

KRIESLER

PLAZA Q4

MODEL 11-191

RADIOGRAM

TECHNICAL ADVISORY

SERVICE SHEET No. 156



OPERETTA
GRANDE Q4

MODEL 11-188

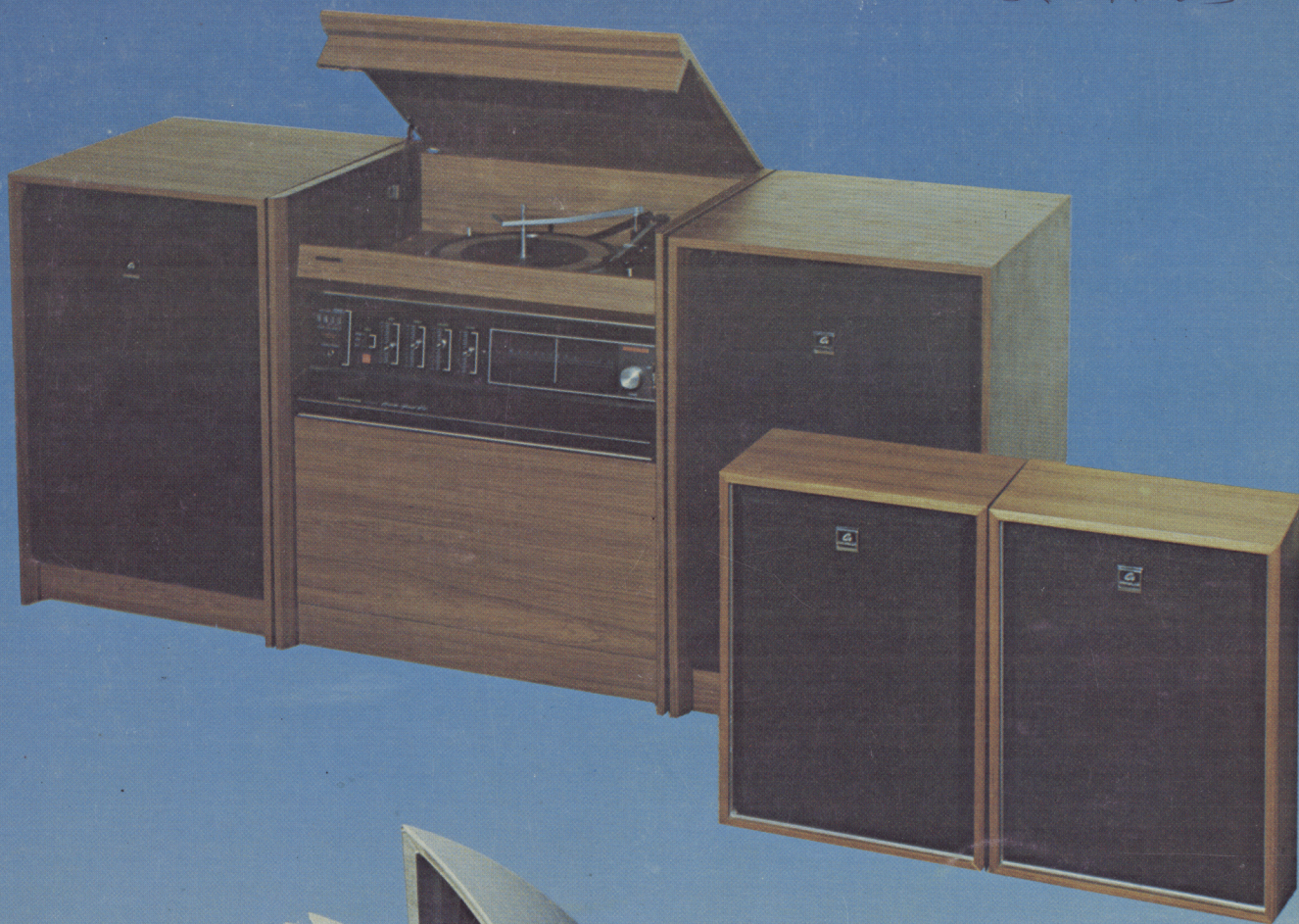
KRIESLER

RADIOGRAM

TECHNICAL ADVISORY

SERVICE SHEET No. 156

J. DAVIS



11-191 PLAZA Q4

DESCRIPTION:

