

# ONKYO SERVICE MANUAL


## Powered sub-woofer with built-in 6ch amplifier MODEL SWA-155X



### Black and Silver models

DT,DS	120V AC, 50/60Hz
GQ,GT	230-240V 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.

## SPECIFICATIONS

### ■ SWA-155X (subwoofer)

INPUT: RCA L/R/C/SL/SR/ subwoofer (500 mV/47 k $\Omega$ )

#### AMPLIFIER SECTION

Power output	Front:	15 W x 2 (6 $\Omega$ /EIAJ)
	Center:	15 W (6 $\Omega$ /EIAJ)
	Surround:	15 W x 2 (6 $\Omega$ /EIAJ)
	Subwoofer:	25 W (3 $\Omega$ /EIAJ)
	Front:	11 W x 2 (6 $\Omega$ /DIN)
	Center:	11 W (6 $\Omega$ /DIN)
	Surround:	11 W x 2 (6 $\Omega$ /DIN)
	Subwoofer:	20 W (3 $\Omega$ /DIN)

Total harmonic distortion: 0.1% (Output: 5 W)

Signal-to-noise ratio: 100 dB (STEREO: IHF A 0.5 V input)

#### SPEAKER SECTION

Type: J'DRIVE system, 16 cm OMF cone

#### GENERAL

Power supply AC 120 V, 60 Hz  
AC 220–230 V, 50/60 Hz  
AC 230–240 V, 50 Hz

Power consumption: 65 W

Power consumption (Max.): 135 W

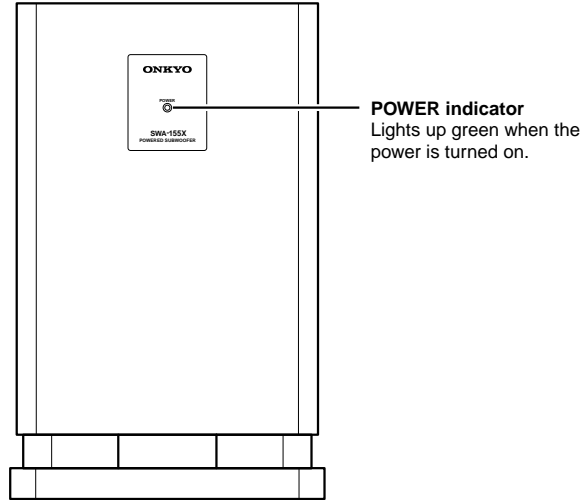
Dimensions (W x H x D): 185 mm x 299 mm x 312 mm

Weight: 8 kg

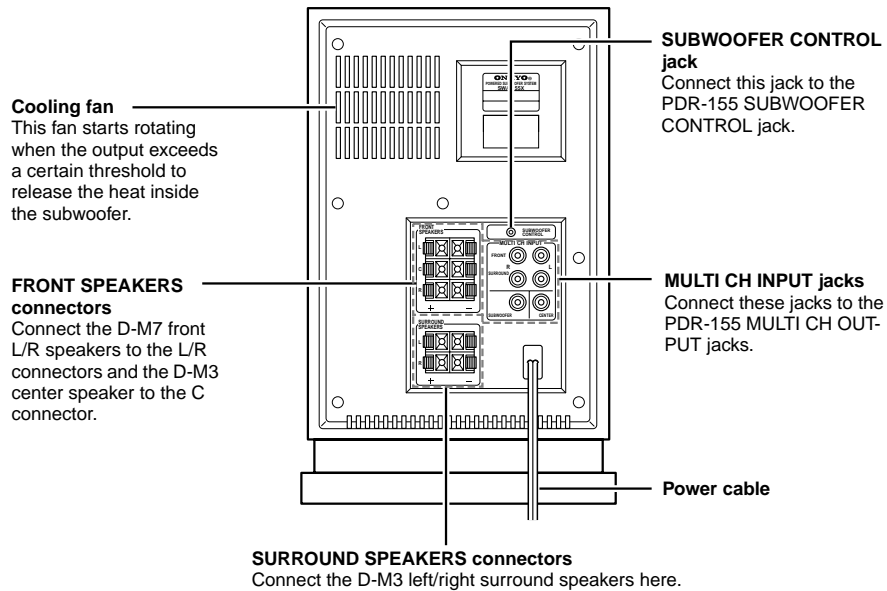
Others: Magnetic shielding (EIAJ)

