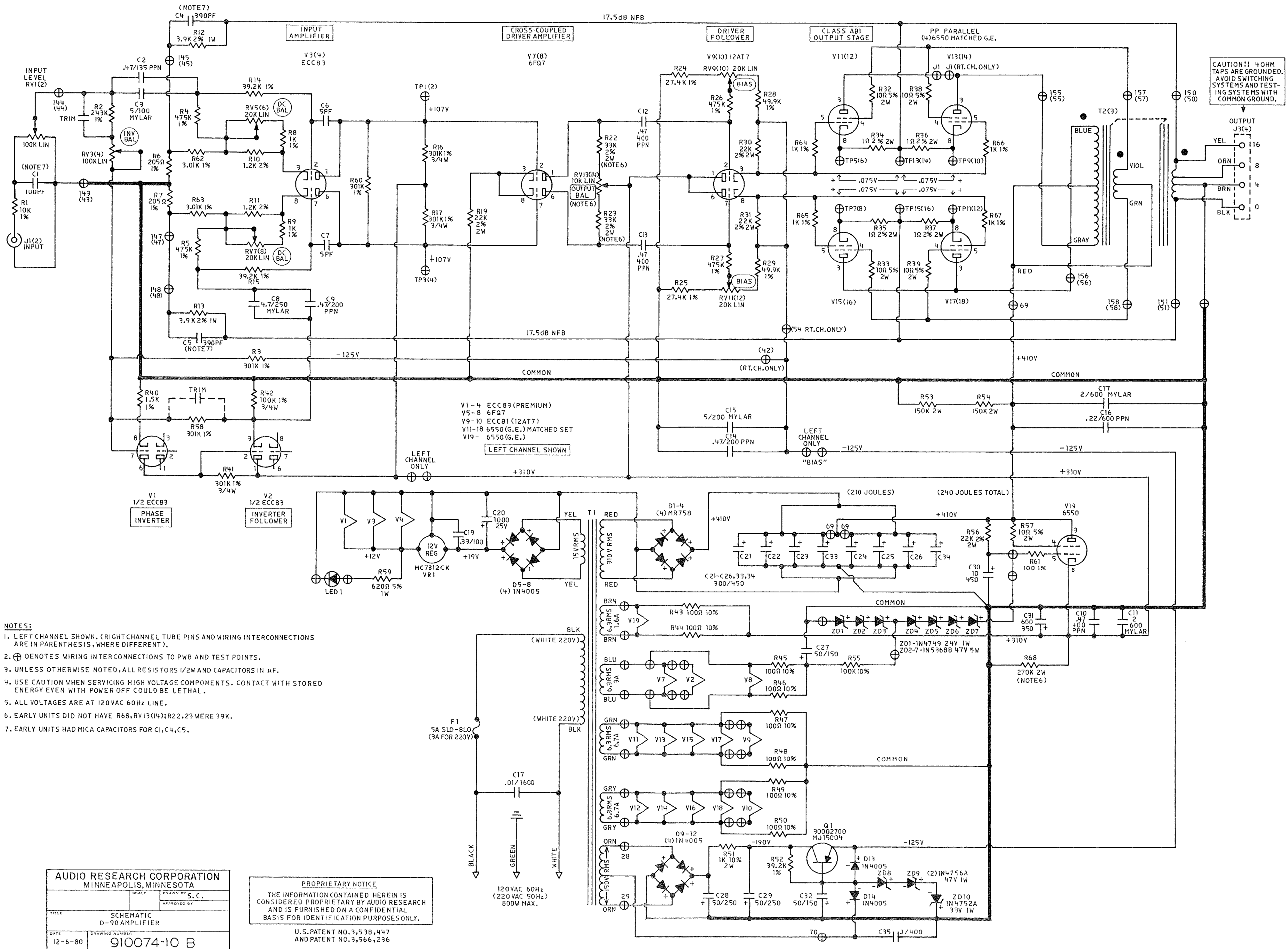


MODEL D-90 POWER AMPLIFIER
SCHEMATIC & PARTS LIST
REV. B 2-24-81



- NOTES:**
1. LEFT CHANNEL SHOWN. (RIGHT CHANNEL TUBE PINS AND WIRING INTERCONNECTIONS ARE IN PARENTHESIS, WHERE DIFFERENT).
 2. ⊕ DENOTES WIRING INTERCONNECTIONS TO PWB AND TEST POINTS.
 3. UNLESS OTHERWISE NOTED, ALL RESISTORS 1/2W AND CAPACITORS IN μF.
 4. USE CAUTION WHEN SERVICING HIGH VOLTAGE COMPONENTS. CONTACT WITH STORED ENERGY EVEN WITH POWER OFF COULD BE LETHAL.
 5. ALL VOLTAGES ARE AT 120VAC 60Hz LINE.
 6. EARLY UNITS DID NOT HAVE R68, RV13(14); R22, 23 WERE 39K.
 7. EARLY UNITS HAD MICA CAPACITORS FOR C1, C4, C5.

