

ONKYO SERVICE MANUAL


7.1-CH THX CERTIFIED HOME THEATER SPEAKER PACKAGE MODEL HTP-980(B)



Black model

B MDC	120V AC, 60Hz
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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.

ADJUSTMENT PROCEDURE

SKW-980 : POWERED SUBWOOFER (EuP AMP.) /

ADJUSTMENT OF IDLING CURRENT

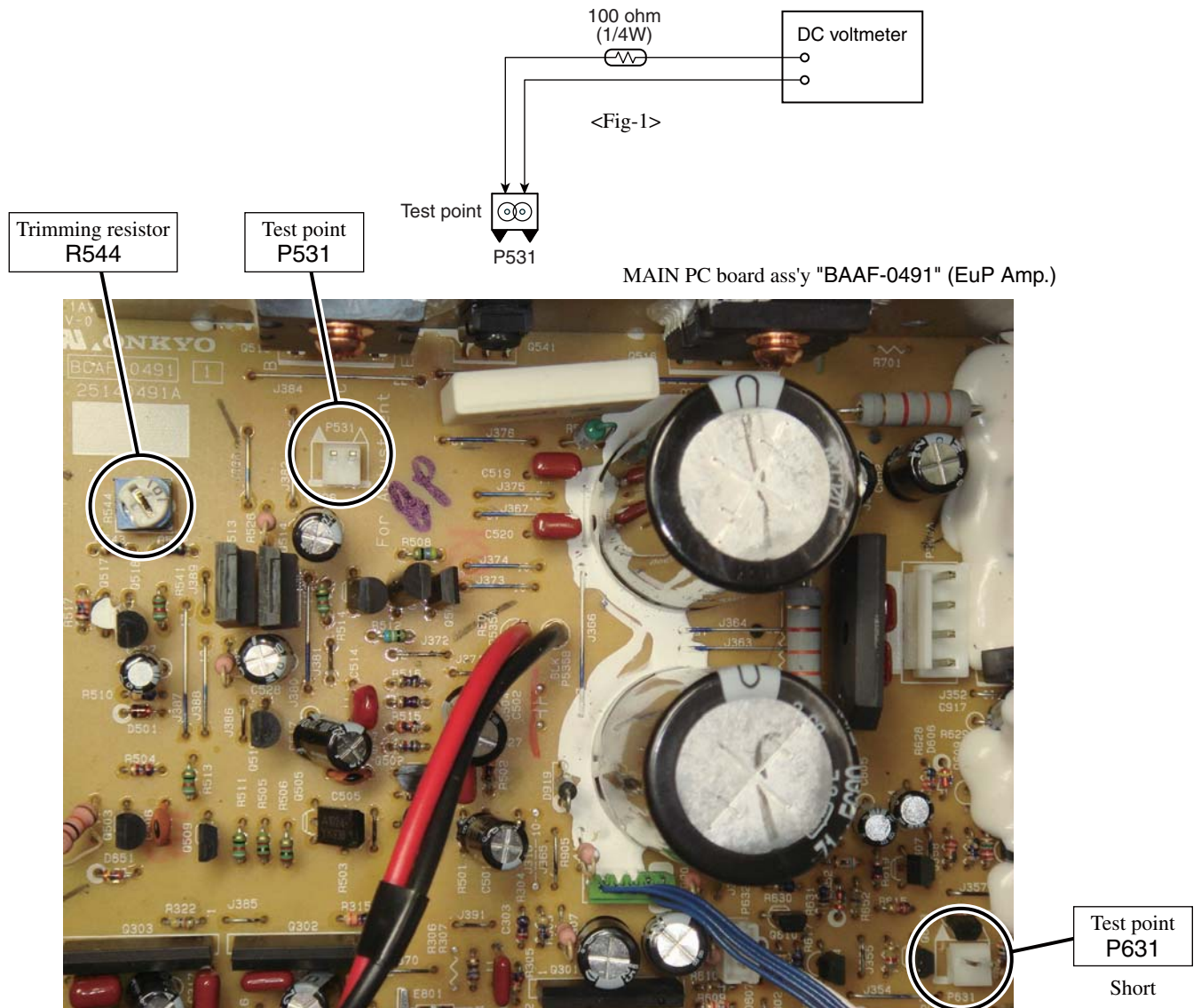
[When]

1. Exchange transistors (Q505 - Q519).
2. Exchange MAIN PC board ass'y (BAAF-0491).

[Procedure]

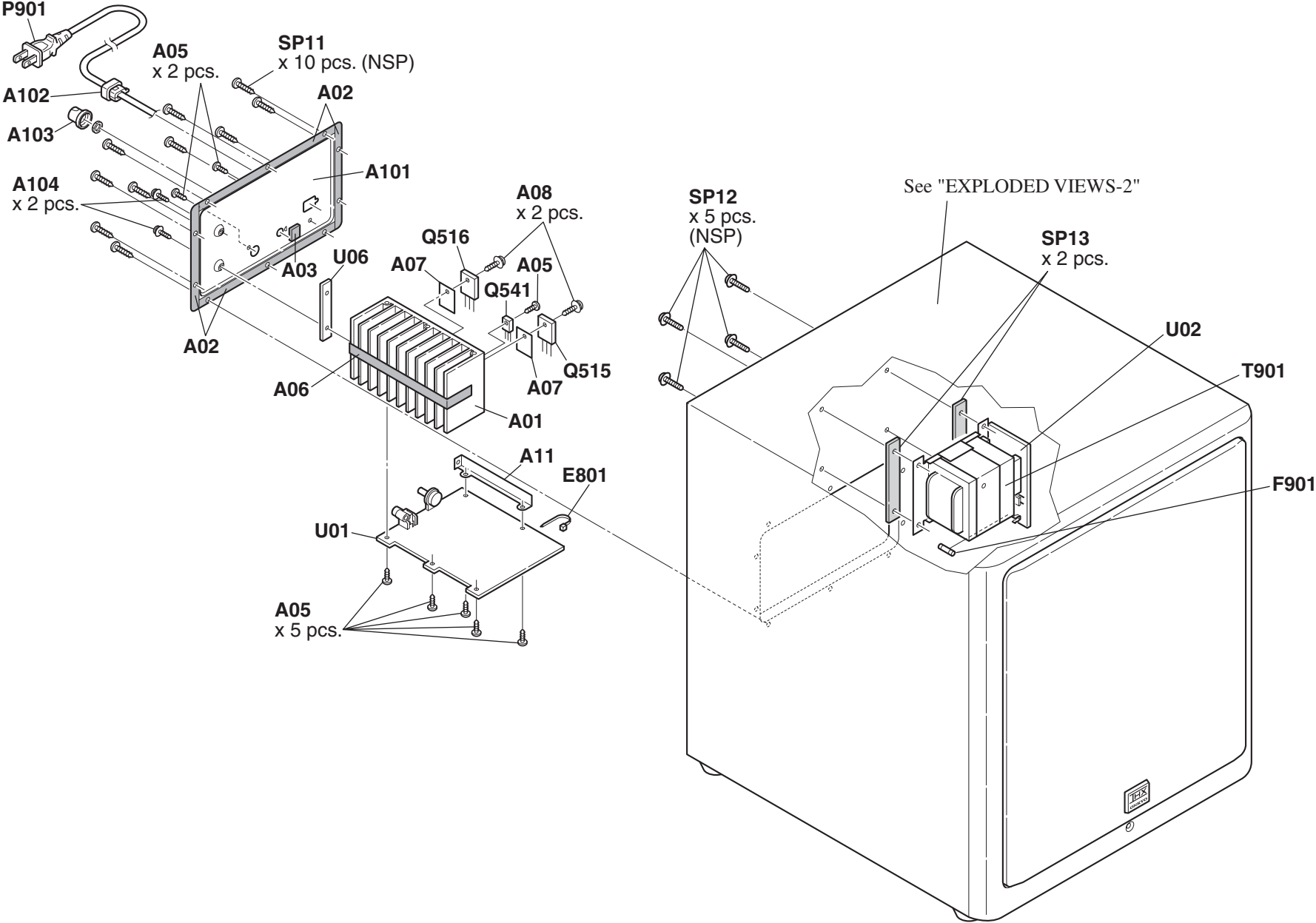
<Note> No speaker load and No input signal.

