

COLISEUM 300 POWER AMP

PARTS LIST

	<u>DESCRIPTION</u>	<u>SUNN PART NO.</u>
DIODES	IN458	22-0458
	IN4004	22-2070
	IN4744 15V Zener	22-0150
TRANSISTORS		
Q1	TIP29B	22-0029
Q11	TIP30B	22-0030
Q2, Q3	2N5089	22-5089
Q4, Q14	MPSA43	22-5184
Q5, Q12	2N4888	22-4888
Q6	BC107	22-0107
Q15	2N4250	22-4250
Q7	MJE15028	22-5028
Q16	MJE15029	22-5029
Q8, Q9, Q10	MJ15022	22-5022
Q17	MJ15016	22-5016
Q18, Q19	2SB600	22-5023
IC	4558	22-4558
POWER TRANSFORMER		28-8200
FILTER CAPACITOR	4700mfd 63V	10-3095
POWER CORD		68-6500
CORD WRAP		48-0000
FAN		27-0003

COLISEUM 300 POWER AMP

TEST POINTS

TEST CONDITIONS: 120VAC; 2 ohm load, place 1.23V RMS at 1KHZ into power amp input.

+V = +50VDC, -V = -50VDC, +Vr = +15VDC, -Vr = -15VDC

TEST POINTS

TP4	.22VP-P, -.02VDC
TP5	30mVP-P, -7.7VDC
TP6	14mVP-P, -.03VDC
TP7	-12VDC
TP8	120mVP-P, +7.9VDC
TP9	80mVP-P, +10VDC
TP10	80mVP-P, +5.4VDC
TP11	76VP-P, -.1VDC
TP12	76VP-P, +1.3VDC
TP13	76VP-P, -1.5VDC
TP14	76VP-P, +.87VDC
TP15	76VP-P, -1VDC
TP16	69VP-P, +.2VDC
TP17	69VP-P, -.3VDC
TP18	69VP-P, -.07VDC
TP19	69VP-P, -.07VDC
TP20	14mVP-P, +.09VDC

BIAS SETTINGS: Unit should be at room temperature. No input signal no load, adjust R42 for a DC voltage reading of .5 -.7 mVDC across R18.

COLISEUM 300 PREAMP  
Parts list

	DESCRIPTION	SUNN PART NO.
DIODES	Red LED	22-0228-1
	Green LED	22-0229-1
	1N458A	22-0458
	1N5239 9V Zener	22-5239
INTERGRATED CIRCUITS	SSM 2012 or SSM 2013	22-2012
	IC 5 TLO 72	22-4002
	IC 401,6,15 MC14069	22-4069
	IC 16 4558	22-4558
	All other IC's	
CONTROLS	25K Linear	23-1111
	Gain, Compression, Master Dual 1 Meg. or	23-1373
	Biamp Dual 100K	23-1380
	Equalization 30K "S" Curve	23-6505
SWITCHES	2 PDT	24-0130
	Contour, Compression Power 125 VAC 15 A	24-0134
KNOBS		59-6161
	Equalization, Biamp	59-6162
	Gain, Compression, Master	59-5532
	Push Button	
JACKS	PC-MT 1/2" Stereo Uninsul. or	67-1001
	PC-MT 1/2" Stereo Insul	67-1000
	All other jacks RT ANG. MT 1/2"	67-3630

COLISEUM 300 PREAMP

TEST POINTS

TEST CONDITIONS: -120VAC, 2 ohm load, input signal .59V RMS @ 1KHZ,  
into normal input gain control at 5 tone control  
at 0 contour switch out, compression switch in,  
compression control min, biamp control at 1 KHZ.