**PANEL VIEW**

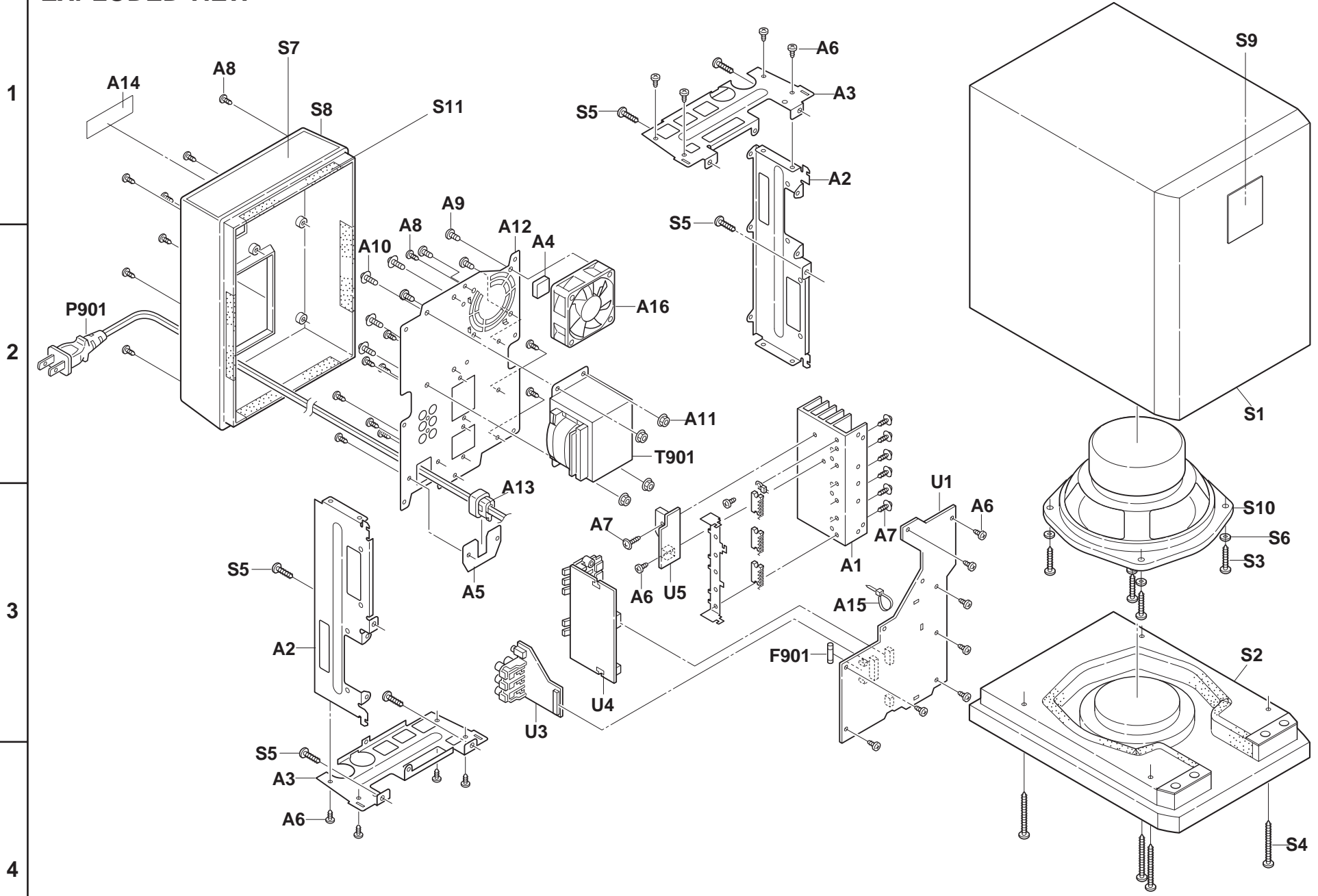
**Subwoofer SWA-155X (front panel)**