A three piece modular console radio-stereogram with quadracoustic feature, consisting of a command module (which contains the turntable, amplifiers, controls, external connection facilities and power supply) and two satellite modules (housing the speakers).

The command module has a hinged lid with self-support stay, and a record storage compartment.

The front control panel layout allows access to the controls with the lid closed.

The satellite modules match the command module in size and finish, suitable for either grouped or separate placement.

FEATURES:

Provision is made for optional connection of four speakers.

In the "Surround" mode the additional speakers will reproduce the same signal as the front speakers, and may be used to fill the room with sound, or as extension speakers for a rumpus room, barbeque area, etc.

The "Matrix A" or "Matrix B" modes may be used to enhance the four speaker (Quadracoustic) reproduction of stereo or quadrasonic discs. Select Button A or B, whichever gives the more acceptable sound reproduction, as this is dependent upon room acoustics, position of speakers, the type of records and the relative position of the listener.

A rear mounted 5 pin stereo input/output DIN socket is provided for connecting tape equipment, additional tuners, microphones, etc.

SPECIFICATIONS:

DIMENSIONS:

Command Module W545mm x H610mm x D368mm

Satellite Modules W359mm x H610mm x D368mm

AMPLIFIERS:

Music Power "Surround" 20 watts (4 x 5 watts)

Music Power "Stereo" 17 watts (8½ watts + 8½ watts)

RMS Power 6 watts per channel (both channels driven)

FREQUENCY RESPONSE:

Power Amplifier 40Hz - 20KHz Within 3dB

* P.U. Pre-Amp, Power Amp & Speakers 70Hz - 8KHz Within 6dB

* P.U. Pre-Amp, Power Amp 40Hz - 10KHz Within 6dB

* With tone controls set to "flat" position.

TONE CONTROL RANGE:

Bass 20dB at 100Hz

Treble 20dB at 10KHz

SPEAKERS:

2 x 8" 15ohm Twin Cone

RADIO:

Frequency Band 525 KHz - 1635 KHz

Sensitivity 600 KHz \geq 100 μ V/m

1000 KHz \geq 75 μ V/m

1500 KHz \geq 60 μ V/m

TURNTABLE:

BSR C123R automatic changer with Tetrad 2 cartridge and C2S sapphire stylus.

11-188 OPERETTA GRANDE Q4

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Provision is made for optional connection of four speakers.

In the "Surround" mode the additional speakers will reproduce the same signal as the front speakers, and may be used to fill the room with sound, or as extension speakers for a rumpus room, barbeque area, etc.

The "Matrix A" or "Matrix B" modes may be used to enhance the four speaker (Quadrasonic) reproduction of stereo or quadrasonic discs. Select Button A or B, whichever gives the more acceptable sound reproduction, as this is dependent upon room acoustics, position of speakers, the type of records and the relative position of the listener.

A rear mounted 5 pin stereo input/output DIN socket is provided for connecting tape equipment, additional tuners, microphones, etc.

SPECIFICATIONS:

DIMENSIONS:

Command Module W557mm x H611mm x D430mm

Satellite Modules W403mm x H611mm x D430mm

AMPLIFIERS:

Music Power "Surround" 20 watts (4 x 5 watts)

Music Power "Stereo" 17 watts (8½ watts + 8½ watts)

RMS Power 6 watts per channel (both channels driven)

FREQUENCY RESPONSE:

Power Amplifier 40Hz - 20KHz Within 3dB

* P.U. Pre-Amp, Power Amp & Speakers 70Hz - 8KHz Within 6dB

* P.U. Pre-Amp, Power Amp 40Hz - 10KHz Within 6dB

* With tone controls set to "flat" position.