TP1	1.6VP-P	
TP2	.6VP-P	Compression control at min.
TP2	.3VP-P	Compression control at max
TP3	.6VP-P	
TP4	3VP-P	
TP5	3VP-P	
TP6	2.5VP-P	
TP7	2.5VP-P	
TP8	3.5VP-P	
TP9	1.2VP-P	
TP10	1.2mVP-P	
TP11	3.5VP-P	
TP12	8.2VP-P	
TP13	7VP-P	

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	<u>DESCRIPTION</u>	<u>SUNN PART NO.</u>
DIODES:	IN458	22-0458
	Red LED	22-0228
	Green LED	22-0229
TRANSISTOR	BC107	22-0107
INTEGRATED CIRCUITS:	NE571	22-0570
	TLO72	22-4002
	4558	22-4558
	74C04-4069	22-7404
CONTROLS:		
MASTER, GAIN, COMPRESSION:	25K linear	23-1111
BIAMP	Dual 100K linear	23-1373
EQUALIZATION	30K S Curve	23-6505
SWITCHES:		
CONTOUR, COMPRESSION		24-0130
POWER		24-0134
KNOBS:		
EQUALIZATION, BIAMP		59-6061
GAIN, COMPRESSION, MASTER		59-6062
PUSH BUTTON		59-5552
JACKS:		
BRITE, NORMAL	PC 1/2" stereo uninsul. with shnt	67-1001
ALL OTHER JACKS	PC 1/2" right angle mount	67-3630

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	Green LED	22-0229-1
	1N458A	22-0458
	1N5239 9V Zener	22-5239
INTERGRATED CIRCUITS		
IC 5	SSM 2012 or SSM 2013	22-2012
IC 401,6,15	TLO 72	22-4002
IC 16	MC14069	22-4069
All other IC's	4558	22-4558
CONTROLS		
Gain, Compression, Master	25K Linear	23-1111
Biamp	Dual 1 Meg. or	23-1373
	Dual 100K	23-1380
Equalization	30K "S" Curve	23-6505
SWITCHES		
Contour, Compression	2 PDT	24-0130
Power	125 VAC 15 A	24-0134
KNOBS		
Equalization, Biamp		59-6161
Gain, Compression, Master		59-6162
Push Button		59-5532
JACKS		
Brite, Normal - Inputs	PC-MT ½" Stereo Uninsul. or	67-1001
	PC-MT ½" Stereo Insul	67-1000
All other jacks	RT ANG. MT ½"	67-3630

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	IN4744 15V Zener	22-0150
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Q4, Q14	MPSA43	22-5184
Q5, Q12	2N4888	22-4888
Q6	BC107	22-0107
Q15	2N4250	22-4250
Q7	MJE15028	22-5028
Q16	MJE15029	22-5029
Q8, Q9, Q10	MJ15022	22-5022
Q17	MJ15016	22-5016
Q18, Q19	2SB600	22-5023
IC	4558	22-4558
POWER TRANSFORMER		28-8200
FILTER CAPACITOR	4700mfd 63V	10-3095
POWER CORD		68-6500
CORD WRAP		48-0000
FAN		27-0003

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TRANSISTOR	BC107	22-0107
INTEGRATED CIRCUITS:	NE571	22-0570
	TLO72	22-4002
	4558	22-4558
	74C04-4069	22-7404
CONTROLS:		
MASTER, GAIN, COMPRESSION:	25K linear	23-1111
BIAMP	Dual 100K linear	23-1373
EQUALIZATION	30K S Curve	23-6505
SWITCHES:		
CONTOUR, COMPRESSION		24-0130
POWER		24-0134
KNOBS:		
EQUALIZATION, BIAMP		59-6061
GAIN, COMPRESSION, MASTER		59-6062
PUSH BUTTON		59-5532
JACKS:		
WRITE, NORMAL	PC 1/2" stereo uninsul. with shnt	67-1001
ALL OTHER JACKS	PC 1/2" right angle mount	67-3630



