

KENWOOD

SERVICE MANUAL

SP-820



EXTERNAL SPEAKER

SPECIFICATIONS/FEATURES/FILTER SELECTOR CIRCUIT/ FILTER SWITCH OPERATIONS

SPECIFICATIONS

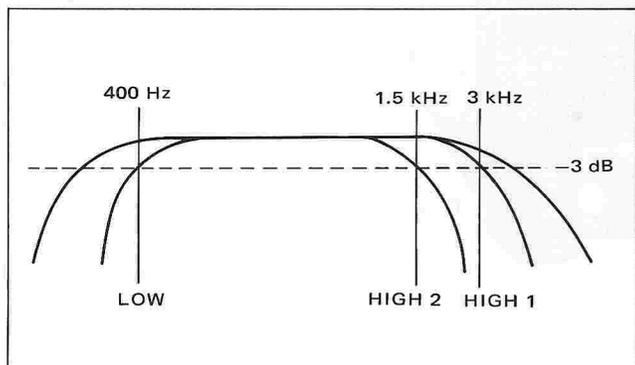
Speaker	.....	12 cm
Nominal max. Input	.....	2 W
Impedance	.....	8 Ω
Frequency Characteristic	..	100 Hz ~ 5 kHz
Filter Cut-off Frequency		
LOW	.....	400 Hz / -3 dB
HIGH 1	.....	3 kHz / -3 dB
HIGH 2	.....	1.5 kHz / -3 dB
Filter Attenuation	.....	-6 dB / Oct
Size	.....	W 169 (169) mm
	.....	H 153 (167) mm
	.....	D 335 (348) mm
Figures in () are max. sizes including projected parts.		
Weight	.....	2.5 kg

FEATURES

1. Adoption of a graceful design which esthetically matches the TS-820 series.
2. Installation of band selector filter (attenuation possible by series insertion of L in high range and C in low range).
3. Selection of 2 input systems (switching between INPUT A and B).
4. Feasibility of monitoring voice with a head-phone, after passing through the band-pass filter.

FILTER SELECTOR CIRCUIT

This speaker system is provided with a circuit which offers a filter effect by the characteristics shown below.



Each filter switch offers the following functions:

1. **FILTERS (LOW)**
FILTER ON makes attenuation at 400 Hz and below (400 Hz / -3 dB).
2. **FILTERS (HIGH 1)**
FILTER ON makes attenuation at 3 kHz and above (1 kHz / -3 dB).
3. **FILTERS (HIGH 2)**
FILTER ON makes attenuation at 1.5 kHz and above (1.5 kHz / -3 dB).

Combined use of these filter switches can make the following frequency characteristics:

FILTER SWITCH OPERATIONS

1. When LOW and HIGH 1 are pressed simultaneously, the resultant frequency band is 400 Hz ~ 3 kHz.
2. When LOW and HIGH 2 are pressed simultaneously, the frequency band is 400 Hz ~ 1.5 kHz.
3. When LOW, HIGH 1, and HIGH 2 are pressed simultaneously, the frequency band is 400 Hz ~ 1.5 kHz.

