

SERVICE DATA**ASTOR MODEL GD045**

SOLID STATE STEREOPHONIC RECORD PLAYER
for operation from 240 Volt 50 Hz supply mains



SUPPLY SOURCE:	240 VOLTS 50Hz
POWER CONSUMPTION:	33 Watts approximately
POWER OUTPUT:	2 Watts per channel

ACCESS TO INTERIOR

Remove seven screws holding cabinet base in position.

CHASSIS SERIAL NUMBER

Located on metal chassis near mains lead clamp, and is visible when cabinet base is removed.

CAUTION

Disconnect receiver power lead plug from mains socket before making adjustments inside the cabinet.

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AUDIO AMPLIFIER GAIN AND BALANCE TEST

Audio Frequency Generator	-	1000 Hz - 600 Ohms impedance
Output Meter	-	8 Ohms
Volume Control	-	Maximum, clockwise
Tone Control	-	Maximum, clockwise
Balance Control	-	Clockwise position (Left Channel)

Connect audio generator output leads to left channel "Output from Tape Recorder" socket.

Connect an 8 Ohm speaker to the right channel speaker socket and the output meter to the left channel speaker socket.

Set the output of the audio generator to 15 millivolts.

With the equipment connected as above, the output meter should read a minimum of 50 milliwatts.

Exchange output meter and speaker connections to opposite channels. Turn balance control to anti-clockwise position (Right Channel).

Difference in output between the two readings must not exceed 2dB.

SPEAKER PHASING

It is essential that the speakers be phased correctly.

If a speaker has to be removed for service, note the lead connections to ensure correct phasing when reconnecting.

A method used for checking the phasing of the speakers is detailed in the following paragraphs.

1. Play a monophonic record.
2. To conduct the following test the speaker cabinets should be spaced about six feet apart and the listener should be located about four feet out in front of the centre point between the two cabinets.
3. If the phasing is correct the reproduced sound will appear to be radiated from this centre point.
4. With incorrect phasing the quality of reproduction will be poor, it will appear to be lacking in bass response and will appear to be radiated from both speaker cabinets.
5. If the speakers are incorrectly phased, reverse the leads connected to the voice coil terminals of one speaker then repeat the test detailed above.

ADJUSTMENT OF COLLECTOR CURRENT

This should be performed after an audio module or output transistors or associated componentry have been replaced.

<u>EQUIPMENT</u>	Current Meter - 0-50mA.DC. terminated with lead and socket assy. Part No. 4078-018-01, positive terminal to red sleeve.
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<u>CONDITIONS</u>	Volume Control set at minimum. No input signal. Connect an 8 ohm impedance speaker to receiver socket. Remove link from pins "O" and "N" on Audio Module board. Place meter lead socket on to test pins "O" and "N". Connector with red sleeving is to be connected to pin "N".
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Adjust 100 ohm potentiometer circuit No. 17 until a meter reading of 8mA. ±2mA. is indicated.

Remove meter lead plug and reconnect link to test pins.

PICK-UP STYLUS PRESSURE ADJUSTMENT

The stylus pressure is to be 5 grammes. A pressure gauge Part No.4121-013-01 is available from the Spare Parts Division.

To check the pressure ensure the unit is level with no record on the turntable. Place pressure gauge on the turntable then lower pick-up arm so that stylus locates into the hollow provided on gauge. Adjust for balance and note reading.

To adjust the pressure refer to details in record changer booklet or turntable instruction disc.

AUDIO MODULE PART NO. 4067-007-02

CIRC. NO.	VALUE	CAPACITORS DESCRIPTION	TOL ±	RATING V.DCW.	PART NUMBER
1	.15uF	Polyester	10%	160	4009-020-04
2	10uF	Electrolytic		16	4005-007-19
3	200uF	Electrolytic		10	4005-006-14
4					
5	400uF	Electrolytic		10	4005-042-07
6					
7	150pF	Ceramic, disc	20%	500	4008-035-03
8					