1. Short test point P631 for amplifier is under active mode.
2. Adjust the trimming resistor R544 so that the reading of multimeter becomes 52 ohm to 53 ohm.
3. Connect the DC voltmeter to test point P531. <Fig-1>
4. Connect the power cord into the AC outlet.
5. Press POWER button to turn on the unit. (MPP only)
6. Confirm the voltage of above point after 6 minutes to 8 minutes. (Heat running)
7. When less than 3.20 mV : Readjust the trimming resistor above so that the voltage becomes 4.5 mV to 5.0 mV.
When 3.30 mV to 5.20 mV : Not necessary to adjust.
When 5.21 mV to 10.0 mV : Readjust the trimming resistor above so that the voltage becomes 5.0 mV to 5.5 mV.
When 10.1 mV to 20.0 mV : Readjust the trimming resistor above so that the voltage becomes 5.6 mV to 6.0 mV.
8. Disconnect the power cord from the AC outlet.
9. Disconnect the DC voltmeter.

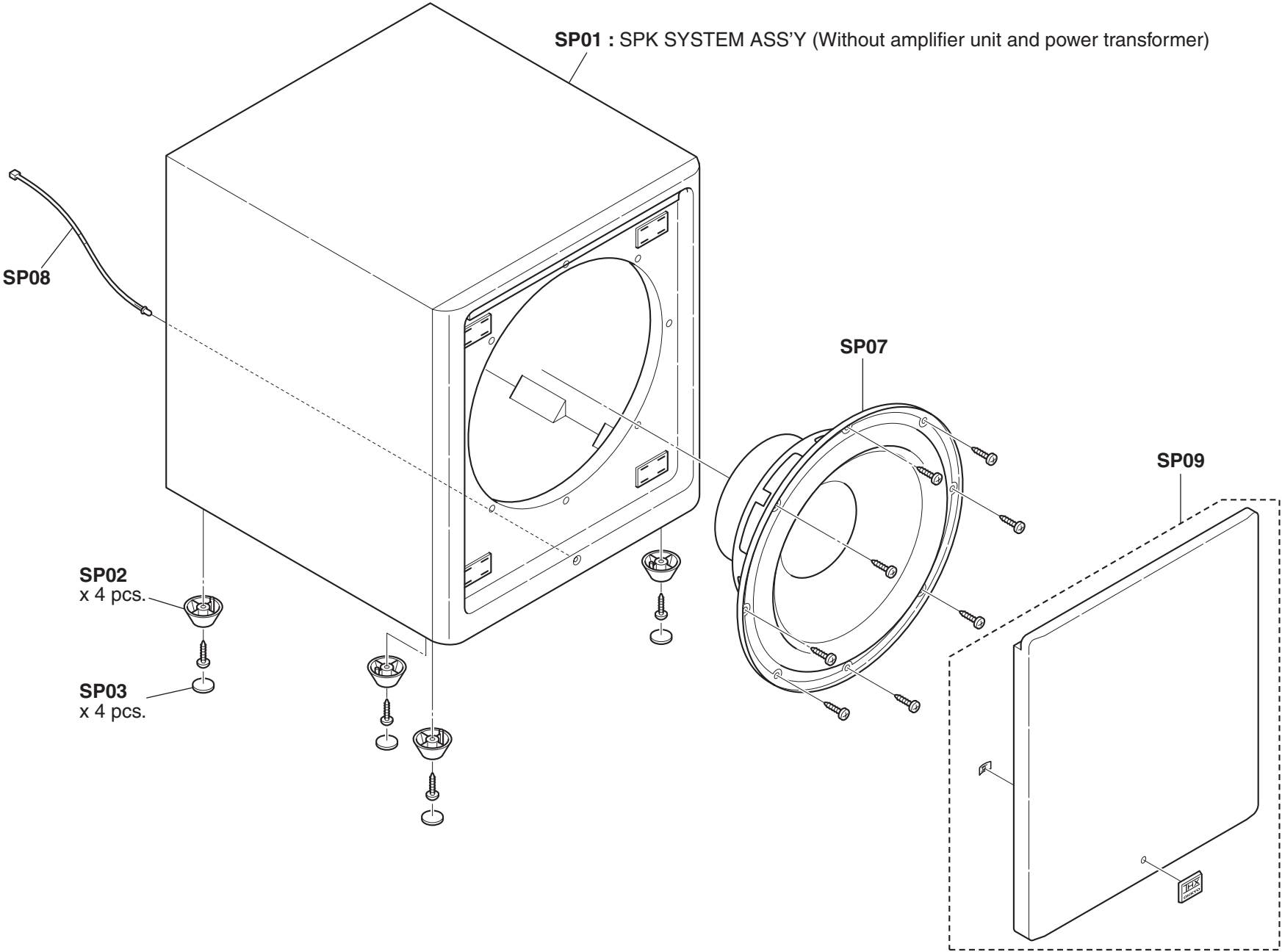


EXPLODED VIEWS-1

SKW-980 : POWERED SUBWOOFER (EuP Amp.)