AUDIO RESEARCH CORPORATION
MINNEAPOLIS, MINNESOTA

SCALE: _____ DRAWN BY: S.C.
APPROVED BY: _____

TITLE: SCHEMATIC
D-90 AMPLIFIER

DATE: 12-6-80 DRAWING NUMBER: 910074-10 B

PROPRIETARY NOTICE

THE INFORMATION CONTAINED HEREIN IS CONSIDERED PROPRIETARY BY AUDIO RESEARCH AND IS FURNISHED ON A CONFIDENTIAL BASIS FOR IDENTIFICATION PURPOSES ONLY.

U.S. PATENT NO. 3,538,447
AND PATENT NO. 3,566,236

120VAC 60Hz
(220VAC 50Hz)
800W MAX.

CAUTION!! 40HM TAPS ARE GROUNDED. AVOID SWITCHING SYSTEMS WITH COMMON GROUND.

D-90 PARTS LIST

COMPONENT	QUAN.	DESCRIPTION	VALUE	RATING	TOL.	ARC PART NO.
V1-4	4	ECC83(Premium)				32001000
V5-8	4	6FQ7				32000202
V9,10	2	ECC81(12AT7)				32000900
V11-18	4	6550 (Matched Pair)				32000502
V19	1	6550				32000501
D1-4	4	MR758	800V	6A		30503100
D5-14	10	1N4005	600V	1A		30500400
ZD1	1	1N4749 Zener	24V	1W	10%	30502500
ZD10	1	1N4752A Zener	33V	1W	5%	30503000
ZD2-7	6	1N5368B Zener	47V	5W	5%	30500100
ZD8,9	2	1N4756A Zener	47V	1W	5%	30503200
LED1	1	LED Green				34300100
Q1	1	PNP Transistor				30002700
RV1,2	2	Input Level	100K	Lin Taper	10%	45100518
RV3,4	2	Trim Pot.	100K	Lin Taper	10%	45100527
RV5-12	8	Trim Pot.	20K	Lin Taper	10%	45200412
RV13,14	2	Trim Pot	10K	Lin Taper	10%	45100424
VR1	1	MC7812CK Voltage Reg.	12V	1A		31001300
R1	2	Metal Film	10K	1/2W	1%	42100403
R2	2	Metal Film	243K	1/2W	1%	42243503
R3,58,60	6	Metal Film	301K	1/2W	1%	42301503
R4,5,26,27	8	Metal Film	475K	1/2W	1%	42475503
R6,7	4	Metal Film	205	1/2W	1%	42205203
R8,9,64-67	12	Metal Film	1K	1/2W	1%	42100303
R10,11	4	Metal Film	1.2K	1/2W	2%	46120301
R12,13	4	Metal Film	3.9K	1W	2%	46390301
R14,15,52	5	Metal Film	39.2K	1/2W	1%	42392403
R16,17,41	6	Metal Film	301K	3/4W	1%	42301504
R19,30,31,56	7	Metal Film	22K	2W	2%	46220401
R22,23	4	Metal Film	33K	2W	2%	46330401
R24,25	4	Metal Film	27.4K	1/2W	1%	42274403
R28,29	4	Metal Film	29.9K	1/2W	1%	42499403
R32,33,38,39,57	9	Wire Wound	10Ω	2W	5%	43100105
R34-37	8	Wire Wound	1.0Ω	2W	5%	43100002
R40	2	Metal Film	1.5K	1/2W	1%	42150303
R42	2	Metal Film	100K	3/4W	1%	42100504
R43-50	8	Carbon Composition	100Ω	1/2W	10%	40100203
R51	1	Carbon Composition	1K	2W	10%	40100305
R53,54	2	Carbon Composition	150K	2W	5%	41150505
R55	1	Carbon Composition	100K	1/2W	10%	40100503
R59	1	Carbon Composition	620Ω	1W	5%	41620204
R61	1	Metal Film	100Ω	1/2W	1%	42100203
R62,63	4	Metal Film	3.01K	1/2W	1%	42301303
R68	1	Carbon Composition	270K	2W	10%	40270505
C1	2	Polystyrene	100pF	160V	5%	53100200
C2,14	4	Polypropylene	.47μF	200V		53470507
C3	2	MPE	5.0μF	100V		53500603
C4,5	4	Polystyrene	390pF	160V	5%	53390200
C6,7	4	Dipped Mica	5pF	500V	10%	57500000
C8,15	4	MPE	4.7μF	250V		53470600
C9,10,12,13	7	Polypropylene	.47μF	400V		53470506
C11,17	3	MPE	2.0μF	600V		53200600
C16	2	Polypropylene	.22μF	600V		53220505
C18	1	Polyester	.01μF	1600V		53100403
C19	1	Ceramic Monolythic	.33μF	100V		52330500
C20	1	Electrolytic	1000μF	25V		50100903
C21-26,33,34	8	Electrolytic	300μF	450V		50300803
C27,32	2	Electrolytic	50μF	150V		50500700
C28,29	2	Electrolytic	50μF	250V		50500703
C30	1	Electrolytic	10μF	450V		50100702
C31	1	Electrolytic	600μF	350V		50600802
C35	1	Polyester	.1μF	400V		53100502
F1	1	Fuse Slo-Blo 120V	5A	250V		34500501
		Fuse Slo-Blo 220V	3A	250V		34500402
T1	1	Power Transformer		120V		60004302
		Power Transformer		220V		60004306
T2,3	2	Output Transformer				60004200
J1,2	2	Input Jack				23201000
J3,4	2	Output Terminal Block				23100100
	2	Knob, Level				13000900