TONE CONTROL RANGE:

Bass 20dB at 100Hz

Treble 20dB at 10KHz

SPEAKERS:

2 x 8" 15ohm Twin Cone

RADIO:

Frequency Band 525 KHz - 1635 KHz

Sensitivity 600 KHz \geq 100 μ V/m

1000 KHz \geq 75 μ V/m

1500 KHz \geq 60 μ V/m

TURNTABLE:

Garrard 6.200 automatic changer with KS40A cartridge and diamond stylus.

Model 11-188 OPERETTA GRANDE Q4

Model 11-191 PLAZA Q4

WARNING:

BEFORE MAKING ANY ADJUSTMENTS TO THIS INSTRUMENT, SWITCH OFF AND DISCONNECT AT THE POWER POINT. THIS INSTRUMENT HAS BEEN ADJUSTED TO OPERATE FROM A 225 TO 245 VOLT, 50 Hz SUPPLY. FOR OPERATION FROM OTHER VOLTAGES AND FREQUENCIES, CONSULT YOUR KRIESLER RETAILER.

THIS AMPLIFIER IS FITTED WITH A 3 AMP FUSE IN A CARTRIDGE TYPE FUSE HOLDER LOCATED ON THE POWER SUPPLY CHASSIS — REPLACE ONLY WITH CORRECT VALUE.

NOTE

IF ADDING EXTENSION SPEAKERS ENSURE THAT THE TOTAL LOAD IMPEDANCE PER CHANNEL IS NOT LESS THAN 7 OHMS OTHERWISE TRANSISTOR DAMAGE MAY RESULT.

CHASSIS AND CHANGER REMOVAL:

1. Remove three screws on back of cabinet.
2. Remove two screws from turntable motor board in front of record player.
3. Place hand under chassis board in record storage compartment and slide chassis board out approx. 20 cm (8 inches).
4. Tilt the changer retaining transit clip under motor board accessible from front. Tilt the second retaining clip accessible through cut out in cabinet back.
5. Lift turntable up and disconnect mains lead plug and shielded leads to turntable tag strip. The chassis mounting board will now slide out.

ESCUTCHEON REMOVAL:

1. Remove control knobs and radio dial plate window held on by screw under tuning knob.
2. Remove three screws under escutcheon panel.
3. Remove two screws under chassis mounting board in storage compartment.
4. Hold in the four quad buttons and pull escutcheon out from bottom.

REMOVAL OF RADIO SUB-CHASSIS:

1. After removing escutcheon, remove the four self-tapping screws securing chassis plate to control chassis.
2. Sub-chassis can now be lifted to the extent of interconnecting leads for access to dial cord.

ACCESS TO RADIO BOARD:

1. Obtain chassis access as described above.
2. Unclip can assembly from base plate.
3. Board may now be unclipped from can and access obtained to both sides.
4. When refitting board into can, ensure that leads are correctly dressed through the holes at each end of the can.

REPLACEMENT OF DIAL LIGHTS:

Dial illumination lights may be replaced without removing chassis — method is as follows:

1. Tune receiver so that pointer is at low frequency end of scale (nearest tuning knob).
2. Pull off tuning knob.
3. Remove self-tapping screw located under knob and remove dial cover by lifting at tuning knob end and moving it to the right.
4. Remove two self-tapping screws (one at each end), insert small screwdriver under left hand edge, and lift off dial scale taking care not to damage or scratch it.
5. Dial lights are now accessible for replacement purposes.

REASSEMBLY:

Reassembly is the reverse of the above procedures, ensuring all interconnecting leads are replaced in cable formers or refitted under the appropriate cable clamps to prevent their entanglement in the record changer mechanism and/or deterioration of performance due to incorrect lead dress.