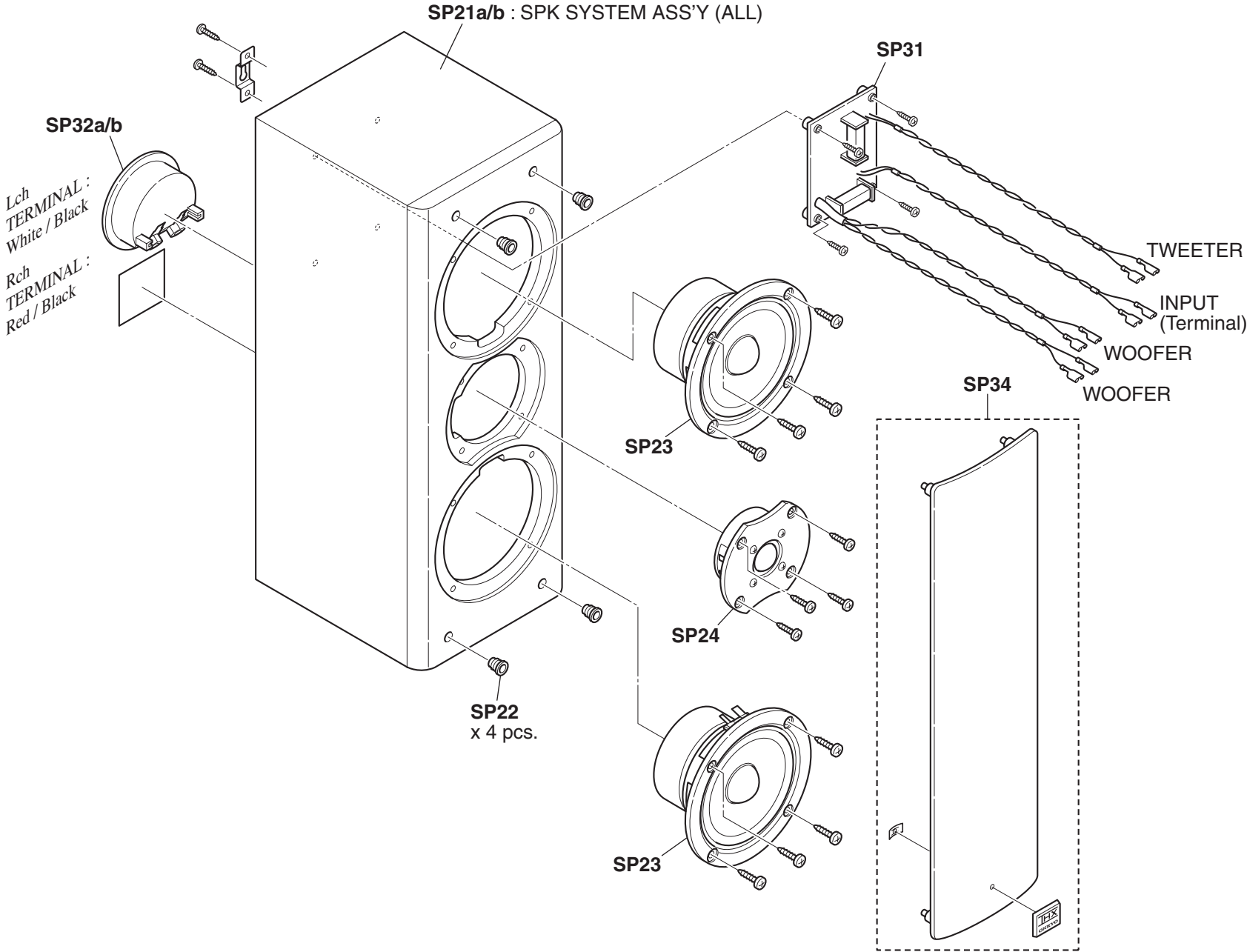


EXPLODED VIEWS-2
SKW-980 : POWERED SUBWOOFER



EXPLODED VIEWS-3

SKF-980 <L> / SKF-980 <R>



SP61a/b : SPK SYSTEM ASS'Y (ALL)

SP71

Lch
TERMINAL :
Blue / Black

Rch
TERMINAL :
Gray / Black

SP72a/b

TWEETER

SP65

SP64

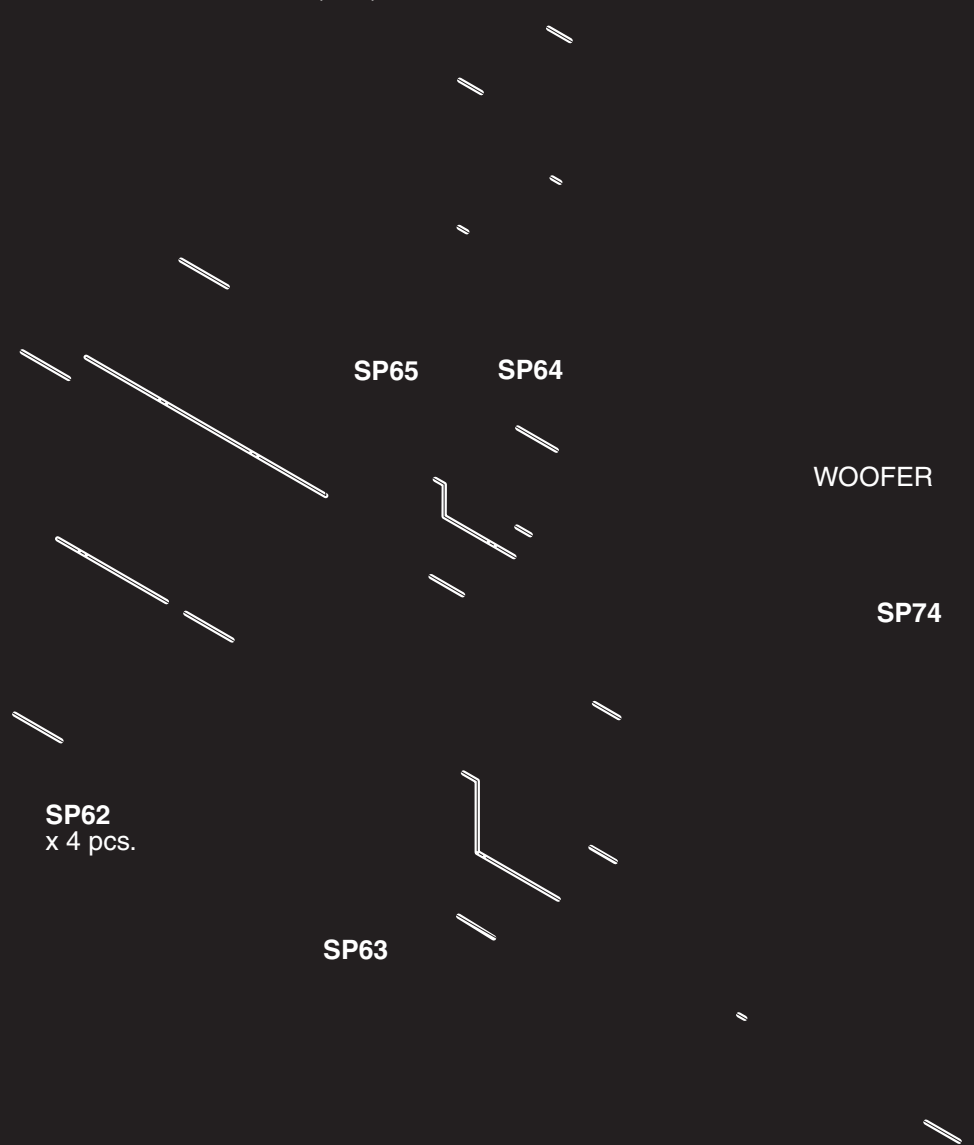
INPUT
(Terminal)

