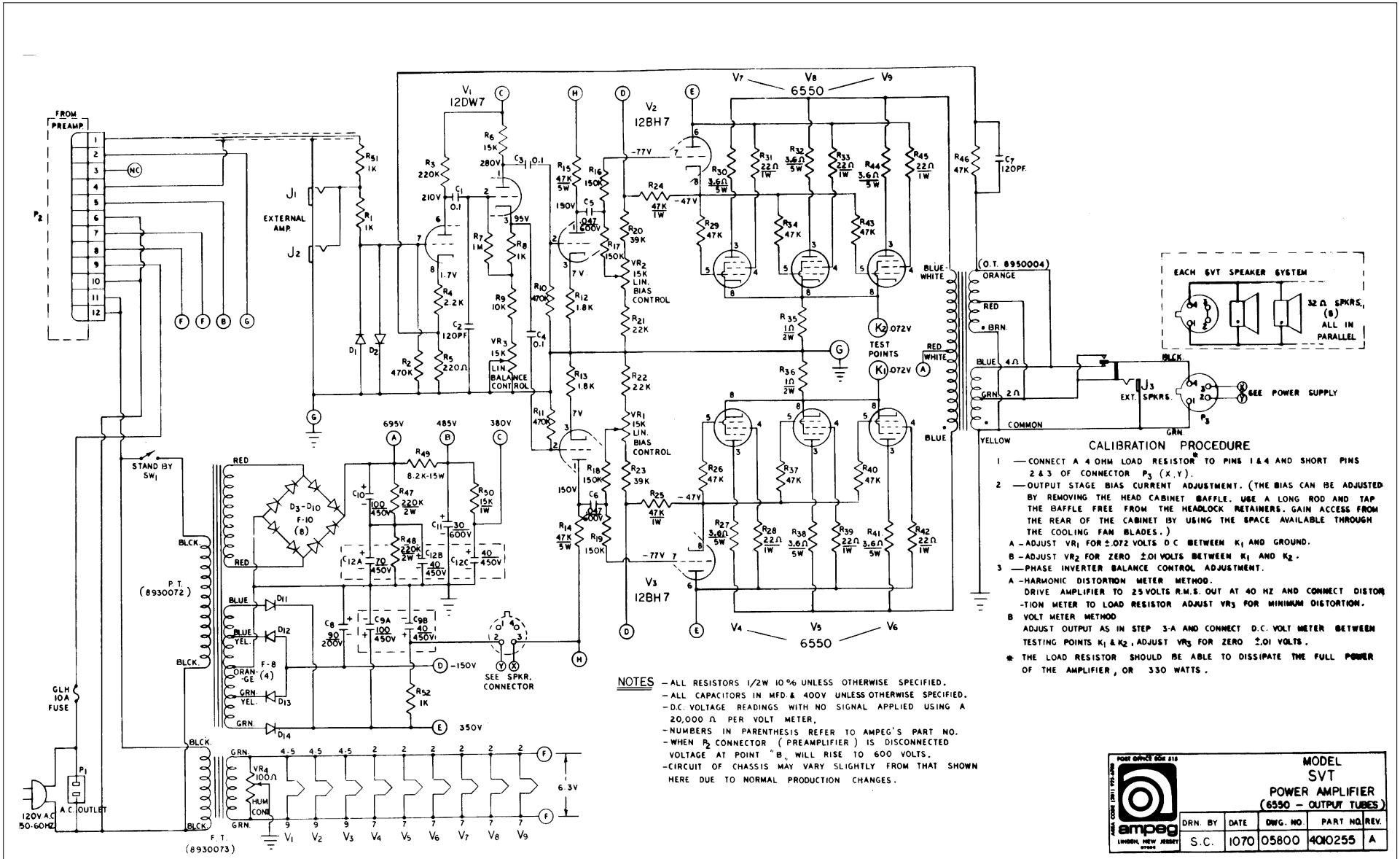
SVT **(REV A)**

Ampeg



CALIBRATION PROCEDURE

1 — CONNECT A 4 OHM LOAD RESISTOR* TO PINS 1 & 4 AND SHORT PINS 2 & 3 OF CONNECTOR P_3 (X,Y).

2 — OUTPUT STAGE BIAS CURRENT ADJUSTMENT. (THE BIAS CAN BE ADJUSTED BY REMOVING THE HEAD CABINET BAFFLE. USE A LONG ROD AND TAP THE BAFFLE FREE FROM THE HEADLOCK RETAINERS. GAIN ACCESS FROM THE REAR OF THE CABINET BY USING THE SPACE AVAILABLE THROUGH THE COOLING FAN BLADES.)