CIRC. NO.	VALUE	RESISTORS DESCRIPTION	TOL ±	RATING WATTS	PART NUMBER
9	3.3K	Carbon	10%	.5	4022-006-01
10	1.2M	Carbon	5%	.5	4022-064-08
11	2.2M	Carbon	5%	.5	4022-036-02
12	47	Carbon	5%	.5	4022-041-11
13	150K	Carbon	10%	.5	4022-038-01
14	12K	Carbon	10%	.5	4022-029-01
15	820	Carbon	10%	.5	4022-009-01
16	4.7K	Carbon	5%	.5	4022-005-15
17	100	Potentiometer, Quiescent Current Adj.			4025-031-03
18	50	N.T.C.			4021-069-03
19	1	Wire Wound	10%	.5	4024-008-02
20	1	Wire Wound	10%	.5	4024-008-02
21	680	Carbon	10%	.5	4022-028-02
22					
23					
24					

CIRC. NO.	MISCELLANEOUS	PART NUMBER
25	Transistor - type AT327	4128-125-01
26	Transistor - type AT415	4128-183-01
27	Transistor - type AC187) matched 4128-107-01) pair
28	Transistor - type AC188	

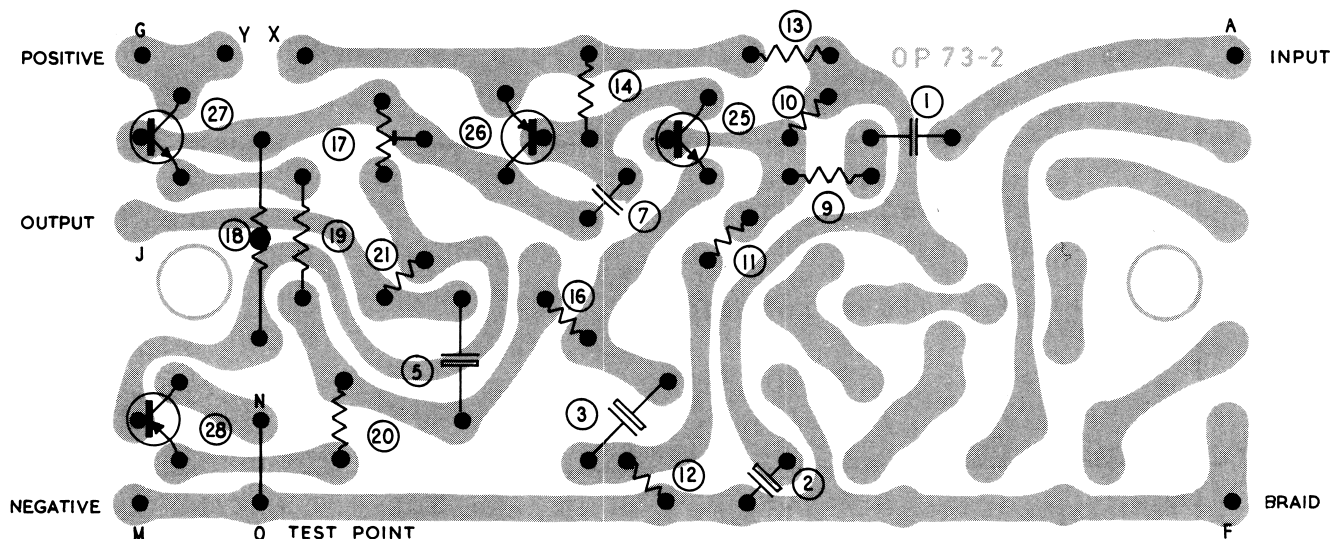
PART NUMBER	MECHANICAL
7111-007-01	Heat Sink (2) output transistors
7167-058-01	Pin (9) board terminations