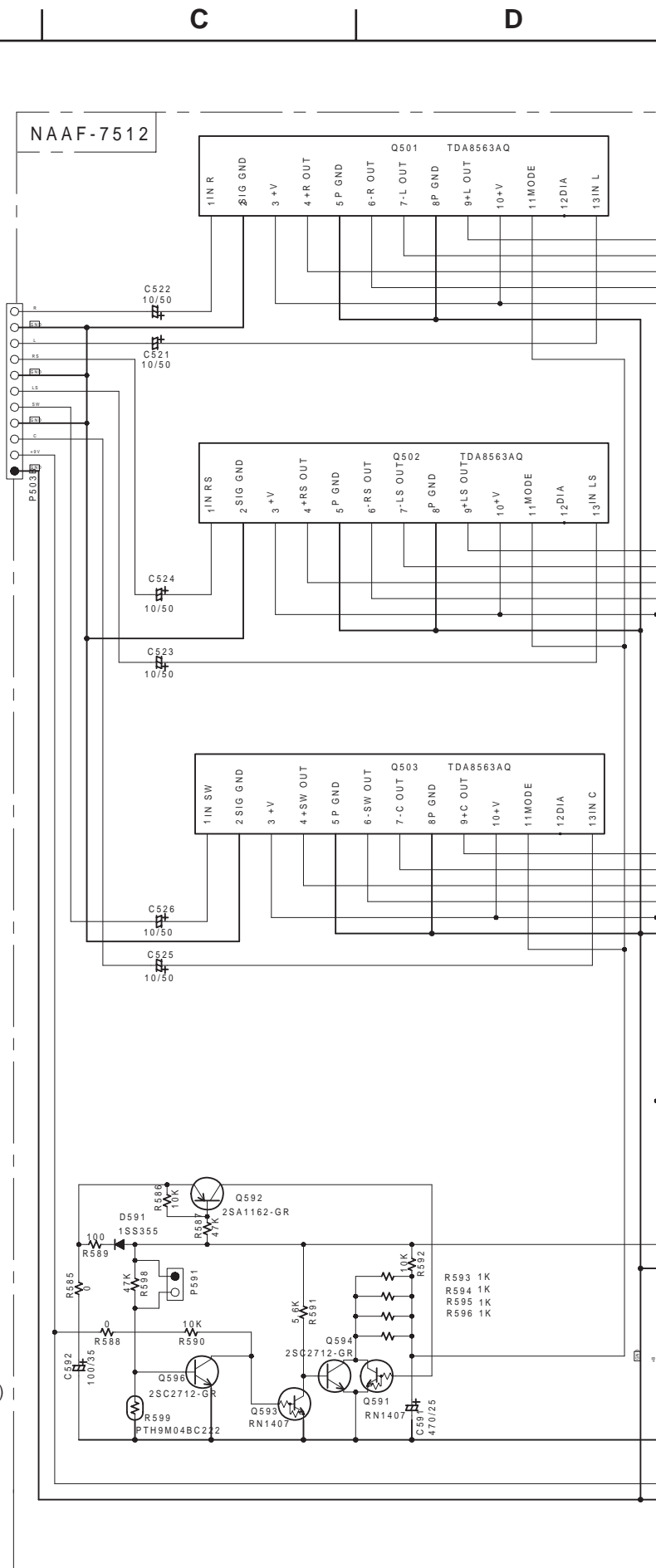
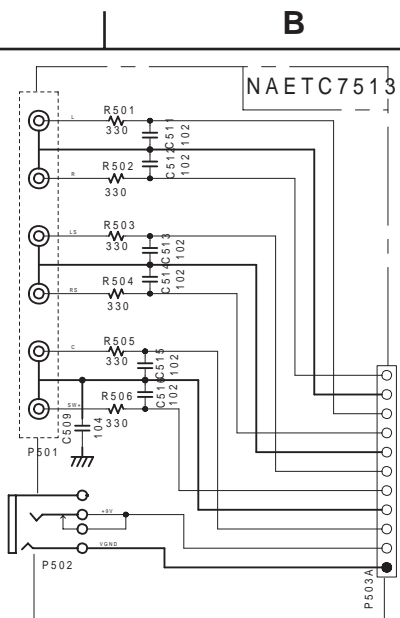
**Subwoofer SWA-155X (rear panel)**