A – ADJUST VR_1 FOR ±.072 VOLTS D.C BETWEEN K_1 AND GROUND.

B – ADJUST VR_2 FOR ZERO ±.01 VOLTS BETWEEN K_1 AND K_2.

3 — PHASE INVERTER BALANCE CONTROL ADJUSTMENT.

A – HARMONIC DISTORTION METER METHOD.
DRIVE AMPLIFIER TO 25 VOLTS R.M.S. OUT AT 40 HZ AND CONNECT DISTORTION METER TO LOAD RESISTOR ADJUST VR_3 FOR MINIMUM DISTORTION.

B VOLT METER METHOD
ADJUST OUTPUT AS IN STEP 3-A AND CONNECT D.C. VOLT METER BETWEEN TESTING POINTS K_1 & K_2, ADJUST VR_3 FOR ZERO ±.01 VOLTS.

* THE LOAD RESISTOR SHOULD BE ABLE TO DISSIPATE THE FULL POWER OF THE AMPLIFIER, OR 330 WATTS.

NOTES

- ALL RESISTORS 1/2W 10% UNLESS OTHERWISE SPECIFIED.
- ALL CAPACITORS IN MFD. & 400V UNLESS OTHERWISE SPECIFIED.
- D.C. VOLTAGE READINGS WITH NO SIGNAL APPLIED USING A 20,000 Ω PER VOLT METER.
- NUMBERS IN PARENTHESIS REFER TO AMPEG'S PART NO.
- WHEN P_2 CONNECTOR (PREAMPLIFIER) IS DISCONNECTED VOLTAGE AT POINT "B" WILL RISE TO 600 VOLTS.
- CIRCUIT OF CHASSIS MAY VARY SLIGHTLY FROM THAT SHOWN HERE DUE TO NORMAL PRODUCTION CHANGES.

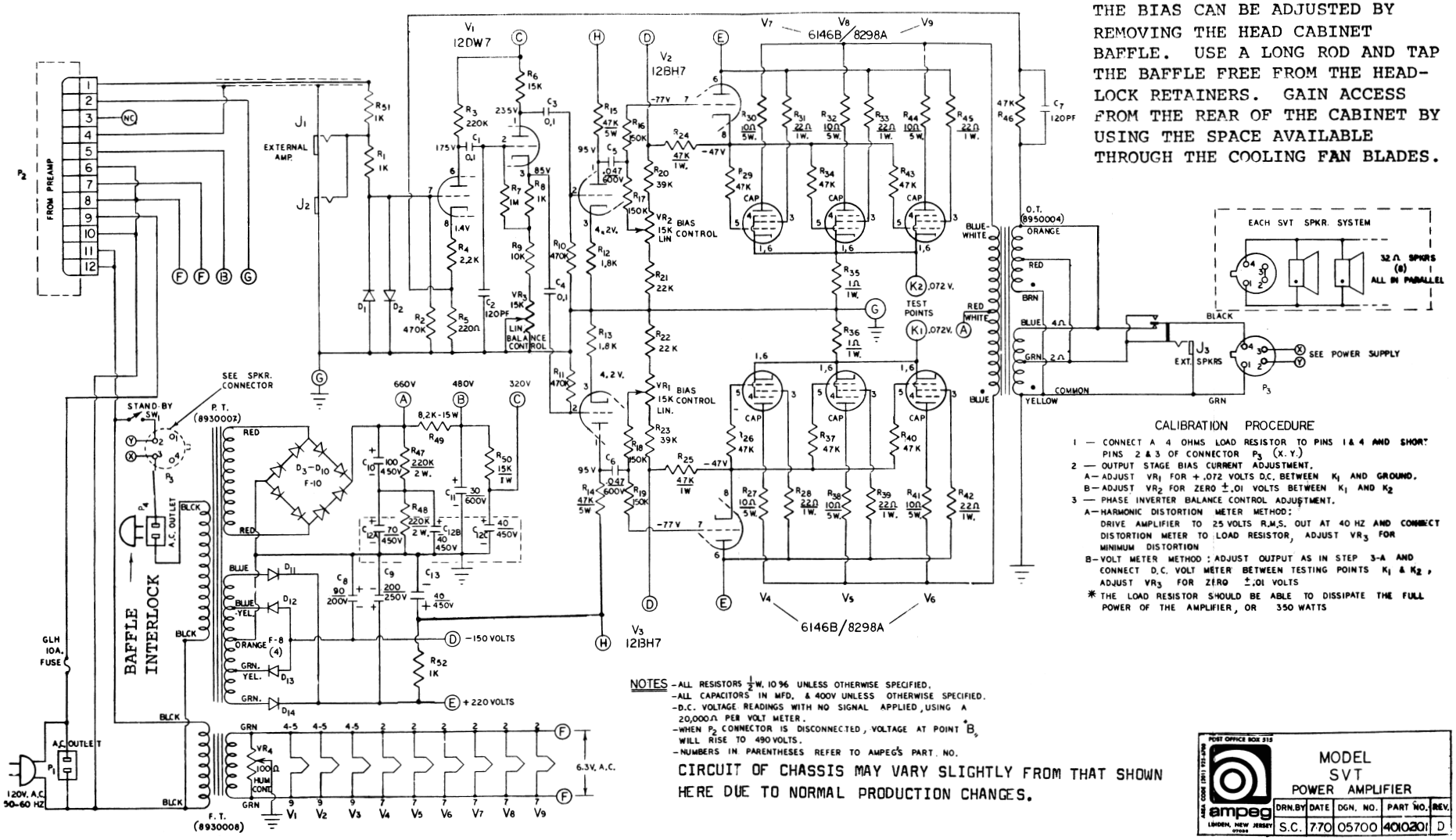
POST OFFICE BOX 818
AREA CODE (201) 925-3000
ampeg
LYNDEN, NEW JERSEY