CAPACITORS

Circuit Reference	Value μF	Tol. $\pm \%$	Rating Volts	Remarks
C1	5-55pF		200	CWA/O Trimmer
C2	3-33pF		500	CW Trimmer
C3	Tuning Gang			MSP 63-12929
C4	.022	10	100	Polyester Elna
C5	.01	10	100	Polyester Elna
C6	330pF	10	100	Ceramic Hik Type AY
C7	.047	10	100	Polyester Elna
C8	.01	10	100	Polyester Elna
C9	.01	10	100	Polyester Elna
C10	.047	10	100	Polyester Elna
C11	470pF	5	100	Styroseal
C12	.022	10	100	Polyester Elna
C13	120pF	5	100	Styroseal
C14	.047	10	100	Polyester Elna
C15	.01	10	100	Polyester Elna
C16	.1	- 20 + 80	63	Ceramic
C17	.1	- 20 + 80	63	Ceramic
C18	.0047	10	100	Polyester Elna
C19	.01	10	100	Polyester Elna
C20	4.7	- 10 + 100	6	Electrolytic
C21	.1	- 20 + 80	63	Ceramic
C22	100	- 10 + 100	16	Electrolytic
C22A	.0047	10	100	Polyester Greencap
C23	.047	10	100	Polyester Greencap
C24	10	- 10 + 100	16	Electrolytic
C25	47	- 10 + 100	50	Electrolytic
C26	.1	10	100	Polyester Greencap
C27	.0022	10	100	Polyester Greencap
C28	.022	10	100	Polyester Greencap
C29	270pF	20	50	Ceramic TL
C30	.0027	20	50	Ceramic TL
C31	.033	10	100	Polyester Greencap
C32	68pF	5	50	Ceramic N750
C33	.0047	10	100	Polyester Greencap
C34	4.7	- 10 + 100	50	Electrolytic
C35	.1	10	100	Polyester Greencap
C36	100	- 10 + 100	25	Electrolytic
C37	82pF	20	500	Ceramic Type TH
C38	.0047	10	100	Polyester Greencap
C39	1000	- 10 + 100	25	Electrolytic
C40	1	- 10 + 100	63	Electrolytic
C41	2200	- 10 + 100	35	Electrolytic

COILS and TRANSFORMERS

Circuit Reference	Part No.	Remarks
L1	34-5875	Compensating Coil
L2	14-12592	Aerial Coil (Complete)
	4BX 9.7 x 8"	Ferrite Rod Only
L3	Toko LBR30051 Gn	Oscillator Coil
IFT1	3102-108-91640	
IFT2	3102-108-91110	
CF1	SFD 455D	Ceramic Filter
T1	18-13597	Power Transformer

TRANSISTORS and DIODES

Circuit Reference	Type
TR1	BF194
TR2	BF195C
TR3	BF495
TR4	BF194B
TR5	BC149
TR6	BC147
TR7	BC327
TR8	BD233
TR9	BD234
D1	BA216
D2	OA662
D3	OA626/100
D4	OA626/100

MISCELLANEOUS PARTS – ELECTRICAL

Circuit Reference	Description	Part No.	Remarks
SW1	Function Switch	SL263B4	
SW2	On/Off Switch	MSP 56001-004	
SW3	Quad Switch	17-13345B	
FS1	H.T. Fuse	3 Amp 3AG	
FS2	Dial Lamp Fuse	.021" Wire	
	Dial Lamps	6.3V a.c. 2W	
SK1	DIN Socket	Mab 55	Hirsamann
SK3	Headphone Socket	90-13702	
SK4	Speaker Socket	2127-12-01	McMurdo
SK5	Speaker Socket	2127-12-01	McMurdo
	Loudspeakers	C8-MXOO/65/15	8" Rola
Amplifier Board Assembly			90-13703C
Power Supply Board Assembly			90-13696
Radio Board Assembly			90-13692
Switch Board Assembly			90-13694