WOOFER

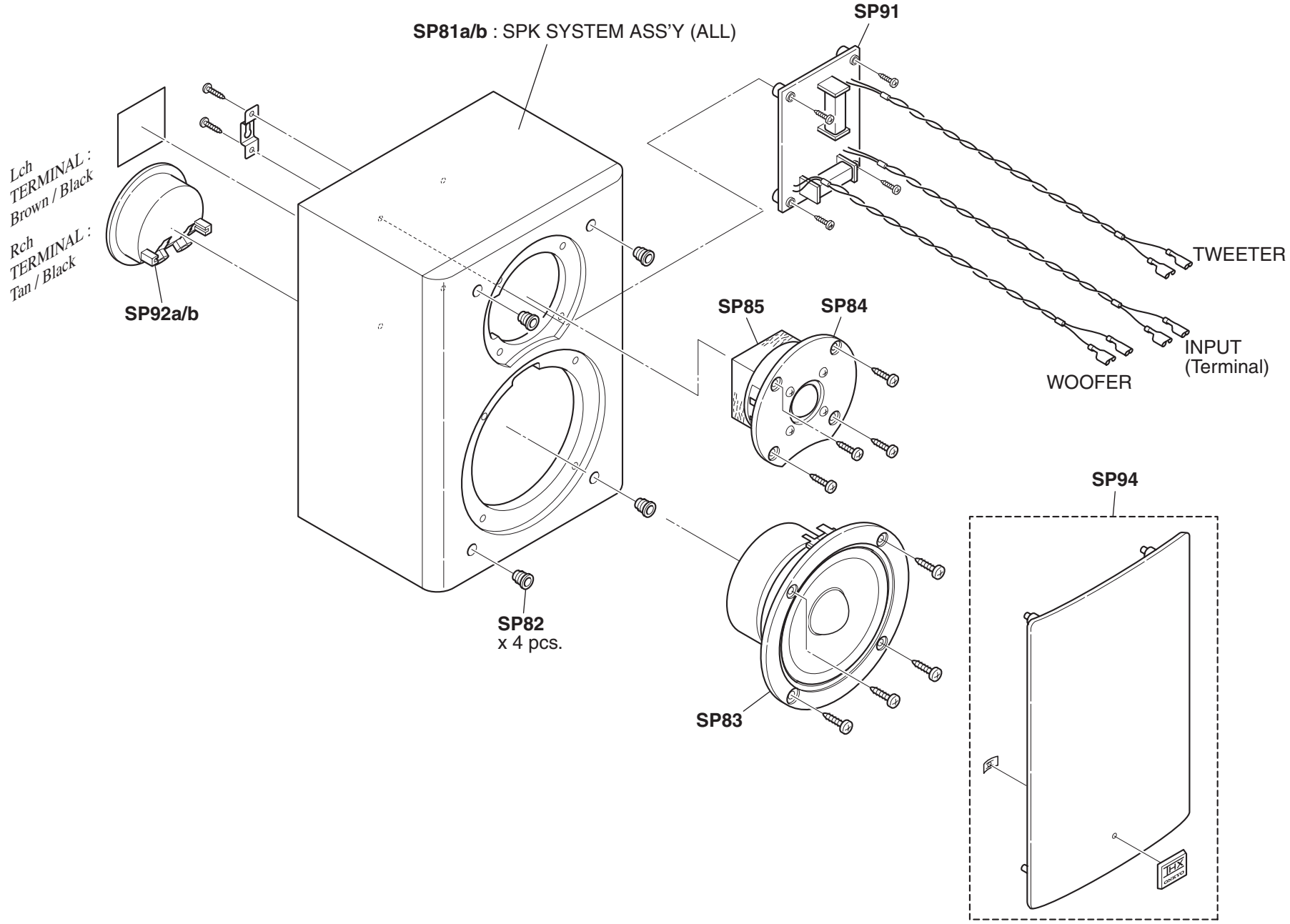
SP74

SP62
x 4 pcs.

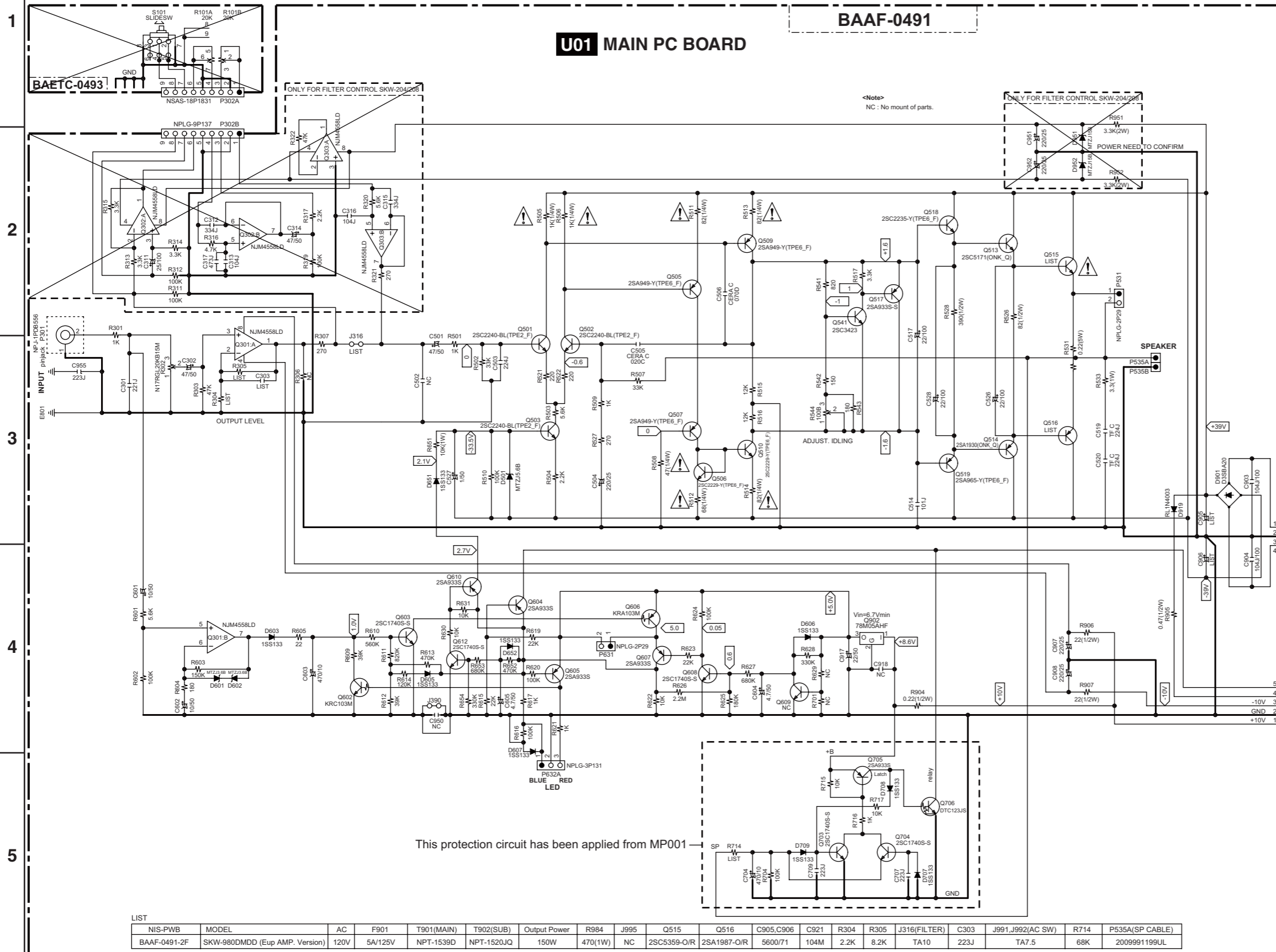
SP63



EXPLODED VIEWS-6
SKB-980 <L> / SKB-980 <R>



SCHEMATIC DIAGRAM
SKW-980 : POWERED SUBWOOFER (EuP AMP with protection.)