MODEL
SVT
POWER AMPLIFIER
(6550 – OUTPUT TUBES)

DRN. BY	DATE	DWG. NO.	PART NO.	REV.
S.C.	1070	05800	4010255	A

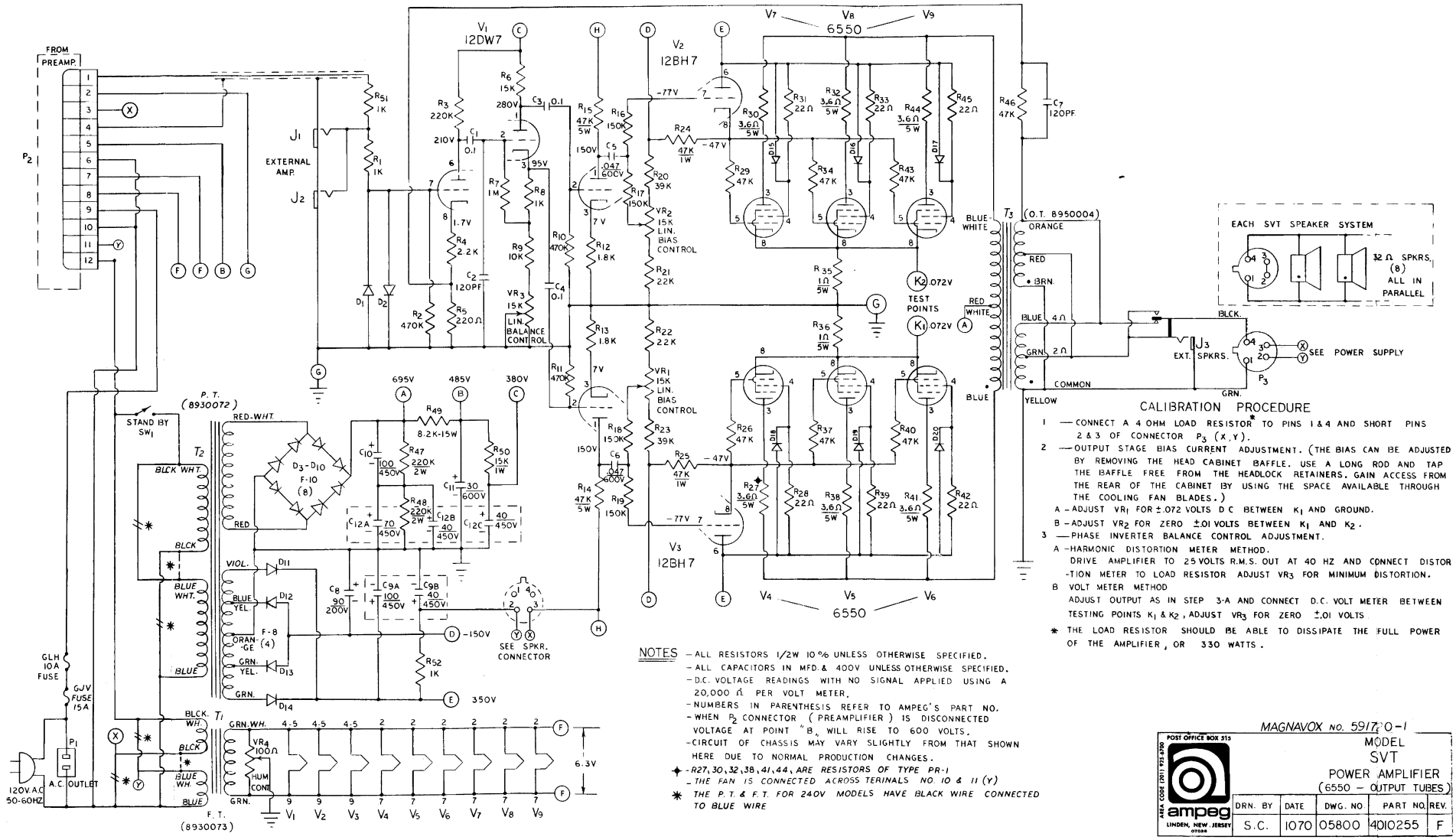
SVT **POWER AMP (REV D)**

Ampeg



SVT **POWER AMP (REV F)**

Ampeg



CALIBRATION PROCEDURE

1 — CONNECT A 4 OHM LOAD RESISTOR * TO PINS 1 & 4 AND SHORT PINS 2 & 3 OF CONNECTOR P_3 (X, Y).

2 — OUTPUT STAGE BIAS CURRENT ADJUSTMENT. (THE BIAS CAN BE ADJUSTED BY REMOVING THE HEAD CABINET BAFFLE. USE A LONG ROD AND TAP THE BAFFLE FREE FROM THE HEADLOCK RETAINERS. GAIN ACCESS FROM THE REAR OF THE CABINET BY USING THE SPACE AVAILABLE THROUGH THE COOLING FAN BLADES.)

A – ADJUST VR_1 FOR ±.072 VOLTS D C BETWEEN K_1 AND GROUND.

B – ADJUST VR_2 FOR ZERO ±.01 VOLTS BETWEEN K_1 AND K_2.

3 — PHASE INVERTER BALANCE CONTROL ADJUSTMENT.

A – HARMONIC DISTORTION METER METHOD.