A B C D E  
**EXPLODED VIEW**



# SCHEMATIC DIAGRAM



## NOTE

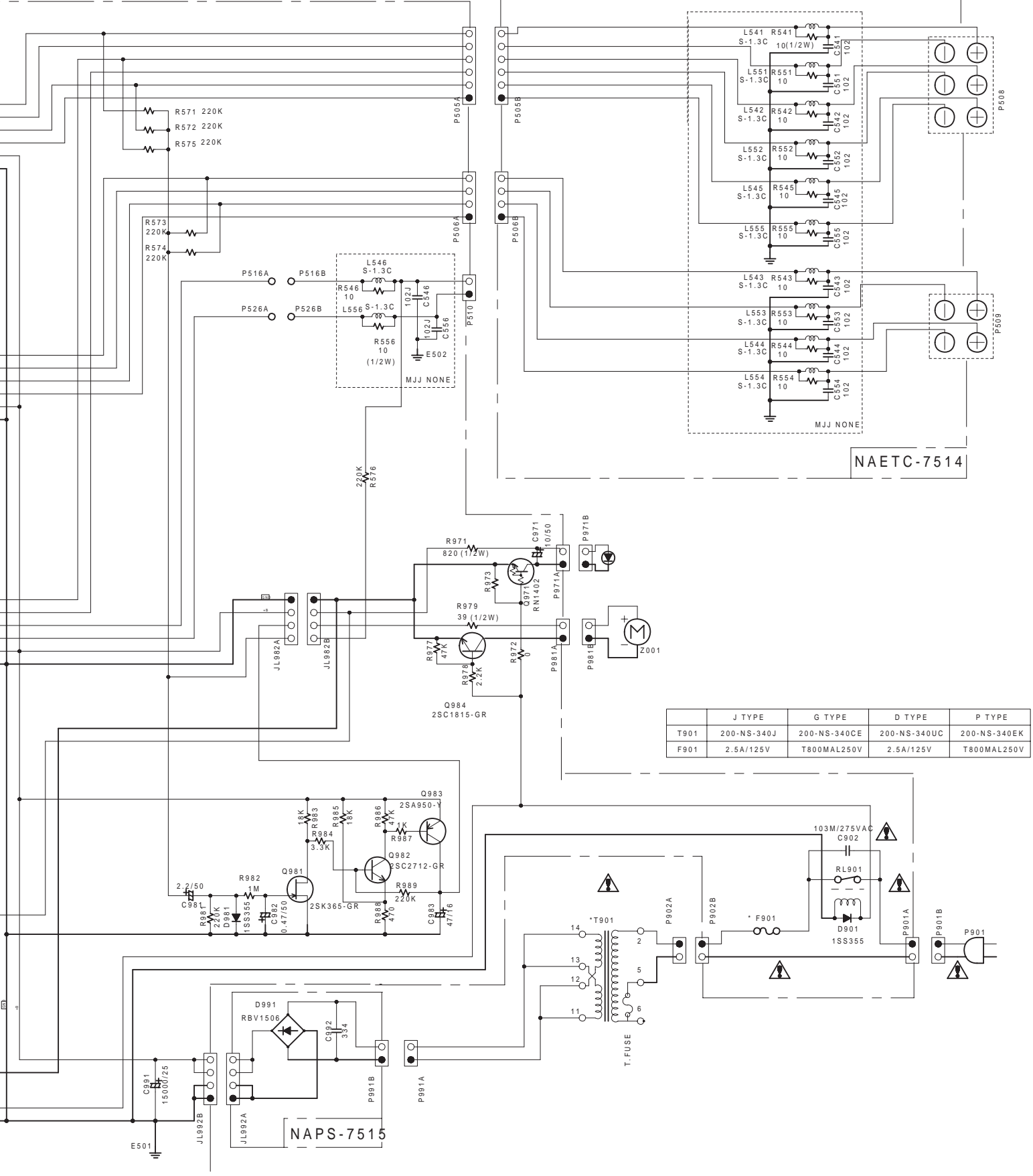
- THE COMPONENTS IDENTIFIED BY MARK  $\Delta$  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER)  $\square$  IS DC VOLTAGE. (NO INPUT SIGNAL)
- ELECTROLYTIC CAPACITORS ( $\text{---}$ ) ARE IN  $\mu\text{F/WV}$ .
- ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.  
EX) 030 $\rightarrow$ 3pF 330 $\rightarrow$ 33pF 331 $\rightarrow$ 330pF 333 $\rightarrow$ 0.033 $\mu\text{F}$
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.  
EX)  $\square$   $\leftarrow$  PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPRIVEMENT.