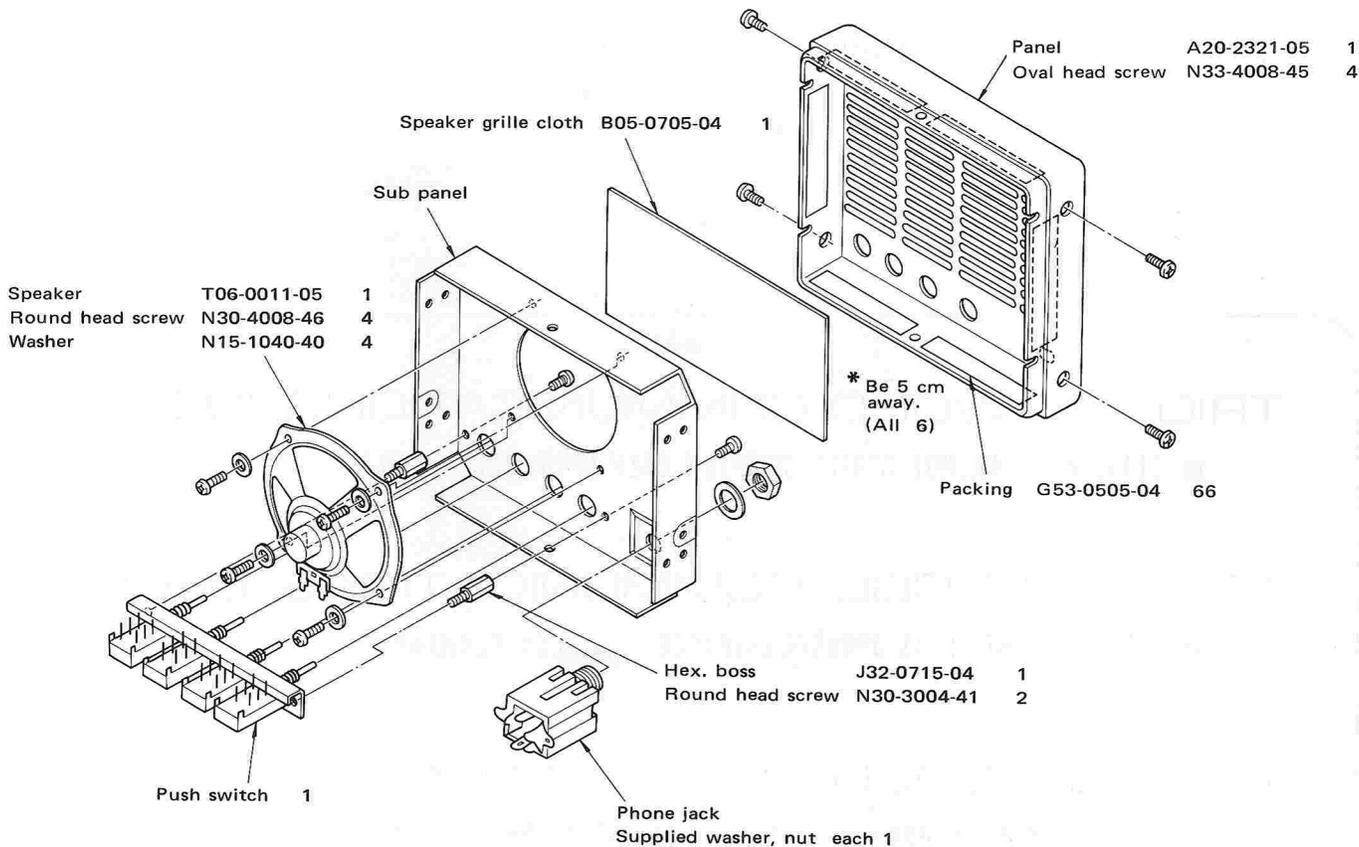
Suggestions for practical filter operations are obtainable from "Use of Filter" in the instruction manual.