DRIVE AMPLIFIER TO 25 VOLTS R.M.S. OUT AT 40 HZ AND CONNECT DISTORTION METER TO LOAD RESISTOR ADJUST VR_3 FOR MINIMUM DISTORTION.

B VOLT METER METHOD
ADJUST OUTPUT AS IN STEP 3-A AND CONNECT D.C. VOLT METER BETWEEN TESTING POINTS K_1 & K_2, ADJUST VR_3 FOR ZERO ±.01 VOLTS

* THE LOAD RESISTOR SHOULD BE ABLE TO DISSIPATE THE FULL POWER OF THE AMPLIFIER, OR 330 WATTS.

NOTES

- ALL RESISTORS 1/2W 10% UNLESS OTHERWISE SPECIFIED.
- ALL CAPACITORS IN MFD. & 400V UNLESS OTHERWISE SPECIFIED.
- D.C. VOLTAGE READINGS WITH NO SIGNAL APPLIED USING A 20,000 Ω PER VOLT METER.
- NUMBERS IN PARENTHESIS REFER TO AMPEG'S PART NO.
- WHEN P_2 CONNECTOR (PREAMPLIFIER) IS DISCONNECTED VOLTAGE AT POINT "B" WILL RISE TO 600 VOLTS.
- CIRCUIT OF CHASSIS MAY VARY SLIGHTLY FROM THAT SHOWN HERE DUE TO NORMAL PRODUCTION CHANGES.