E

F

G

H



NAETC-7514

NAPS-7515

	J TYPE	G TYPE	D TYPE	P TYPE
T901	200-NS-340J	200-NS-340CE	200-NS-340UC	200-NS-340EK
F901	2.5A/125V	T800MAL250V	2.5A/125V	T800MAL250V

**SCHEMATIC  
DIAGRAM**

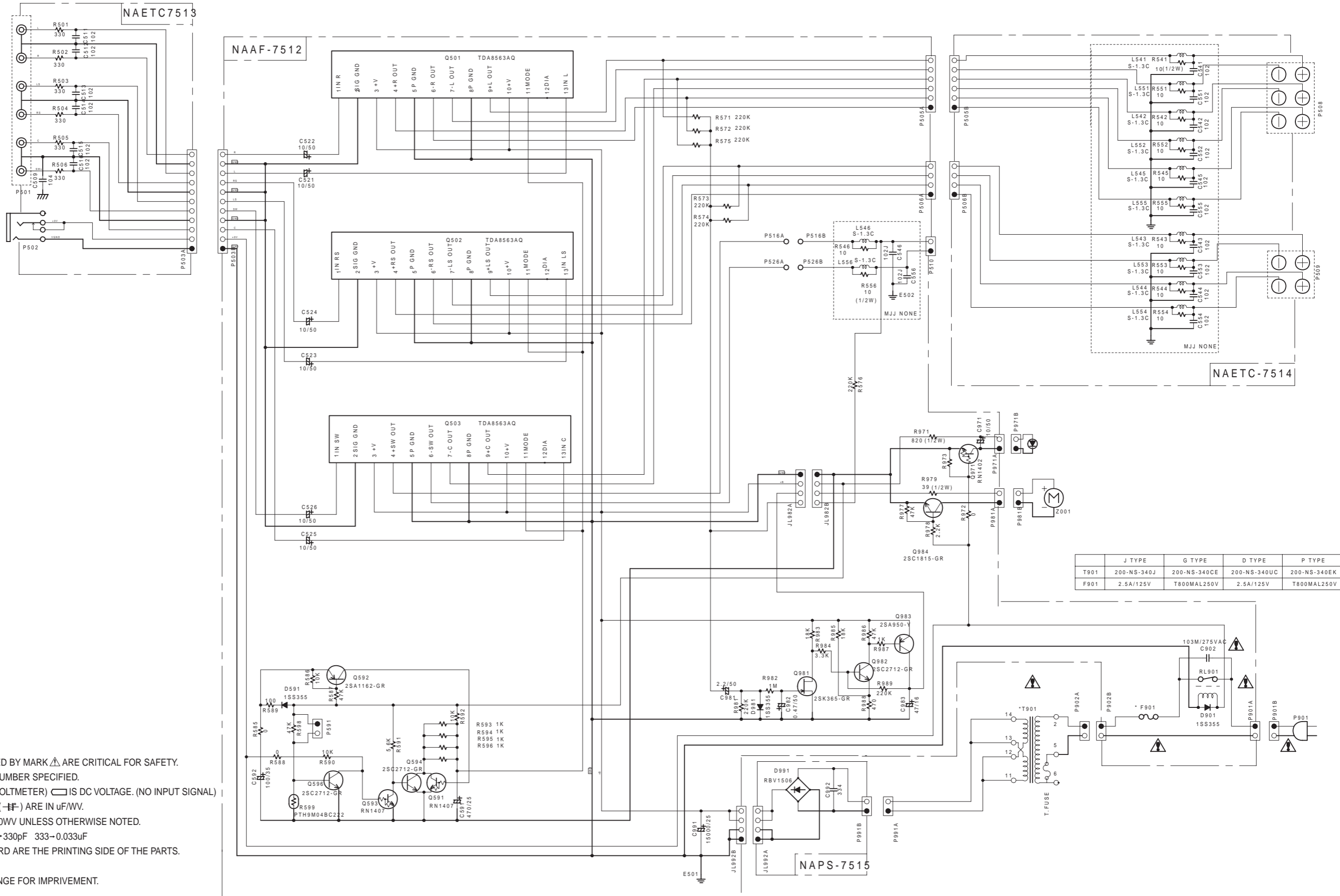
1

2

3

4

5



**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)
- 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
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.  
EX) PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

SWA-155X Parts list							
REF. No.	Description	Part No.	DESTINATION				
			UDS	UDT	UGQ	UGT	
<b>Circuit board section</b>							
C509	C-CERA C	CK725F1E-104Z1	332161040R1	0	0	0	0
C511-C516	C-CERA C	CC725CH1E-102J1 or	342111024R1 or	0	0	0	0
		CC725CH1H-102J1 or	342101024R1 or	0	0	0	0
		CC725CH1E-102K1	342111025R1	0	0	0	0
C521-C526	VX C	CE04W50V10M	393381009	0	0	0	0
C541-C546 C551-C556	C-CERA C	CC725CH1E-102J1	342111024R1	0	0	0	0
C591	VR C	CE04W25V-470M(VR)	394654717	0	0	0	0
