3B <MPP>	Power switch PC board assy, NASW-6868-3B
	1W204568-3C <MDT>	Power switch PC board assy, NASW-6868-3C
	1W204568-3D <MGP>	Power switch PC board assy, NASW-6868-3D
U5	1W204569-3B <MPP>	Power transformer PC board assy, NAPS-6869-3B
	1W204569-3C <MDT>	Power transformer PC board assy, NAPS-6869-3C
	1W204569-3D <MGP>	Power transformer PC board assy, NAPS-6869-3D
U6	1W204570-3B <MPP>	Volume control PC board assy, NAETC-6870-3B
	1W204570-3C <MDT>	Volume control PC board assy, NAETC-6870-3C
	1W204570-3D <MGP>	Volume control PC board assy, NAETC-6870-3D
U7	1W204572-3B <MPP>	Support PC board, NAETC-6872-3B
	1W204572-3C <MDT>	Support PC board, NAETC-6872-3C
	1W204572-3D <MGP>	Support PC board, NAETC-6872-3D
U8	1W204573-3B <MPP>	Power indicator PC board assy, NAETC-6873-3B
	1W204573-3C <MDT>	Power indicator PC board assy, NAETC-6873-3C
	1W204573-3D <MGP>	Power indicator PC board assy, NAETC-6873-3D

<SPEAKER CABINET PARTS LIST>

REF. NO.	PART NO.	DESCRIPTION
S1	AZ200005-01	Cabinet assy (Y)
	AZ200005-02	Cabinet assy (B), <MPP> only
S2	AZ200006-01	Base assy (Y)
	AZ200006-02	Base assy (B), <MPP> only
S3	57-000-581-31	Panel (Y)
	57-000-581-41	Panel (B), <MPP> only
S4	58-000-302-11	Foot (Y)
	58-000-302-01	Foot (B), <MPP> only
S5	58-000-303-11	Knob A (Y), Power button
	58-000-303-01	Knob A (B), Power button <MPP> only
S6	58-000-304-11	Knob B (Y), Frequency/Output Level
	58-000-304-01	Knob B (B), Frequency/Output Level <MPP> only
S7	838440204	Tapping screw, 4 x 20 (BK)
S8	70-015-450-01	Tapping screw, 4 x 50 (YEL)
S9	70-015-414-01	Tapping screw, 4 x 14 (YEL)
S10	W20170A	Speaker system

NOTE: <MAP> European model
 <MDT> Taiwanese model only
 <MGT> Asian model only
 <Y> Yellow color model
 Black color model MPP only