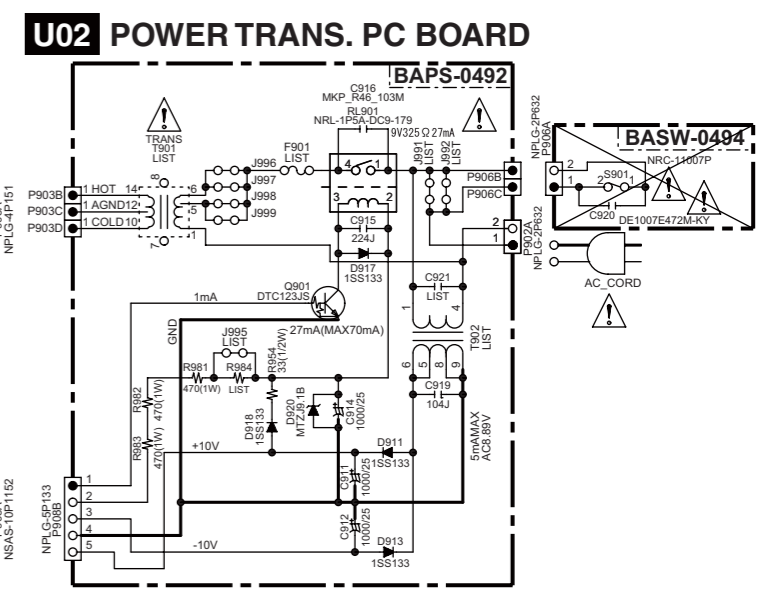
- NOTE**
- THE COMPONENTS IDENTIFIED BY MARK ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
 - VOLTAGE (MEASURED WITH VOLTMETER) IS DC VOLTAGE. (NO INPUT SIGNAL).
 - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
 - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
 - ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
 - 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.
 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.



LIST

NIS-PWB	MODEL	AC	F901	T901(MAIN)	T902(SUB)	Output Power	R984	J995	Q515	Q516	C905,C906	C921	R304	R305	J316(FILTER)	C303	J991,J992(AC SW)	R714	P535A(SP CABLE)
BAAF-0491-2F	SKW-980DMDD (Eup AMP. Version)	120V	5A/125V	NPT-1539D	NPT-1520JQ	150W	470(1W)	NC	2SC5359-O/R	2SA1987-O/R	5600/71	104M	2.2K	8.2K	TA10	223J	TA7.5	68K	2009991199UL

HTP-980

EXPLODED VIEWS PARTS LIST

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

<Notes>

- <L> : Lch
- <R> : Rch
- <MDC> : Canadian model only
- <MPP> : European model only

REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
EXPLODED	SKW-980 (B) : POWERED SUBWOOFER				
EXPLODED	AMPLIFIER SECTION				
EXPLODED	[SEMI CONDUCTOR]				
EXPLODED	Q515	TR		2203082	!
EXPLODED	Q515 or	TR	(1)	2203083	!
EXPLODED	Q516	TR		2203072	!
EXPLODED	Q516 or	TR	(1)	2203073GR	!
EXPLODED	Q541	TR		2202104	
EXPLODED	Q541 or	TR	(1)	2202103	
EXPLODED	<Note>				
EXPLODED	When replacement the following the transistor, made from the same HFE rank as the original type.				
EXPLODED	Q515, Q516, Q541				
EXPLODED	[CHASSIS SCREW]				
EXPLODED	A01	HEAT SINK		27160591	
EXPLODED	A02	CUSHION	---	28141682	
EXPLODED	A03	CUSHION	---	28141691	
EXPLODED	A05	SCREW		838430088GR	
EXPLODED	A06	TAPE		29110083	
EXPLODED	A07	ISO SHEET		223025	
EXPLODED	A08	SCREW		801634	
EXPLODED	A11	RETAINER		27142025	
EXPLODED	A12	RETAINER		27142177	
EXPLODED	A101	REAR PANEL		27124184A	
EXPLODED	A102	BUSHING		27300750	!
EXPLODED	A103	KNOB		28326463	
EXPLODED	A104	SCREW		801433GR	
EXPLODED	[TRANS COIL]				

EXPLODED	T901	P TRANS	NPT-1539D	1	2301863	
EXPLODED	[SW TRM]					
EXPLODED	F901	FUSE	5A-UL/T-233	1	252326GR	!
EXPLODED	P901	AC CORD	AS-UC-2	1	253368BLTK	!
EXPLODED	P901 or	AC CORD	AS-UC-2	(1)	253368AYUN	!
EXPLODED	[OTHERS]					
EXPLODED	E801	WIRE TIE	BSK-1	1	260208	
EXPLODED	F901C	LABEL	5A/125V	1	29360462	!
EXPLODED	[TUNER UNIT]					
EXPLODED	U01	MAIN PC BOARD ASS'Y	BAAF-0491-2F *	1	1B139591-2F	
EXPLODED	U02	POWER TRANS. PC BOARD ASS'Y	BAPS-0492-2F	1	1B139592-2F	
EXPLODED	U06	HOLDER PC BOARD	BAETC-0498-2F	1	---	NSP
EXPLODED	SPEAKER SECTION (SKW-980)					
EXPLODED	SP01	SPK SYSTEM ASS'Y(ALL)	SKW-980 (B) MDC	1	000-SKW980BMDC	<MDC>