COLISEUM 300 PREAMP  
Parts list

	DESCRIPTION	SUNN PART NO.
DIODES	Red LED	22-o228-1
	Green LED	22-0229-1
	1N458A	22-0458
	1N5239 9V Zener	22-5239
INTERGRATED CIRCUITS		
IC 5	SSM 2012 or SSM 2013	22-2012
IC 401,6,15	TLO 72	22-4002
IC 16	MC14069	22-4069
All other IC's	4558	22-4558
CONTROLS		
Gain, Compression, Master	25K Linear	23-1111
Biamp	Dual 1 Meg. or	23-1373
	Dual 100K	23-1380
Equalization	30K "S" Curve	23-6505
SWITCHES		
Contour, Compression	2 PDT	24-0130
Power	125 VAC 15 A	24-0134
KNOBS		
Equalization, Biamp		59-6161
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Push Button		59-5532
JACKS		
Brite, Normal - Inputs	PC-MT 1/2" Stereo Uninsul. or	67-1001
	PC-MT 1/2" Stereo Insul	67-1000
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Q8, Q9, Q10	MJ15022	22-5022
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IC	4558	22-4558
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FILTER CAPACITOR	4700mfd 63V	10-3095
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	TLO72	22-4002
	4558	22-4558
	74C04-4069	22-7404
CONTROLS:		
MASTER, GAIN, COMPRESSION:	25K linear	23-1111
BIAMP	Dual 100K linear	23-1373
EQUALIZATION	50K S Curve	23-6505
SWITCHES:		
CONTOUR, COMPRESSION		24-0150
POWER		24-0154
KNOBS:		
EQUALIZATION, BIAMP		59-6061
GAIN, COMPRESSION, MASTER		59-6062
PUSH BUTTON		59-5532
JACKS:		
WRITE, NORMAL	PC 1/2" stereo uninsul. with shnt	67-1001
ALL OTHER JACKS	PC 1/2" right angle mount	67-3630

COLISEUM 300 PREAMP BOARD TEST POINTS - REV. B  
Starting serial # K30615

TEST CONDITIONS: Line voltage 120 VAC, Input signal 670 MVRMS, @ 500 hz, Speaker load  
2 ohms

CONTROL SETTINGS:

Gain -5

Contour switch- out

Compression - MAX

Compression switch - as indicated on test points

Equalization - 0

Crossover - 300

Master level - 10

TP1, 2.4 VP-P

TP2, 3.4 VP-P

TP3, 6.5 VP-P Comp. off; 1.2 VP-P Comp. on

TP4 2.75 VP-P Comp. off; 1 VP-P Comp. on

TP5 3.5 VP-P Comp. off; 1.3 VP-P Comp. on

TP6 +.45 VDC Comp. off, +.17 VDC

TP7 +.45VDC Comp. off; +.17 VDC

TP8 -1.06 VDC Comp. off ; -.375 VDC Comp. on

TP9 0VDC Comp off; +.19 VDC Comp. on

TP10 3.2 VP-P

TP11 3.2 VP-P

TP12 3.2 VP-P

TP13 1.5VP-P

TP 14 1.3 VP-P

TP15 3.3 VP-P

TP16 1.8 VP-P

TP17 5.2 VP-P

TP18 5.2 VP-P

TP19 9 VP-P

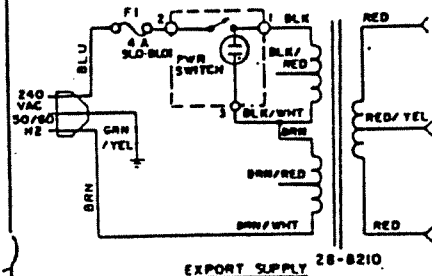
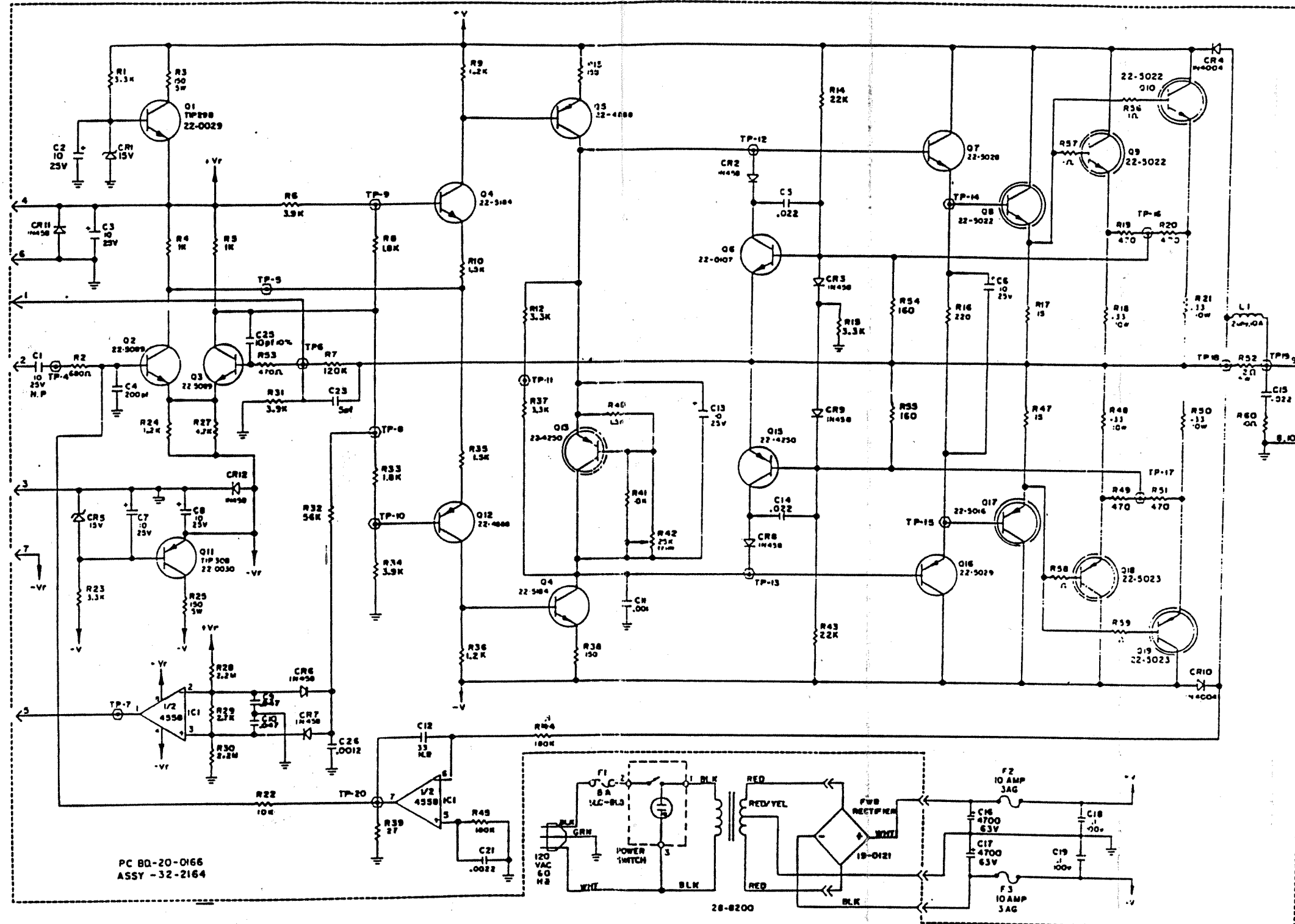
TP20 9 VP-P