✦ – R27, 30, 32, 38, 41, 44, ARE RESISTORS OF TYPE PR-1
– THE FAN IS CONNECTED ACROSS TERINALS NO. 10 & 11 (Y)

✱ THE P.T. & F.T. FOR 240V MODELS HAVE BLACK WIRE CONNECTED TO BLUE WIRE

MAGNAVOX no. 5917-0-1

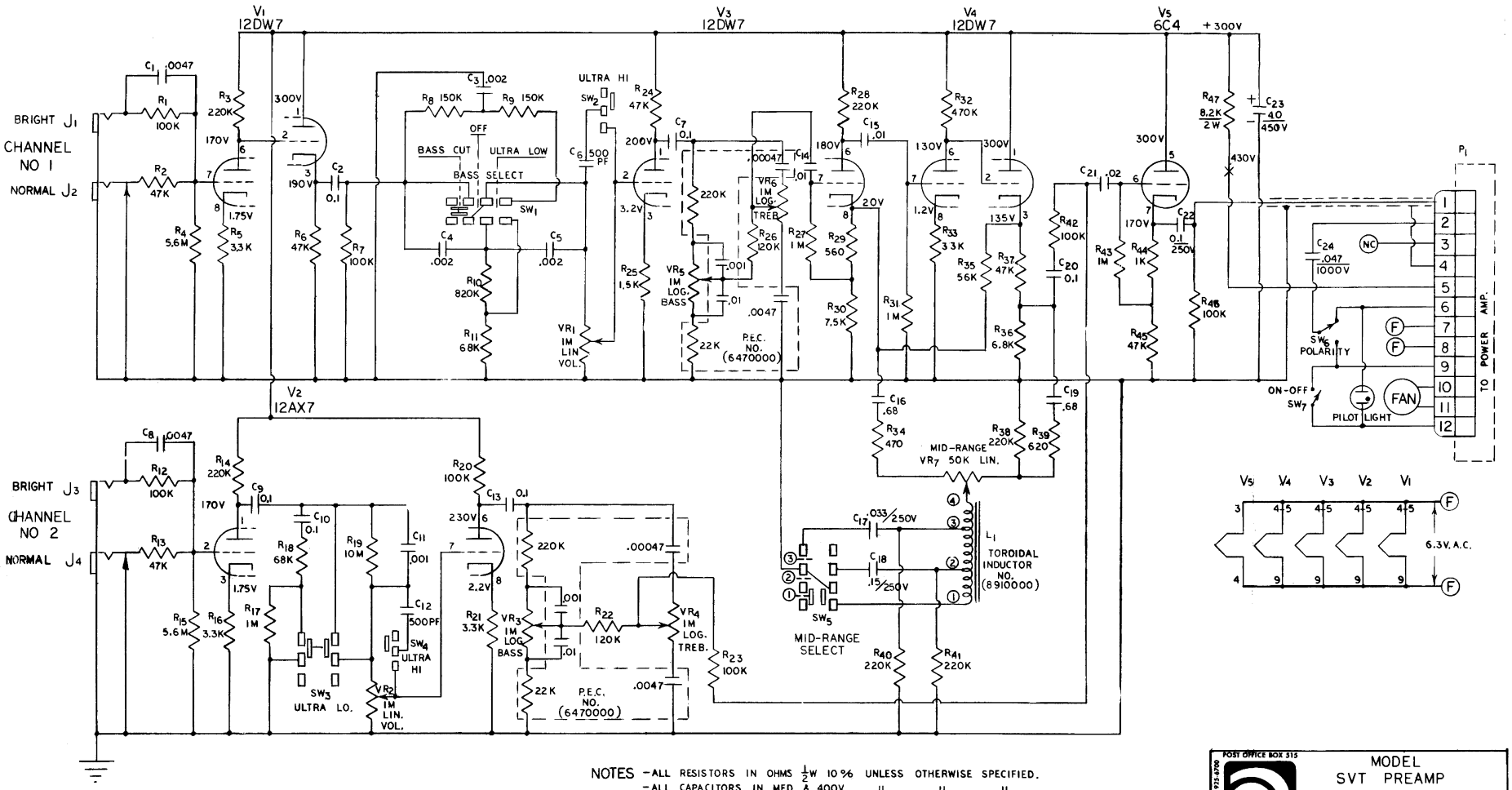
POST OFFICE BOX 513 — AREA CODE (201) 925-0600 — ampeg — LINDEN, NEW JERSEY 07036

MODEL
SVT
POWER AMPLIFIER
(6550 – OUTPUT TUBES)