EXPLODED	<Note>				
EXPLODED	SP01 = Without amplifier unit and power transformer				
EXPLODED	SP02	FOOT	(PLASTIC)	4	D249-W54001B-00
EXPLODED	SP03	CUSHION	Dia17.5 x 2T	4	442-902133-00
EXPLODED	SP07	WOOFER	12 inch (30cm) (FPI)	1	300-DNS4243000
EXPLODED	SP08	LED HARNESS ASS'Y	---	1	335-SKW750-01
EXPLODED	SP09	CLOTH FRAME ASS'Y	---	1	113-0BW980-10
EXPLODED	SP13	CUSHION RUBBER PAD	19 x 89 T2 RUBBER (FOR P-TRANS)	2	442-902138-00
EXPLODED	SKF-980 (B) <L> / <R> : FRONT SPEAKERS				
EXPLODED	SP21a	SPK SYSTEM ASS'Y(ALL)	SKF-980 (B) <L> MDC	1	000-SKF980FLBMDC <L>
EXPLODED	SP21b	SPK SYSTEM ASS'Y(ALL)	SKF-980 (B) <R> MDC	1	000-SKF980FRBMDC <R>
EXPLODED	SP22	CATCHING HOLDER	---	4	D230-DN3X01B-01
EXPLODED	SP23	WOOFER	W1277C (ONKYO ELE M)	2	W1277C
EXPLODED	SP24	TWEETER	TW3208B (ONKYO ELE M)	1	TW3208B
EXPLODED	SP31	CROSSOVER	SKF/SKC NETWORK PCB ASS'Y	1	311-SKF940-00
EXPLODED	SP32a	TERMINAL	WHITE / BLACK	1	332-H8107B-41 <L>
EXPLODED	SP32b	TERMINAL	RED / BLACK	1	332-H8107B-01 <R>
EXPLODED	SP34	CLOTH FRAME ASS'Y	(WITH GRILLE CLOTH and LOGO)	1	D201-F96001B-50
EXPLODED	SKC-980 (B) : CENTER SPEAKER				
EXPLODED	SP41	SPK SYSTEM ASS'Y(ALL)	SKC-980 (B) MDC	1	000-SKC980CBMDC
EXPLODED	SP42	CATCHING HOLDER	---	4	D230-DN3X01B-01
EXPLODED	SP43	WOOFER	W1277C (ONKYO ELE M)	2	W1277C
EXPLODED	SP44	TWEETER	TW3208B (ONKYO ELE M)	1	TW3208B
EXPLODED	SP51	CROSSOVER	SKF/SKC NETWORK PCB ASS'Y	1	311-SKF940-00
EXPLODED	SP52	TERMINAL	GREEN / BLACK	1	332-H8107B-31
EXPLODED	SP54	CLOTH FRAME ASS'Y	(WITH GRILLE CLOTH and LOGO)	1	D201-C96001B-50
EXPLODED	SKR-980 (B) <L> / <R> : SURROUND SPEAKERS				
EXPLODED	SP61a	SPK SYSTEM ASS'Y(ALL)	SKR-980 (B) <L> MDC	1	000-SKR980SLBMDC <L>
EXPLODED	SP61b	SPK SYSTEM ASS'Y(ALL)	SKR-980 (B) <R> MDC	1	000-SKR980SRBMDC <R>
EXPLODED	SP62	CATCHING HOLDER	---	4	D230-DN3X01B-01
EXPLODED	SP63	WOOFER	W1367B (ONKYO ELE M)	1	W1367B
EXPLODED	SP64	TWEETER	TW3223A (ONKYO ELE M)	1	TW3223A
EXPLODED	SP65	S. ABSORBER	25t x 50 x 50	1	443-925404-00
EXPLODED	SP71	CROSSOVER	SKM/SKB NETWORK PCB ASS'Y	1	311-SKM940-00
EXPLODED	SP72a	TERMINAL	BLUE / BLACK	1	332-H8107B-81 <L>
EXPLODED	SP72b	TERMINAL	GRAY / BLACK	1	332-H8107B-21 <R>
EXPLODED	SP74	CLOTH FRAME ASS'Y	(WITH GRILLE CLOTH and LOGO)	1	D201-M96001B-50

EXPLODED	SKB-980 (B) <L> / <R> : SURROUND BACK SPEAKERS					
EXPLODED	SP81a	SPK SYSTEM ASS'Y(ALL)	SKB-980 (B) <L> MDC	1	000-SKB980BLBMDC	<L>
EXPLODED	SP81b	SPK SYSTEM ASS'Y(ALL)	SKB-980 (B) <R> MDC	1	000-SKB980BRBMDC	<R>
EXPLODED	SP82	CATCHING HOLDER	---	4	D230-DN3X01B-01	
EXPLODED	SP83	WOOFER	W1367B (ONKYO ELE M)	1	W1367B	
EXPLODED	SP84	TWEETER	TW3223A (ONKYO ELE M)	1	TW3223A	
EXPLODED	SP85	S. ABSORBER	25t x 50 x 50	1	443-925404-00	
EXPLODED	SP91	CROSSOVER	SKM/SKB NETWORK PCB ASS'Y	1	311-SKM940-00	
EXPLODED	SP92a	TERMINAL	BROWN / BLACK	1	332-H8107B-91	<L>
EXPLODED	SP92b	TERMINAL	TAN / BLACK	1	332-H8107B-A1	<R>
EXPLODED	SP94	CLOTH FRAME ASS'Y	(WITH GRILLE CLOTH and LOGO)	1	D201-M96001B-50	

HTP-980

PRINTED CIRCUIT BOARD PARTS LIST

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

<Notes>

<MDC> : Canadian model only

<MPP> : European model only

SKW-980

U01 MAIN PC BOARD (BAAF-0491-2F)

U02 POWER TRANS. PC BOARD (BAPS-0492-2F)

	CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
PWB		[SEMI CONDUCTOR]				
PWB	D501	ZENER D	MTZJ5.6B	1	224470562T	
PWB	D601	ZENER D	MTZJ3.6B	1	224470362T	
PWB	D602	ZENER D	MTZJ3.6B	1	224470362T	
PWB	D603	DIODE	1SS133	1	223163T	
PWB	D605	DIODE	1SS133	1	223163T	
PWB	D606	DIODE	1SS133	1	223163T	
PWB	D607	DIODE	1SS133	1	223163T	
PWB	D651	DIODE	1SS133	1	223163T	
PWB	D652	DIODE	1SS133	1	223163T	
PWB	D707	DIODE	1SS133	1	223163T	
PWB	D708	DIODE	1SS133	1	223163T	
PWB	D709	DIODE	1SS133	1	223163T	
PWB	D901	DIODE	D3SBA60	1	22380272F	
PWB	D901 or	DIODE	RBV402	(1)	22380022F	
PWB	D911	DIODE	1SS133	1	223163T	
PWB	D913	DIODE	1SS133	1	223163T	
PWB	D917	DIODE	1SS133	1	223163T	
PWB	D918	DIODE	1SS133	1	223163T	
PWB	D919	DIODE	RL1N4003	1	22380260T	
PWB	D920	ZENER D	MTZJ9.1B	1	224470912T	
PWB		<Note>				
PWB		When replacement the following the transistor, made from the same HFE rank as the original type.				
PWB	Q301	IC	NJM4558L-D	1	22240293	
PWB	Q501	TR	2SC2240-BL(TPE2_F)	1	2211406T	
PWB	Q502	TR	2SC2240-BL(TPE2_F)	1	2211406T	
PWB	Q503	TR	2SC2240-BL(TPE2_F)	1	2211406T	

PWB	Q505	TR	2SA949-O(TPE6_F)	1	2211353T	
PWB	Q505 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T	
PWB	Q505 or	TR	KTA1024-Y	(1)	2215844T	
PWB	Q506	TR	2SC2229-O(TPE6_F)	1	2211633T	
PWB	Q506 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T	
PWB	Q506 or	TR	KTC3206-Y	(1)	2215854T	
PWB	Q507	TR	2SA949-O(TPE6_F)	1	2211353T	
PWB	Q507 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T	
PWB	Q507 or	TR	KTA1024-Y	(1)	2215844T	
PWB	Q509	TR	2SA949-O(TPE6_F)	1	2211353T	
PWB	Q509 or	TR	2SA949-Y(TPE6_F)	(1)	2211354T	
PWB	Q509 or	TR	KTA1024-Y	(1)	2215844T	
PWB	Q510	TR	2SC2229-O(TPE6_F)	1	2211633T	
PWB	Q510 or	TR	2SC2229-Y(TPE6_F)	(1)	2211634T	