PARTS LIST / DISASSEMBLY

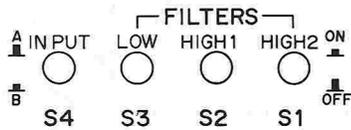
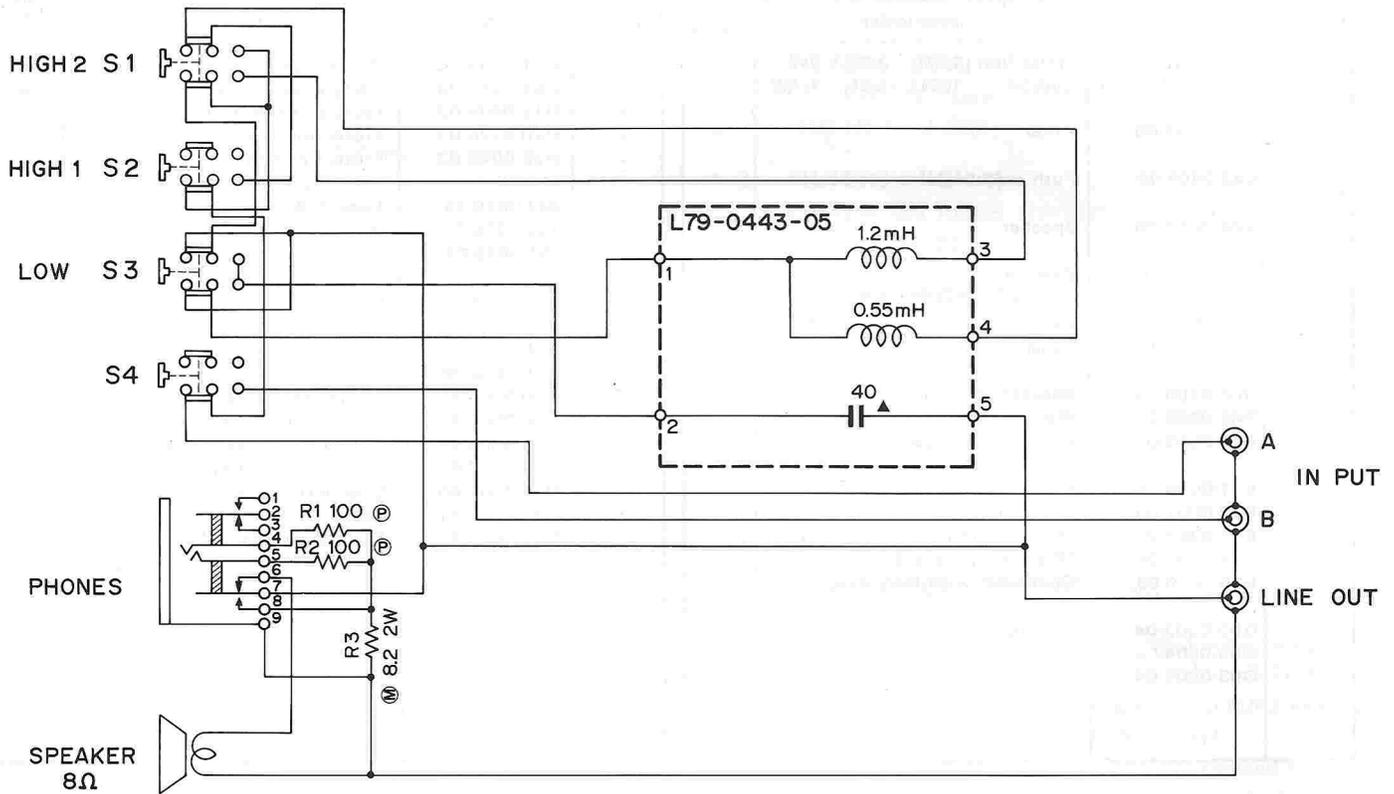
☆ : New parts

Ref. No.	Part No.	Description	Re- marks	Ref. No.	Part No.	Description	Re- marks
-	RS14AB3D8R2J	Metal film 8.2Ω ±5% 2W		-	H01-2552-04	Carton case (inside)	K, W ☆
-	RD14BB2E101J	Carbon 100Ω ±5% 1/4W		-	H01-2553-04	Carton case (inside)	T ☆
-	L79-0443-05	Filter	☆	-	H12-0434-02	Packing material X 2	☆
-	S42-2401-05	Push switch	☆	-	H20-0276-03	Protection cover	
-	T06-0011-05	Speaker		-	H25-0049-03	Protection bag	
-	A01-0720-02	Case A	☆	-	J02-0049-14	Foot X 6	
-	A01-0721-02	Case B	☆	-	J32-1030-14	Round boss X 2	
-	A20-2321-05	Panel	T ☆	-	J61-0019-05	Vinyl tie X 2	
-	A20-2322-05	Panel	K, W ☆	-	K29-0166-04	Knob X 4	
-	B05-0705-04	Speaker grille cloth	☆	-	N10-2030-46	Nut X 2	
-	B46-0058-00	Warranty card	K	-	N15-1040-46	Washer X 4	
-	B50-2563-00	Operating manual	☆	-	N30-3004-41	Round head screw X 6	
-	E11-0044-25	Phone jack		-	N30-3006-41	Round head screw X 6	
-	E12-0001-05	Phone plug		-	N30-4008-46	Round head screw X 4	
-	E13-0361-05	3P phono jack		-	N30-4010-41	Round head screw X 2	
-	E14-0101-05	1P phono plug X 2		-	N33-4008-45	Oval head screw X 4	
-	E30-1610-05	Connector with lead wire		-	N35-3008-41	Binder screw X 18	
-	G53-0503-04	Packing X 4	☆	-	N87-4012-41	Tap tight screw X 2	
-	G53-0504-04	Packing X 2	☆				
-	G53-0505-04	Packing X 6	☆				

DISASSEMBLY



BLOCK DIAGRAM



TRIO-KENWOOD COMMUNICATIONS, INC.

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TRIO-KENWOOD CORPORATION

■ 6-17, 3-CHOME, AOBADAI, MEGURO-KU, TOKYO, JAPAN.