C592	VR C	CE04W35V-100M(VR)	394661017	0	0	0	0
C902	IS C	DE1607F103-KH	3300031	0	0	0	0
C971	VR C	CE04W50V-10M(VR)	394681007	0	0	0	0
C981	VR C	CE04W50V-2.2M(VR)	39468022	0	0	0	0
C982	VR C	CE04W50V-0.47M(VR)	394684797	0	0	0	0
C983	VR C	CE04W25V-47M(VR)	394654707	0	0	0	0
C991	ELECT C	SMH 15000 $\mu$ F/25V or	- or	0	0	0	0
		13000 $\mu$ F/25V	3504168	0	0	0	0
C992	TF C	ECQ-V50V-334J	374723344	0	0	0	0
D591 D901 D981	C-DIODE	1SS352 or	223234R2 or	0	0	0	0
		1SS355	223269R2	0	0	0	0
D991	DIODE	RBV-1506 or	22380044 or	0	0	0	0
		D15XB60	22380309	0	0	0	0
E501	RETAINER		-	0	0	0	0
E903	TRM	NTM-1P233 (M1969)	25060302	0	0	0	0
F901A,B	FUSE HOL	NSCT-1P2031	25052133	0	0	0	0
F901C	F SPEC SHT	Fuse description sheet (T800mAL250V)	29362519	-	-	0	0
JL982	JUMPER LEAD	JL4 250 B	4J250606B15	0	0	0	0
JL982A,B	WIRE HOL	NSCT-4P875	25051088	0	0	0	0
JL992	JUMPER LEAD	JL4 200 H	4J200606H	0	0	0	0
JL992A,B	WIRE HOL	NSCT-4P895 or	25051108 or	0	0	0	0