PWB	Q510 or	TR	KTC3206-Y	(1)	2215854T
PWB	Q513	TR	2SC5171(ONK_Q)	1	2203010
PWB	Q513 or	TR	KTD2061-Y	(1)	2203434
PWB	Q514	TR	2SA1930(ONK_Q)	1	2203000
PWB	Q514 or	TR	KTB1369-Y	(1)	2203424
PWB	Q517	TR	2SA933S-S	1	2213355T
PWB	Q517 or	TR	2SA933S-R	(1)	2213354T
PWB	Q517 or	TR	KTA1267-GR	(1)	2215995T
PWB	Q518	TR	2SC2235-Y(TPE6_F)	1	2211654T
PWB	Q519	TR	2SA965-Y(TPE6_F)	1	2211644T
PWB	Q602	TR	KRC103M	1	2215810T
PWB	Q602 or	TR	DTC124ES	(1)	2213160T
PWB	Q603	TR	2SC1740S-S	1	2213285T
PWB	Q603 or	TR	2SC1740S-R	(1)	2213284T
PWB	Q603 or	TR	KTC3199-GR	(1)	2215864T
PWB	Q604	TR	2SA933S-S	1	2213355T
PWB	Q604 or	TR	2SA933S-R	(1)	2213354T
PWB	Q604 or	TR	KTA1267-GR	(1)	2215995T
PWB	Q605	TR	2SA933S-S	1	2213355T
PWB	Q605 or	TR	2SA933S-R	(1)	2213354T
PWB	Q605 or	TR	KTA1267-GR	(1)	2215995T
PWB	Q606	TR	KRA103M	1	2215780T
PWB	Q606 or	TR	DTA124ES	(1)	2212600T
PWB	Q607	TR	2SA933S-S	1	2213355T
PWB	Q607 or	TR	2SA933S-R	(1)	2213354T
PWB	Q607 or	TR	KTA1267-GR	(1)	2215995T
PWB	Q608	TR	2SC1740S-S	1	2213285T
PWB	Q608 or	TR	2SC1740S-R	(1)	2213284T
PWB	Q608 or	TR	KTC3199-GR	(1)	2215864T
PWB	Q610	TR	2SA933S-S	1	2213355T
PWB	Q610 or	TR	2SA933S-R	(1)	2213354T
PWB	Q610 or	TR	KTA1267-GR	(1)	2215995T
PWB	Q612	TR	2SC1740S-S	1	2213285T
PWB	Q612 or	TR	2SC1740S-R	(1)	2213284T
PWB	Q612 or	TR	KTC3199-GR	(1)	2215864T
PWB	Q703	TR	2SC1740S-S	1	2213285T
PWB	Q703 or	TR	2SC1740S-R	(1)	2213284T

PWB	Q703 or	TR	KTC3199-GR	(1)	2215864T	
PWB	Q704	TR	2SC1740S-S	1	2213285T	
PWB	Q704 or	TR	2SC1740S-R	(1)	2213284T	
PWB	Q704 or	TR	KTC3199-GR	(1)	2215864T	
PWB	Q705	TR	2SA933S-S	1	2213355T	
PWB	Q705 or	TR	2SA933S-R	(1)	2213354T	
PWB	Q705 or	TR	KTA1267-GR	(1)	2215995T	
PWB	Q706	TR	DTC123JS	1	2213640T	
PWB	Q901	TR	DTC123JS	1	2213640T	
PWB	Q902	IC	78M05AHF(MPC78M05AHF)	1	222780055NEC	
PWB	Q902 or	IC	78M05(NJM78M05FA)	(1)	222780055JRC	
PWB	[TRANS COIL]					
PWB	T902	P TRANS	NPT-1520JQ	1	2301812A	!
PWB	[CAPACITOR]					

PWB	C301	UPZ C	2AUPZTF221JE	1	376332214T	
PWB	C302	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
PWB	C303	TF C	ECQ-V50V-223J	1	374722234T	
PWB	C501	UTSP C	CE04W50V 47M(UTSP)	1	397584707T	
PWB	C503	TF C	ECQ-V50V-224J	1	374722244T	
PWB	C504	UTSP C	CE04W25V-220M(UTSP)	1	397552217T	
PWB	C505	CERA C	CC45CH50V-020C	1	345340201T	
PWB	C506	CERA C	CC45CH50V-070D	1	345340702T	
PWB	C514	UPZ C	2AUPZTF101JE	1	376331014T	
PWB	C517	VR C	CE04W100V-22M(VR)	1	394692207T	
PWB	C519	TF C	ECQ-V50V-224J	1	374722244T	
PWB	C520	TF C	ECQ-V50V-224J	1	374722244T	
PWB	C526	VR C	CE04W100V-22M(VR)	1	394692207T	
PWB	C527	UTSP C	CE04W50V-1M(UTSP)	1	397580107T	
PWB	C528	VR C	CE04W100V-22M(VR)	1	394692207T	
PWB	C601	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
PWB	C602	UTSP C	CE04W50V-10M(UTSP)	1	397581007T	
PWB	C603	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
PWB	C604	UTSP C	CE04W50V-4.7M(UTSP)	1	397580477T	
PWB	C605	UTSP C	CE04W50V-4.7M(UTSP)	1	397580477T	
PWB	C704	UTSP C	CE04W10V-470M(UTSP)	1	397534717T	
PWB	C707	TF C	ECQ-V50V-223J	1	374722234T	
PWB	C709	TF C	ECQ-V50V-223J	1	374722234T	
PWB	C903	TF C	ECQ-V100V-104J	1	374731044T	
PWB	C904	TF C	ECQ-V100V-104J	1	374731044T	
PWB	C905	ELECT C	CE62W71V5600M	1	3504444	
PWB	C906	ELECT C	CE62W71V5600M	1	3504444	
PWB	C907	UTSP C	CE04W25V-220M(UTSP)	1	397552217T	
PWB	C908	UTSP C	CE04W25V-220M(UTSP)	1	397552217T	
PWB	C911	UTSK C	CE04W25V-1000M(UTSK)	1	398351027S	
PWB	C912	UTSK C	CE04W25V-1000M(UTSK)	1	398351027S	
PWB	C914	UTSK C	CE04W25V-1000M(UTSK)	1	398351027S	
PWB	C915	TF C	ECQ-V50V-224J	1	374722244T	
PWB	C916	IS C	MKP R46 103M	1	3500202S	!
PWB	C917	UTSP C	CE04W50V-22M(UTSP)	1	397582207T	
PWB	C919	TF C	ECQ-V50V-104J	1	374721044T	
PWB	C921	PLA C	MKP R46 104M	1	3800041S	!

