

Service Manual

PIONEER
The future of sound and vision.

Original

ORDER NO.
ARP1793

SPEAKER SYSTEM

CS-907A G

SPECIFICATIONS

Enclosure.....	Book-shelf style, Bass-reflex type
System.....	4-way, 7-speaker system
Speakers:	
Woofers.....	40 cm (16 in) cone type × 1
Mid-range.....	16 cm (6-5/16 in) cone type × 1
Tweeter.....	Horn type × 1
Super Tweeter.....	1-10/16 inch piezoelectric cone type × 4
Accessory.....	Power Indicator
	LED — green × 13
	Tone selector
	NORMAL—SOFT—CRISP
Impedance.....	8 ohms
Frequency Range.....	30 Hz to 25,000 Hz
Sensitivity.....	99 dB/W (at 1-meter distance)
Maximum Power.....	400 W
Rated Power.....	100 W
Crossover Frequency.....	2,000 Hz, 4,000 Hz, 11,000 Hz
Weight.....	21 kg/46.3 lbs
External Dimensions.....	450(W) × 725(H) × 269(D) mm
	17-11/16 (W) × 28-9/16 (H) × 10-9/16 (D) in
Accessory Parts.....	Operating Guide × 1
	Speaker Cord × 1

NOTE:

Specifications and design subject to possible modification without notice, due to improvements.

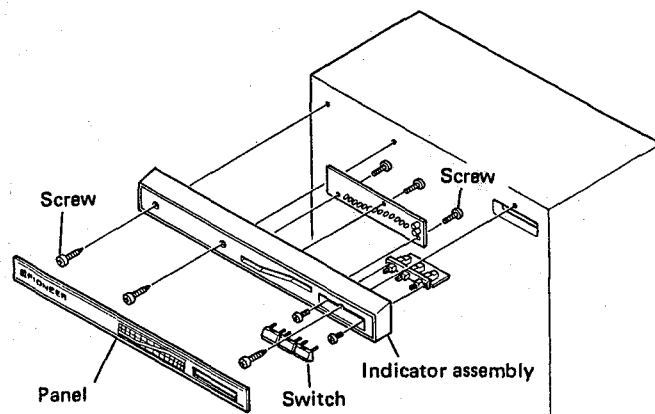
REMOVAL METHOD

• Woofer and Network Assembly

1. Remove the grille.
Grasp both ends of the top part of the grille and pull out on it to remove.
2. The woofer can be removed by undoing the 8 screws (Phillips screwdriver needed) and 8 bolts (socket wrench needed).
3. The network assembly can be taken out after removing the woofer.

• Indicator Assembly

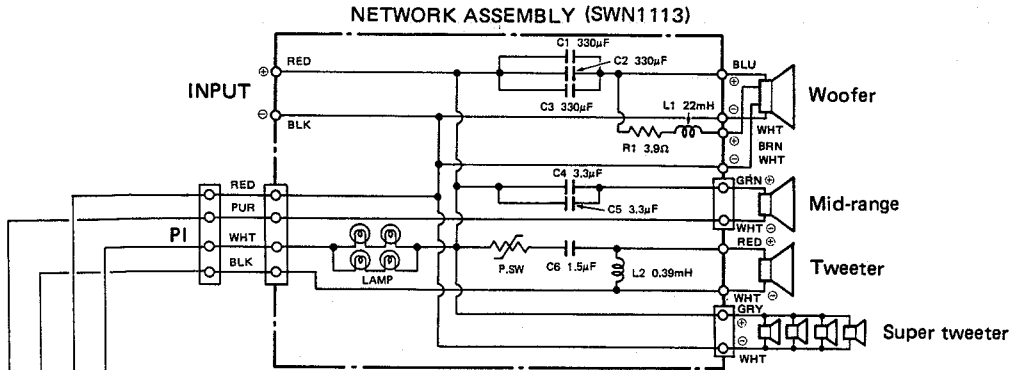
1. Use a small screwdriver or punch-like instrument to remove the panel. Then undo the 3 screws and take off the indicator assembly.
After repairing it, attach it to a new panel.



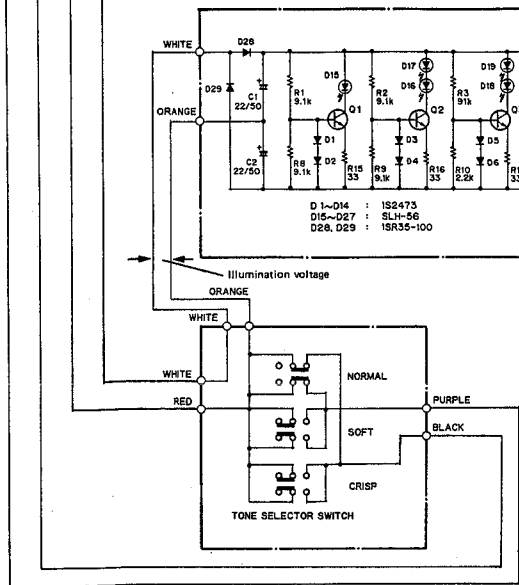
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CIRCUIT DIAGRAM AND PARTS LIST

Circuit Diagram of Network Assembly



Circuit Diagram of Power Indicator Assembly (SWX1013)