MISCELLANEOUS

Circuit No.	Description	Part Number
24	Diode type AD4002	4127-114-01
25	Diode type AD4002	4127-114-01
26	Audio Module	4067-007-02
27	Audio Module	4067-007-02
28	Power Transformer	4041-065-04
29	Speaker - 9" x 6" Type C96LX00/72/8	4056-004-21
30	Speaker - 9" x 6" Type C96LX00/72/8	4056-004-21
31	Record Changer B.S.R. (A'Asia) Pty. Ltd. Type C110 4 Speed 200-250 Volt 50Hz Operation Cartridge - Type C1 L.P. Stylus - Diamond 78 Stylus - Sapphire	4060-013-02
32	Mains lead and plug assy.	4078-069-02
33	Switch - part of record changer	
34		
35	Socket - output FROM tape recorder	7222-172-01
36	Socket - output FROM tape recorder	7222-172-01
37	Socket - Speaker	7222-184-01
38	Socket - Speaker	7222-184-01
39	Plug - Speaker	7171-141-01
40	Plug - Speaker	7171-141-01
41	Socket - output TO tape recorder	7222-172-01
42	Socket - output TO tape recorder	7222-172-01

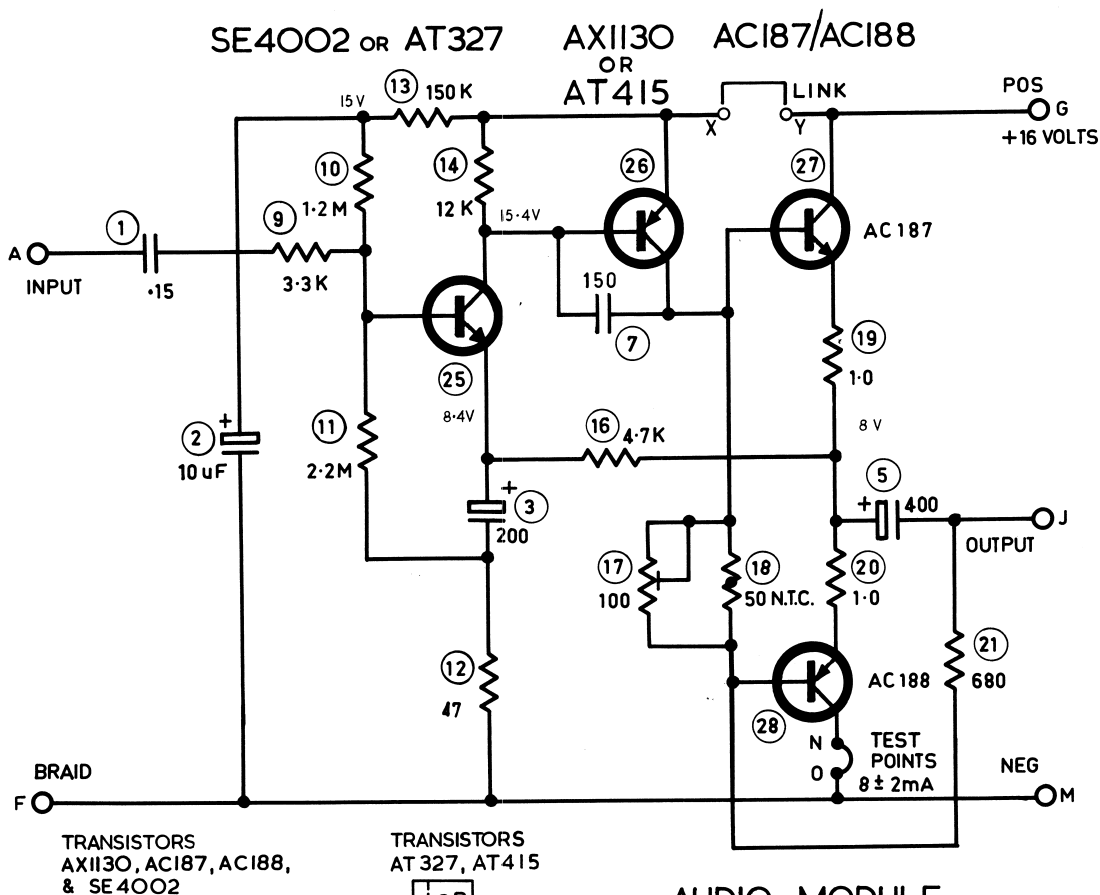
MECHANICAL

Part Number	Description
7294-110-01	Spacer - white (4) module mount
7120-070-01	Spacer - clear (4) module mount
7201-576-06	Screw (4) 1/2" x No.4 Phillips Head - module mount
7261-133-01	Washer (2) heat sink mount
7060-022-02	Contact (4) circuit board links
7054-051-01	Clamp (1) mains lead
7293-025-03	Spacer (2) power transformer mount
7152-751-01	Speednut (2) power transformer mount
7201-576-28	Screw (2) 5/8" x No.4 Phillips Head - trfmr. mount
7231-302-01	Terminal strip (1) Type 3E1
7231-203-01	Terminal strip (1) Type 2E2
7231-103-01	Terminal strip (1) Type 1E2