		NSCT-4P875	25051088	0	0	0	0
L541-L546 L551-L556	S COIL	S-1.3C	231176	0	0	0	0
P501	PIN JACK	NPJ-6PWRLGGP493	25045697	0	0	0	0
P502	ST JACK	LGY2502-0200C	25045696	0	0	0	0
P503A	SOCKET	NSCT-11P1026	25051236	0	0	0	0
P503B	PLUG	NPLG-11P663	25055707	0	0	0	0
P505A	SOCKET	NSCT-6P2452	25052555	0	0	0	0
P505B	PLUG	NPLG-6P1030	25056091	0	0	0	0
P506A	SOCKET	NSCT-4P2450	25052553	0	0	0	0
P506B	PLUG	NPLG-4P1028	25056089	0	0	0	0
P508	TRM	NTM-6PDML256	25060325	0	0	0	0
P509	TRM	NTM-4PDML252	25060321	0	0	0	0
P510	PLUG	NPLG-2P158	25055174	0	0	0	0
P516	CRIMP AS	CRIMP AS	2065525181UL	0	0	0	0
P526	CRIMP AS	CRIMP AS	2065525203UL	0	0	0	0
P591	PLUG	NPLG-2P645	25055689	0	0	0	0
P599	WS CLAMP	CP-1S	260224	0	0	0	0
P901A	PLUG	NPLG-2P631	25055675	0	0	0	0
P902B P991B	PLUG	NPLG-2P632	25055676	0	0	0	0
P971A	PLUG	NPLG-2P349	25055366	0	0	0	0
P981A	P PLUG	NPLG-2P568	25055600	0	0	0	0
Q501 Q502 Q503	IC	TDA8563AQ	22241679	0	0	0	0
Q501A	BRACKET	(TR)	27130865	0	0	0	0
Q591,Q593	TRANSISTOR	RN1407 or	2216260R2 or	0	0	0	0
		KRC107S	2216340R2	0	0	0	0
Q592	TRANSISTOR	2SA1162-GR or	2214375R2 or	0	0	0	0
		KTA1504-GR	2216185R2	0	0	0	0
Q594 Q596 Q982	TRANSISTOR	2SC2712-GR or	2213145R2 or	0	0	0	0
		KTC3875-GR	2216175R2	0	0	0	0
Q971	TRANSISTOR	RN1402 or	2214470R2 or	0	0	0	0

		KRC102S	2216190R2	0	0	0	0
Q981	TRANSISTOR	2SK365-GR	2212445	0	0	0	0
Q983	TRANSISTOR	2SA950-Y	2211504	0	0	0	0
Q984	TRANSISTOR	2SC1815-GR or	2211255 or	0	0	0	0
		KTC3198-Gr	2215985	0	0	0	0
R501-R506	C-CARBON R	RN72K1J-331JE	435033314R1	0	0	0	0
R509,R585 R588,R972	C-CARBON R	RN72K1J-000JE	435030004R1	0	0	0	0
R541-R546 R551-R556	METAL O R	RS1/2WBJ-10	443521004	0	0	0	0
R571-R576 R981,R989	C-CARBON R	RN72K1J-224JE	435032244R1	0	0	0	0
R586,R590	C-CARBON R	RN72K1J-103JE	435031034R1	0	0	0	0
R587,R598 R977,R986	C-CARBON R	RN72K1J-473JE	435034734R1	0	0	0	0
R589	C-CARBON R	RN72K1J-101JE	435031014R1	0	0	0	0
R591	C-CARBON R	RN72K1J-562JE	435035624R1	0	0	0	0
R593,R594 R595,R596	C-CARBON R	RN72K1J-102JE	435031024R1	0	0	0	0
R599	THERMISTOR	PTH9M04BC222TS2 F333	4000150	0	0	0	0
R971	METAL O R	RS1/2WBJ-820	443528214	0	0	0	0
R978	C-CARBON R	RN72K1J-222JE	435032224R1	0	0	0	0
R979	METAL O R	RS1/2WBJ-39	443523904	0	0	0	0
R982	C-CARBON R	RN72K1J-105JE	435031054R1	0	0	0	0
R983,R985	C-CARBON R	RN72K1J-183JE	435031834R1	0	0	0	0
R984	C-CARBON R	RN72K1J-332JE	435033324R1	0	0	0	0
R988	C-CARBON R	RN72K1J-471JE	435034714R1	0	0	0	0
RL901	RELAY	NRL-1P5A-DC9-150	25065601	0	0	0	0