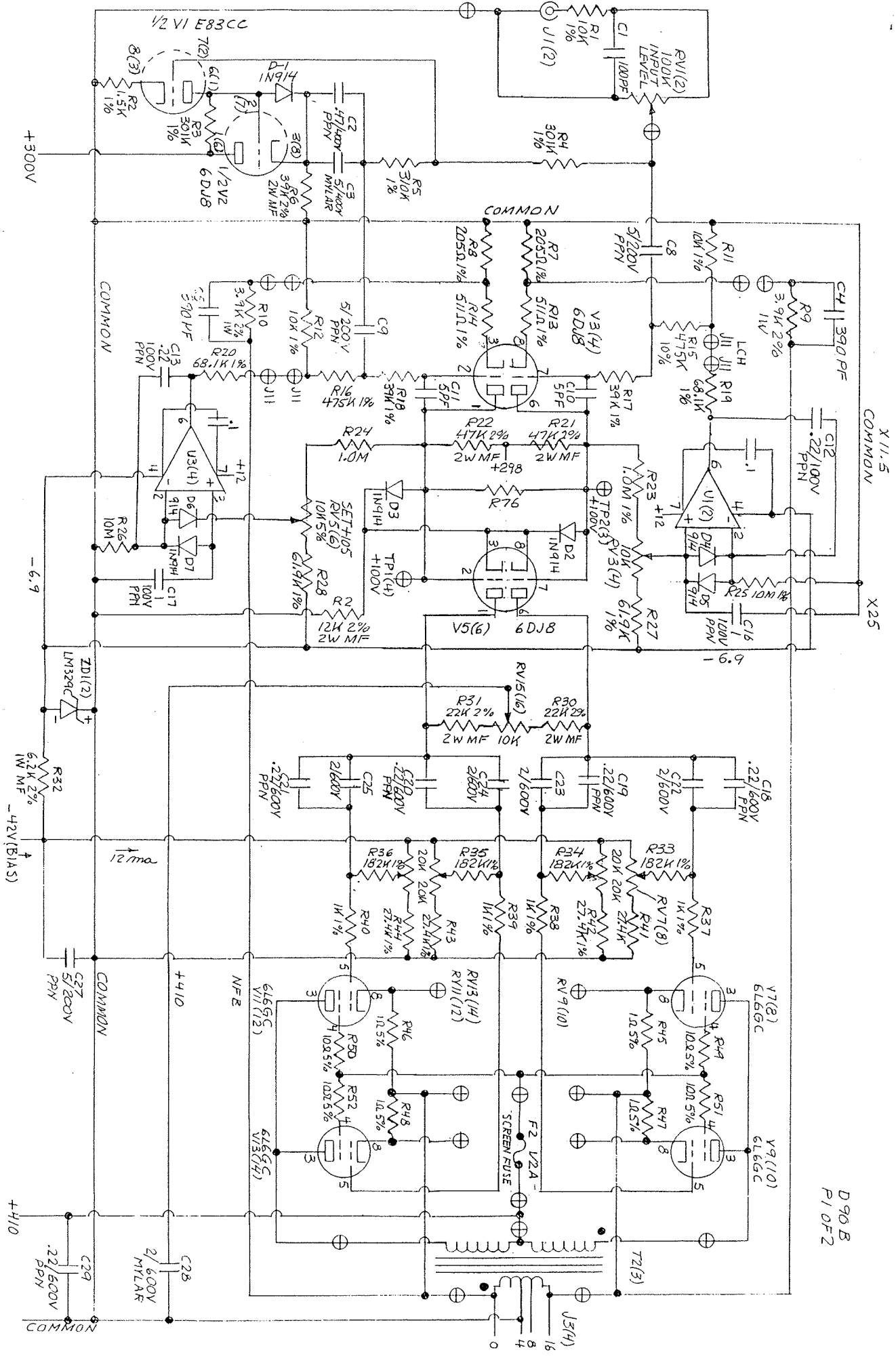
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D90B AMPLIFIER SCHEMATIC

3-8-82



D90 B
P1 OF 2