PWB	C955	TF C	ECQ-V50V-223J	1	374722234T	
PWB	[RESISTOR]					
PWB	R301	CARBON R	R16J-1K	1	417341024T	
PWB	R302	VARI R	N17RGL20KB15M	1	5151508	
PWB	R303	CARBON R	R16J-47K	1	417344734T	
PWB	R304	CARBON R	R16J-2.2K	1	417342224T	
PWB	R305	CARBON R	R16J-8.2K	1	417348224T	
PWB	R307	CARBON R	R16J-270	1	417342714T	
PWB	R501	CARBON R	R16J-1K	1	417341024T	
PWB	R502	CARBON R	R16J-33K	1	417343334T	
PWB	R503	CARBON R	R16J-5.6K	1	417345624T	
PWB	R504	CARBON R	R16J-2.2K	1	417342224T	
PWB	R505	NF CARBON R	R25J-1.0K	1	415471024T	!
PWB	R506	NF CARBON R	R25J-1.0K	1	415471024T	!

PWB	R507	CARBON R	R16J-33K	1	417343334T	
PWB	R508	NF CARBON R	R25J-47	1	415474704T	!
PWB	R509	CARBON R	R16J-1K	1	417341024T	
PWB	R510	CARBON R	R16J-100K	1	417341044T	
PWB	R511	NF CARBON R	R25J-82	1	415478204T	!
PWB	R512	NF CARBON R	R25J-68	1	415476804T	!
PWB	R513	NF CARBON R	R25J-82	1	415478204T	!
PWB	R514	NF CARBON R	R25J-82	1	415478204T	!
PWB	R515	CARBON R	R16J-12K	1	417341234T	
PWB	R516	CARBON R	R16J-12K	1	417341234T	
PWB	R517	CARBON R	R16J-3.3K	1	417343324T	
PWB	R521	CARBON R	R16J-220	1	417342214T	
PWB	R522	CARBON R	R16J-220	1	417342214T	
PWB	R526	METAL O R	RS1/2WBJ-82	1	443528204T	
PWB	R527	CARBON R	R16J-270	1	417342714T	
PWB	R528	METAL O R	RS1/2WBJ-390	1	443523914T	
PWB	R531	METAL PR	RF-5EGKR22	1	4000201	
PWB	R531 or	METAL PR	RGC55 0.22	(1)	4000132	
PWB	R531 or	METAL P R	RGC55C 0.22 K	(1)	4000157	
PWB	R531 or	METAL PR	MPR5W+5W 0R22	(1)	4000233	
PWB	R533	METAL R	RNU1WCJ-3.3	1	453630334T	
PWB	R541	NF CARBON R	R25J-820	1	415478214T	!
PWB	R542	CARBON R	R16J-150	1	417341514T	
PWB	R543	CARBON R	R16J-180	1	417341814T	
PWB	R544	TRIM R	N06HR100BC	1	5210399T	
PWB	R601	CARBON R	R16J-5.6K	1	417345624T	
PWB	R602	CARBON R	R16J-100K	1	417341044T	
PWB	R603	CARBON R	R16J-150K	1	417341544T	
PWB	R604	CARBON R	R16J-180	1	417341814T	
PWB	R605	CARBON R	R16J-22	1	417342204T	
PWB	R609	CARBON R	R16J-39K	1	417343934T	
PWB	R610	CARBON R	R16J-560K	1	417345644T	
PWB	R611	CARBON R	R16J-820K	1	417348244T	
PWB	R612	CARBON R	R16J-39K	1	417343934T	
PWB	R613	CARBON R	R16J-470K	1	417344744T	
PWB	R614	CARBON R	R16J-120K	1	417341244T	
PWB	R615	CARBON R	R16J-22K	1	417342234T	

PWB	R616	CARBON R	R16J-100K	1	417341044T
PWB	R617	CARBON R	R16J-1K	1	417341024T
PWB	R619	CARBON R	R16J-22K	1	417342234T
PWB	R620	CARBON R	R16J-100K	1	417341044T
PWB	R621	CARBON R	R16J-1K	1	417341024T
PWB	R622	CARBON R	R16J-10K	1	417341034T
PWB	R623	CARBON R	R16J-22K	1	417342234T
PWB	R624	CARBON R	R16J-100K	1	417341044T
PWB	R625	CARBON R	R16J-180K	1	417341844T
PWB	R626	CARBON R	R16J-2.2M	1	417342254T
PWB	R627	CARBON R	R16J-680K	1	417346844T
PWB	R628	CARBON R	R16J-330K	1	417343344T
PWB	R630	CARBON R	R16J-10K	1	417341034T
PWB	R631	CARBON R	R16J-10K	1	417341034T

PWB	R651	METAL O R	RS1WBJ-10K	1	443621034T	
PWB	R652	CARBON R	R16J-470K	1	417344744T	
PWB	R653	CARBON R	R16J-680K	1	417346844T	
PWB	R654	CARBON R	R16J-330K	1	417343344T	
PWB	R704	CARBON R	R16J-100K	1	417341044T	
PWB	R714	CARBON R	R16J-68K	1	417346834T	
PWB	R715	CARBON R	R16J-10K	1	417341034T	
PWB	R716	CARBON R	R16J-1K	1	417341024T	
PWB	R717	CARBON R	R16J-10K	1	417341034T	
PWB	R904	METAL R	RNU1/2WCJ-0.22	1	453532294T	
PWB	R905	METAL R	RNU1/2WCJ-0.47	1	453534794T	
PWB	R906	METAL O R	RS1/2WBJ-22	1	443522204T	
PWB	R907	METAL O R	RS1/2WBJ-22	1	443522204T	
PWB	R954	METAL O R	RS1/2WBJ-33	1	443523304T	
PWB	R981	METAL O R	RS1WBJ-470	1	443624714T	
PWB	R982	METAL O R	RS1WBJ-470	1	443624714T	
PWB	R983	METAL O R	RS1WBJ-470	1	443624714T	
PWB	R984	METAL O R	RS1WBJ-470	1	443624714T	
PWB	[SW TRM]					
PWB	E801	RETAINER	KANAGU(EARTH)	1	27141059	
PWB	F901A	FUSE HOL	NSCT-1P2506	1	25052609T	!
PWB	F901Aor	FUSE HOL	NSCT-1P2031	(1)	25052133T	!
PWB	F901B	FUSE HOL	NSCT-1P2506	1	25052609T	!
PWB	F901Bor	FUSE HOL	NSCT-1P2031	(1)	25052133T	!
PWB	P301	PIN JACK	NPJ-1PDB581	1	25045801	
PWB	P301 or	PIN JACK	NPJ-1PDBL382	(1)	25045567	
PWB	P301 or	PIN JACK	NPJ-1PDB556	(1)	25045774	
PWB	P531	PLUG	NPLG-2P29	1	25055038	
PWB	P535A	SOCKET AS	NSAS-2P1865	1	2009991199UL	
PWB	P631	PLUG	NPLG-2P29	1	25055038	
PWB	P632A	PLUG	NPLG-3P131	1	25055147	
PWB	P902A	PLUG	NPLG-2P632	1	25055676	!
PWB	P903A	PLUG	NPLG-4P151	1	25055167	
PWB	P903B	SOCKET AS	NSAS-7P1834	1	20099900740UL	
PWB	P908A	SOCKET AS	NSAS-10P1152	1	2002A391040UL	
PWB	P908B	PLUG	NPLG-5P133	1	25055149	
PWB	RL901	RELAY	NRL-1P5A-DC9-179	1	25065669	!

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