DRAWN	DATE	CHE'D.	APP'D.	DATE
R. J. A.	18-2-70	<i>[Signature]</i>	S. I. Z.	3-4-70

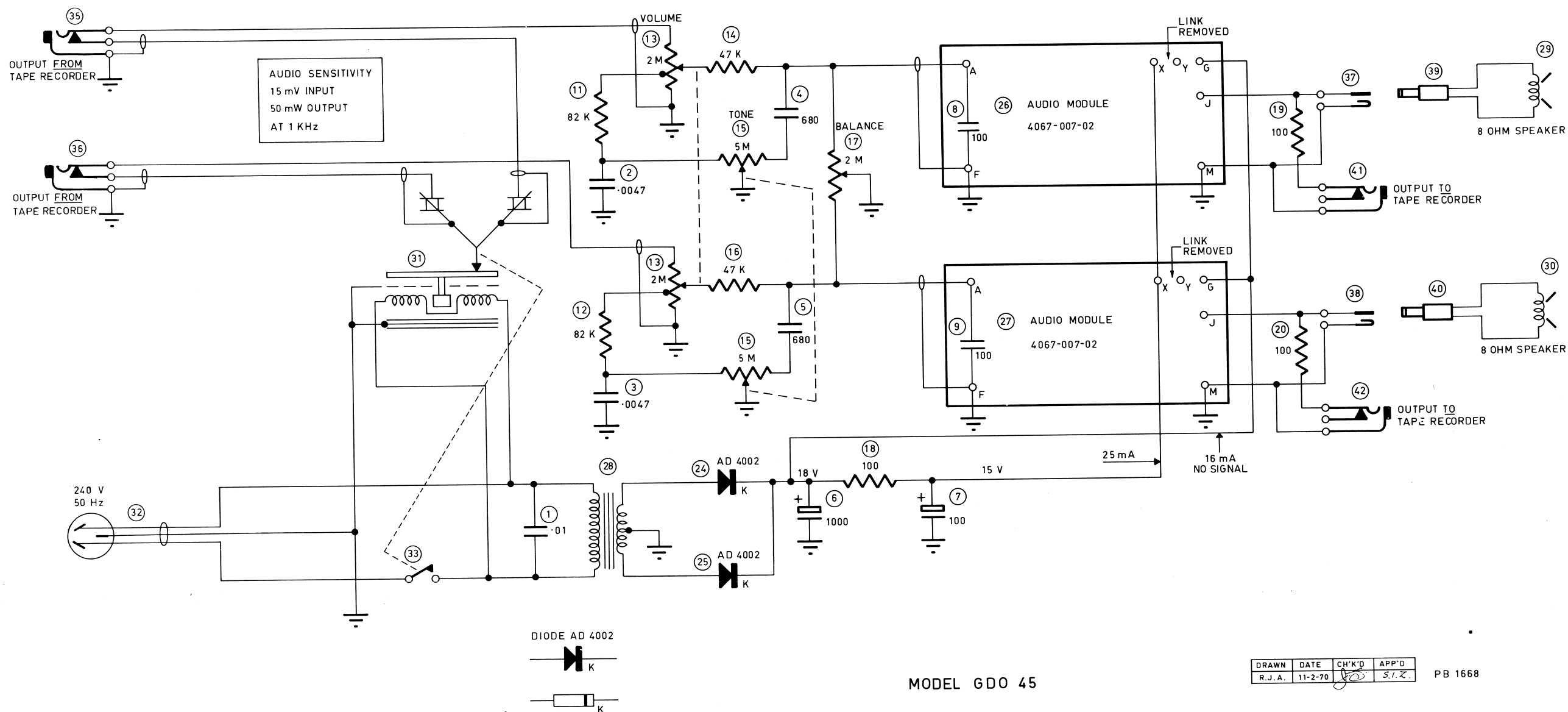
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UNDERSIDE VIEW