TP21 +5.5 VDC

TP22 -5.5 VDC

# COLISEUM 300 POWER AMP SCHEMATIC

REV	DESCRIPTION	DATE	APPROVED

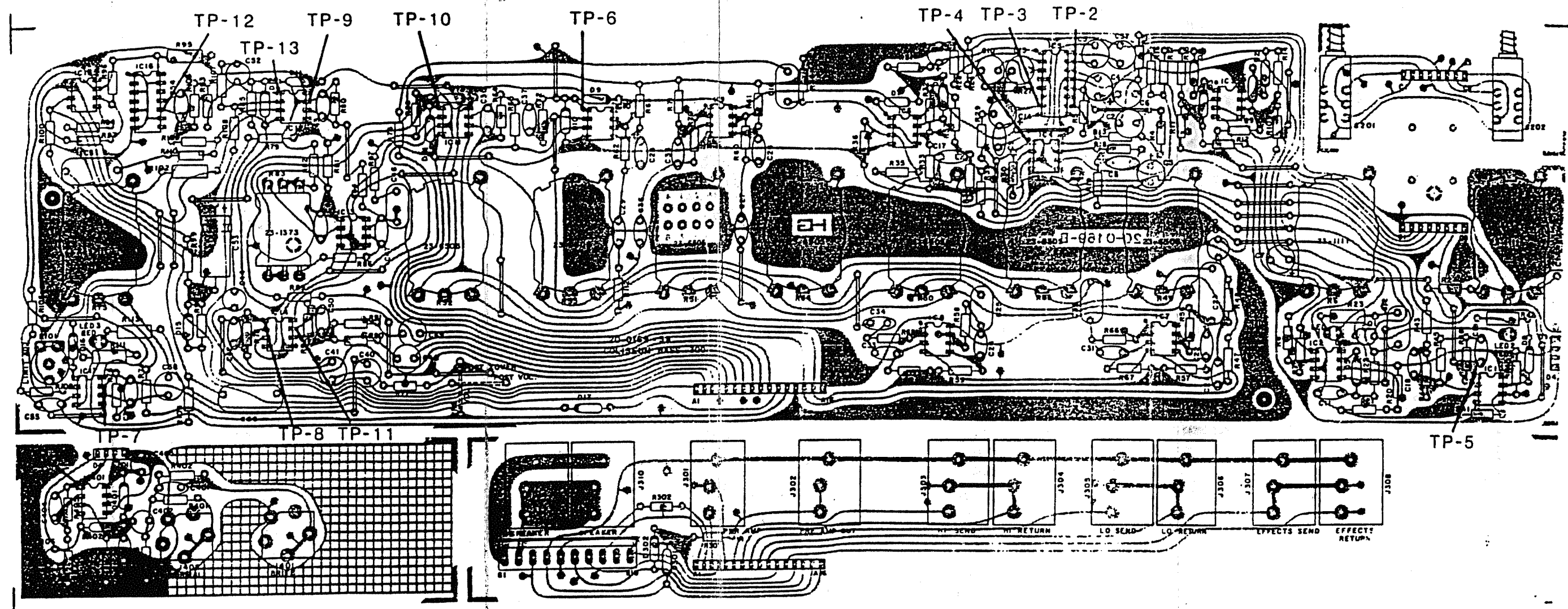


PC 80-20-D166  
ASSY - 32-2164

UNLESS OTHERWISE NOTED:  
1) ALL RESISTORS 1/2 W, 5%, VALUE IN OHMS  
2) ALL CAPACITORS NON-POLAR, VALUE IN MICROFARADS

SUNN MUSICAL EQUIP. CO.	
SCHEMATIC, POWER AMPLIFIER 200W	
DATE: 3-1-62	DESIGNED BY: D
REV: 1	DRAWING NO: D-1142
DO NOT SCALE DRAWING	

# COLISEUM 300 PREAMP & OUTPUT BOARD LAYOUT



## COLISEUM 300 PREAMP

### TEST POINTS

TEST CONDITIONS: -120VAC, 2 ohm load, input signal .59V RMS @ 1KHZ, into normal input gain control at 5 tone control at 0 contour switch out, compression switch in, compression control min, biamp control at 1 KHZ.

TP1	—	1.6VP-P			
TP2		.6VP-P	Compression control at min.	TP7	2.5VP-P
TP2		.3VP-P	Compression control at max.	TP8	3.5VP-P
TP3		.6VP-P		TP9	1.2VP-P
TP4		3VP-P		TP10	1.2mVP-P
TP5		3VP-P		TP11	3.5VP-P
TP6		2.5VP-P		TP12	8.2VP-P
				TP13	7VP-P