Exploded view section							
A1	HEAT SINK		27160506	0	0	0	0
A2	BRACKET(LR)		27130881	0	0	0	0
A3	BRACKET(BT)		27130882	0	0	0	0

A4	CUSHION	10x10xt0.5	28141464	0	0	0	0
A5	RETAINER	AC CORD	27141822	0	0	0	0
A6	SCREW	3TTB+8B	838130088	0	0	0	0
A7	SCREW	3SMS8W.SW+14B(BC)	801433	0	0	0	0
A8	SCREW	3TTB+8B(BC)	838430088	0	0	0	0
A9	SCREW	5TTB+10B(BC)	838450108	0	0	0	0
A10	SCREW	4TTC+10C(BC)	830440109	0	0	0	0
A11	NUT	FWN4*10FN	86414010	0	0	0	0
A12	REAR PANEL		-	0	0	-	-
			-	-	-	0	0
A13	BUSHING	S-RELIEF #2271	27300750	0	0	0	0
A14	SERIAL LABEL		-	0	0	0	0
A15	WIRE TIE	BINDER(CLAMPER) UL	260208	0	0	0	0
S1	CABINET AS	BOX + ACOUSTIC SPONG + BUTYL + LED CORD AS + SP CORD AS	505-1HTP-DR7	0	0	0	0
S10	SPEAKER UNIT	for SUBWOOFER	W16146B	0	0	0	0
S11	PACKING	130x35x1t	429-NS-323A	0	0	0	0
S2	BOTTOM BOARD AS	BOTTOM BOARD + DISK BOARD $\phi$ 80 + DISK BOARD $\phi$ 108 + ED BOARD + SPONGE	516-HTP-DR7	0	0	0	0
S3	WOOD SCREW	BIND HEAD 4x20(BC) TAPPING(A)	300-B8402000	0	0	0	0
S4	WOOD SCREW	BIND HEAD 4x50(BC) TAPPING(A)	300-B8405000	0	0	0	0
S5	WOOD SCREW	BIND HEAD 4x16(BC) TAPPING(A)	300-B8401600	0	0	0	0
S6	RUBBER WASHER	$\phi$ 7x $\phi$ 3.9x1t	430-NS-291	0	0	0	0
S7	PLATE	PVC 1t BLACK	410-NS-323	0	0	0	0
S8	COVER		400-1CNS-323	0	0	0	0
S9	FRONT PLATE	W/PRINTED	410-FSWA-155X	0	0	0	0
U1	PWB	NCAF-7512	-	0	0	0	0
U3	PWB	NCETC-7513	-	0	0	0	0
U4	PWB	NCETC-7514	-	0	0	0	0
U5	PWB	NCPS-7515	-	0	0	0	0
F901	FUSE	2.5A-UL/T-237	252160	0	0	-	-
		800mA-SE-EAK-FUSE	252069	-	-	0	0

T901	P TRANS	NPT-1441G	200-NS340CE	-	-	O	O
		NPT-1441D	200-NS-340UC	O	O	-	-
P901	AC CORD	AS-UC-2	253332HIT	O	O	-	-
		AS-CEE	253335HIT	-	-	-	O
		AS-BS	253198HIT	-	-	O	-

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