DRAWN	DATE	CH'ED.	APP'D.	DATE
R. J. A.	18-2-70	<i>[Signature]</i>	S. I. Z.	3-4-70

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CAPACITORS

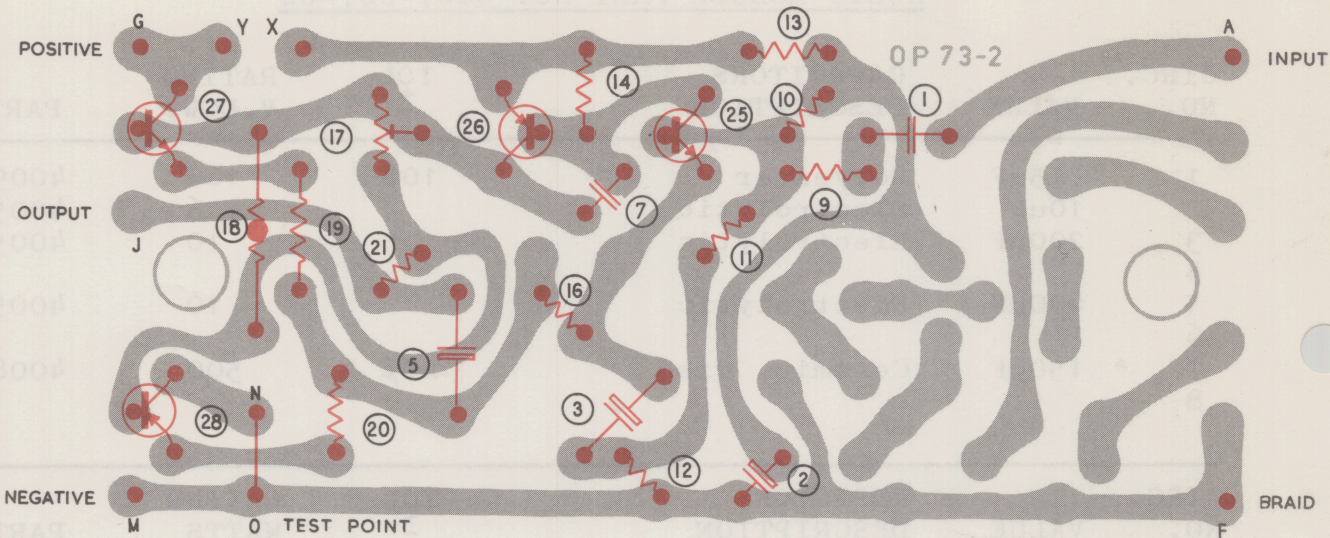
Circuit No.	Value	Description	Tol. ±	Rating V.DCW	Part Number
1	.01uF	Polyester	10%	1000	4009-051-03
2	.0047uF	Polyester	10%	400	4009-017-06
3	.0047uF	Polyester	10%	400	4009-017-06
4	680pF	Polystyrene	10%	100	4004-016-02
5	680pF	Polystyrene	10%	100	4004-016-02
6	1000uF	Electrolytic		25	4005-025-12
7	100uF	Electrolytic		25	4005-002-47
8	100pF	Ceramic Disc	20%	500	4008-006-14
9	100pF	Ceramic Disc	20%	500	4008-006-14

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RESISTORS

Circuit No.	Value Ohms	Description	Tol. ±	Rating Watts	Part Number
11	82K	Carbon	10%	.5	4022-037-01
12	82K	Carbon	10%	.5	4022-037-01
13	2M	Volume Control ganged potentiometers, tapped at 900K			4034-008-04
14	47K	Carbon	10%	.5	4022-051-03
15	5M	Tone Control ganged potentiometers			4034-009-05
16	47K	Carbon	10%	.5	4022-051-03
17	2M	Balance Control			4032-009-11
18	100	Carbon	10%	1	4022-062-02
19	100	Carbon	10%	.5	4022-062-01
20	100	Carbon	10%	.5	4022-062-01

21
22
23



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