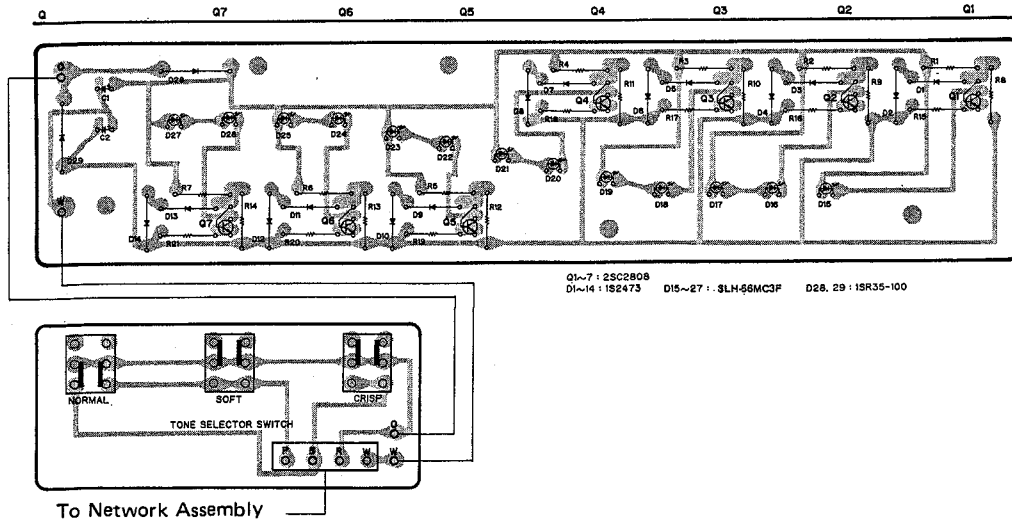
Power Indicator Illumination Voltage

L.E.D. No.	1	2,3	4,5	6,7	8,9	10,11	12,13
Illumination voltage	1V	2.6V	2.6V	6.6V	11V	14.3	18.0V

Measurement conditions

- Input is 60Hz sine wave.

P.C.B. Pattern of Power Indicator Assembly (SWX1013)



NOTES:

- Parts without part number cannot be supplied.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω	56×10^1	561.....	RD1/4PS	Δ	Δ	Δ	J
47k Ω	47×10^3	473.....	RD1/4PS	Δ	Δ	Δ	J
0.5 Ω	0R5.....		RN2H	Δ	Δ	Δ	K
1 Ω	010.....		RS1P	Δ	Δ	Δ	K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω	562×10^1	5621.....	RN1/4SR	Δ	Δ	Δ	F
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⊙ Network Assembly (SWN1113)

Mark	Symbol & Description	Part No.
L1	Choke coil (22 mH)	STH-431
L2	Choke coil (0.39 mH)	STH-339
C1-C3	Capacitor (330 μ F)	CES4SM331KH
C4, C5	Capacitor (3.3 μ F)	CES43R3KJ
C6	Capacitor (1.5 μ F)	CES41R5KJ
R1	Resistor (3.9 Ω , 5W)	RTF5AL3R9JC
	Wedge-base bulb	SEL-011
	Poly switch	SSG-020

⊙ Power Indicator Assembly (SWX1013)

Mark	Symbol & Description	Part No.
Q1-Q7	Transistor	2SC2808
D15-D27	Diode	SLH-56MC3F
D28, D29	Diode	1SR35-100A
D1-D14	Diode	1S2473HS
C1, C2	Capacitor	CEA220M50
	All resistors	RD1/4PM $\square\square\square\square$ J
	Switch	SSG-019

P. SW (POLYSWITCH):

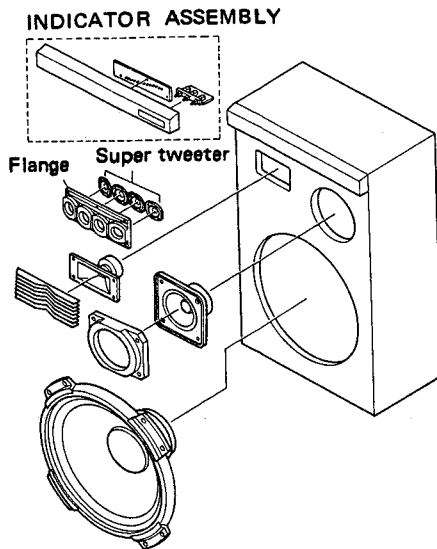
P. SW has extreme positive resistance-temperature characteristics. (Less than 0.3 Ω at the normal temperature). If an abnormal current flows to P. SW due to an excessive input or unusual signal, P. SW heats up and the resistance extremely increases. With this function, the tweeter is protected from excessive input or unusual signal. The resistance increase even by soldering iron during repairing so that cool it enough before using.

EXPLODED VIEW AND PARTS LIST

NOTES:

- Parts without part number cannot be supplied.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Exploded View



Replace the super tweeter together with the flange.
(The super tweeter and flange are heat sealed together.)

Parts List

Mark	Part No.	Description
	SMG-438	Grille
	SAX1109	Panel
⊙	SWN1113	Network assembly
	SNK1170	Mid flange
	SNK1171	Diffuser
	SNK1172	Flange
	B42ZG	Super tweeter
	SEP-032	Bushing
	SKX-029	Input terminal
	SFH-025	Horn
	SAA-069	Knob
	PMZ30P050FMC	Screw
	PTZ30P100FMC	Screw
	40-811A	Woofer
	16-753A	Mid-range
	PD-009A	Tweeter
	SBA-133	Hexagonal twin screw with hole
	SBA-204	Hexagonal twin screw with hole
	SBA-215	Hexagonal screw with hole
	RWC38P450FMC	Screw
⊙	SWX1013	Power indicator assembly
	SAA-069	Knob

PARTS LIST OF PACKING

Mark	Part No.	Description
	SHG1210	Packing case
	SHB-188	Top pad A
	SHB-193	Top pad B
	SHB-189	Bottom pad
	SHC-430	Cover
	KDD-012	Speaker cord
	SRB1097	Instruction manual Operating guide