MISCELLANEOUS PARTS – MECHANICAL

Description	Part No.
Heat Sink (Output Transistors)	16-14001
Heat Sink (Driver Transistors)	TO 18 Anodeon
Door Hinge	46-11498
Door Stay	38325X
Lid Stay	90-615
Knob - Slide Control	90-14918A
Knob - Tuning	90-11191
Cover - Rocker Switch	20-11422E
Escutcheon (11-188)	16-14919A
Escutcheon (11-191)	16-14921
Escutcheon Badge	16-13254
"KRIESLER" Badge	16-14826
"Q4" Badge	16-13787B
Badge - Speaker Box	20-12502
Dial Overlay	16-14931A
Dial Window	20-14932A
Dial Scale (11-188)	69-14933B
Dial Scale (11-191)	69-14933A
Speaker Enclosure (11-188)	90-12734
Speaker Enclosure (11-191)	90-12736

ADJUSTMENT PROCEDURES

I.F. ALIGNMENT:

The i.f. amplifier is factory pre-aligned and should not normally require adjustment. If however, adjustment is necessary, adopt the following procedures:

1. Detune IFT 1 by approximately 1/2 turn of core.
2. Connect signal generator (modulated 30%) to TR2 base via 0.1uF capacitor and adjust frequency (approximately 455 KHz) for maximum audio output. (This is done to ensure that the signal generator is set to the centre of the pass-band of CF 1, which is not adjustable).
3. Adjust IFT 2 for maximum audio output.
4. Adjust IFT 1 for maximum audio output.
5. Repeat (3) and (4) until no further increase in audio output is obtained.

R.F. ALIGNMENT:

N.B. If both i.f. and r.f. alignment is to be carried out, the i.f. alignment must be done first.

1. Connect the signal generator (modulated 30%) to the external aerial connection.
2. With the gang closed and the signal generator at 525 KHz, adjust L 3 for maximum audio output.
3. With the gang open and the signal generator at 1650 KHz, adjust C 2 for maximum audio output.
4. Repeat (3) and (4) until there is no change at either end.
5. With the pointer at 600 KHz on the radio dial, and the generator at 600 KHz, adjust L 2 for maximum audio output.
6. With the pointer at 1500 KHz on the radio dial, and the generator at 1500 KHz, adjust C 1 for maximum audio output.
7. Repeat (5) and (6) until there is no change at either end.

NOTE: C2 is adjusted by removing turns of wire from the former. If the capacitance needs to be increased, a new capacitor should be fitted.

L 2 is adjusted by sliding the former along the loopstick. It should be fixed in place with wax on completion.

These adjustments should only be necessary after major service e.g. loopstick replacement.

AMPLIFIER ADJUSTMENT:

Adjust R 32 (250K preset) to obtain half supply voltage at the junction of R40, R41.

SERVICE NOTE

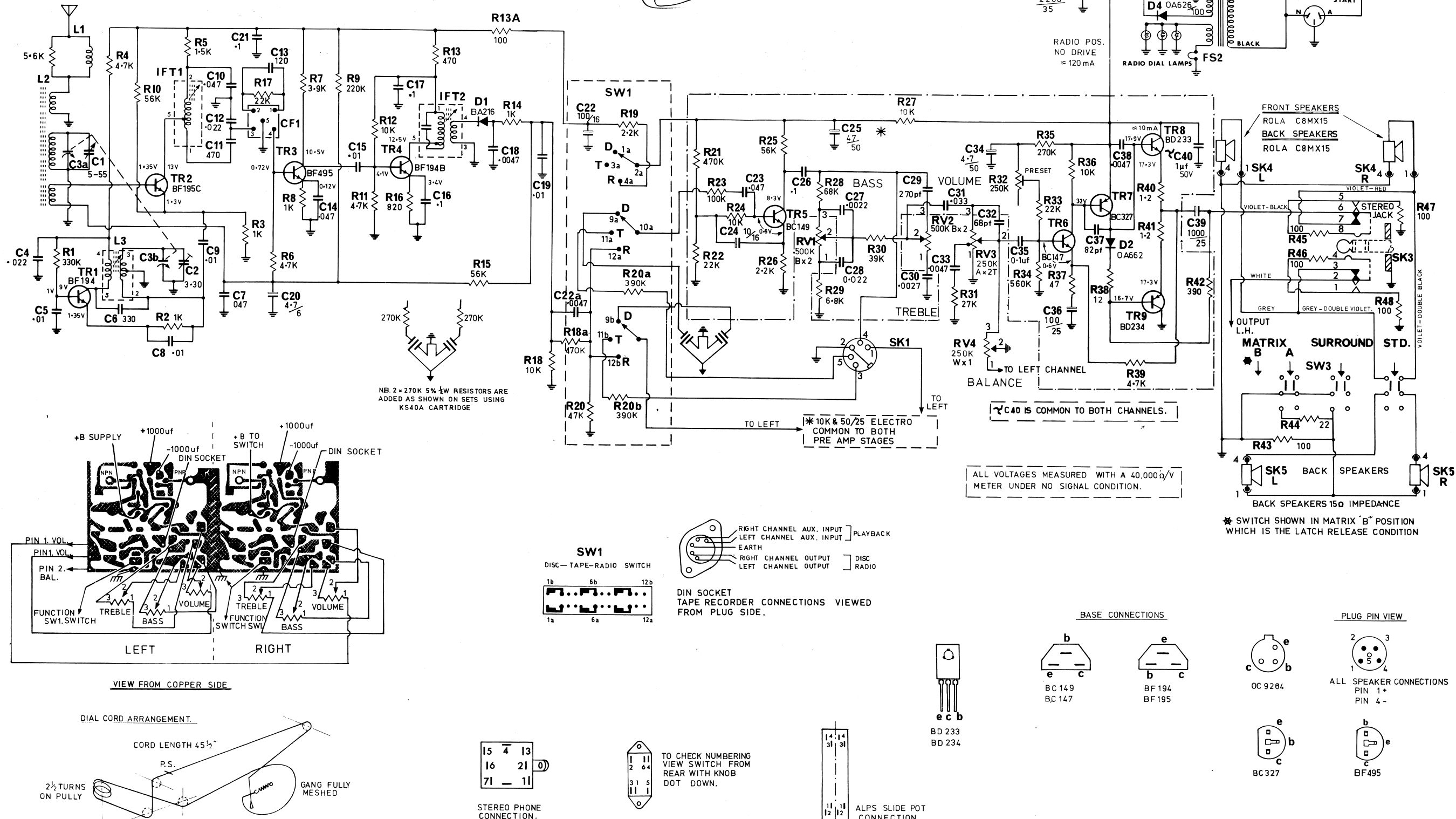
It has been found that under certain conditions of low ambient temperature and low mains input voltage, "crossover distortion" may occur.

This has been corrected in later production sets by altering the value of R38 from 8.2 ohm to 12 ohm. Where this problem occurs in sets fitted with R38 = 8.2 ohms, it should be replaced with 12 ohm 5% 1/2 watt resistor.

RESISTORS

All resistors are 5% 1/2 watt carbon except the following:

Circuit Reference	Value Ohms	Tol. ± %	Rating Watts	Remarks
R32	250K	20	1/4	Preset
R40	1.2	5	1/2	IRH BW1/2
R41	1.2	5	1/2	IRH BW1/2
R42	390	10	1	Morganite AY
R44	22	10	2	IRH
R47	100	10	1	Morganite AY
R48	100	10	1	Morganite AY
RV1	500K/Bx2			Alps 32-12325 BASS CONTROL
RV2	500K/Bx2			Alps 32-12325 TREBLE CONTROL
RV3	250K/A			Alps 32-13595 VOLUME CONTROL
RV4	250K			Alps 32-13596 BALANCE CONTROL



COMPONENTS VIEW