DRN. BY	DATE	DWG. NO	PART NO.	REV.
S.C.	1070	05800	4010255	F

SVT **PREAMP**

Ampeg

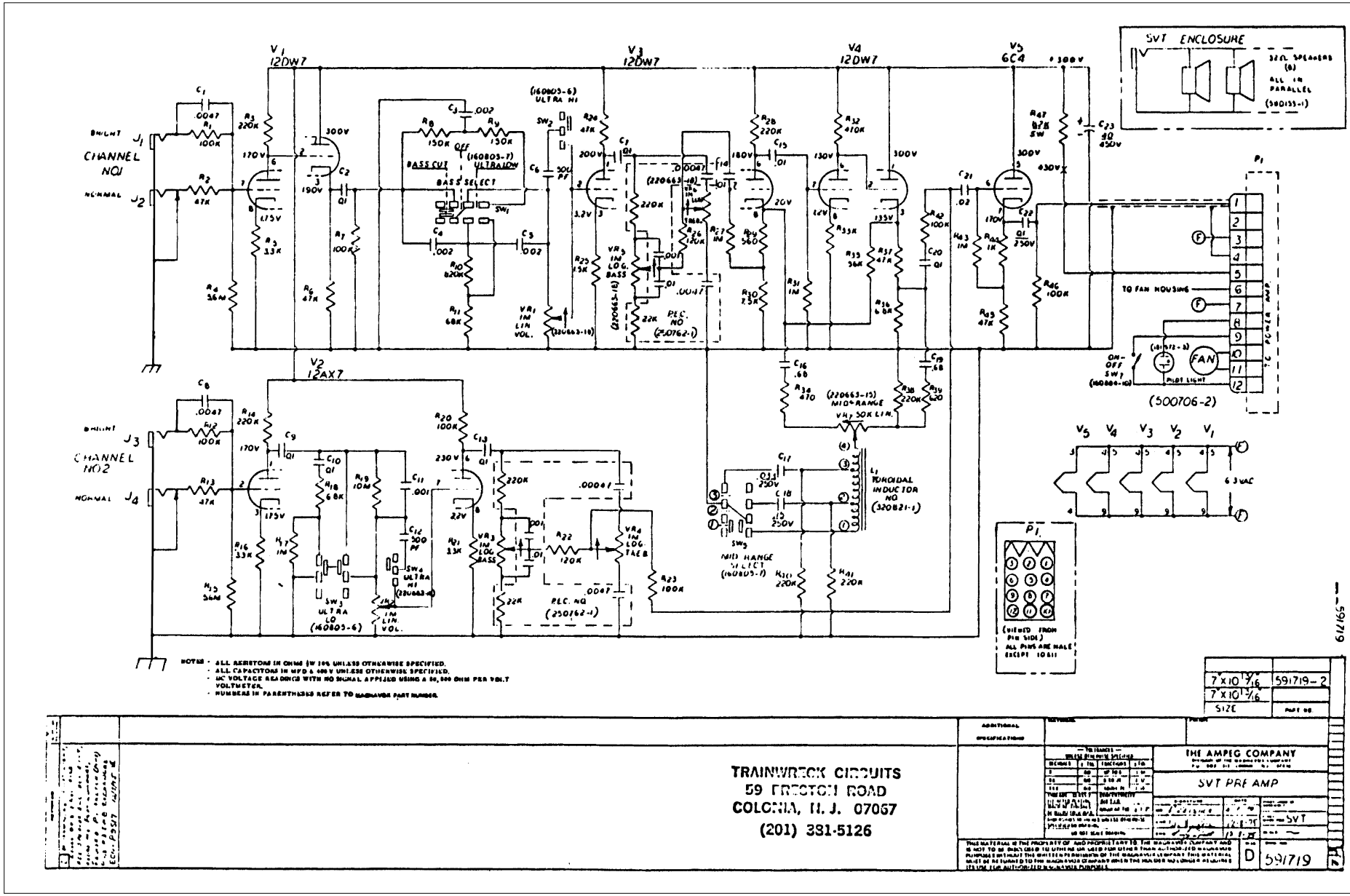


NOTES
- ALL RESISTORS IN OHMS ½W 10% UNLESS OTHERWISE SPECIFIED.
- ALL CAPACITORS IN MFD & 400V " " "
- DC VOLTAGE READINGS WITH NO SIGNAL APPLIED USING A 20,000Ω PER VOLT VOLTMETER.
- NUMBERS IN PARENTHESES REFER TO AMPEG'S PART NO.

POST OFFICE BOX 515
AREA CODE (201) 925-4700
ampeg
LINDEN, NEW JERSEY 07036

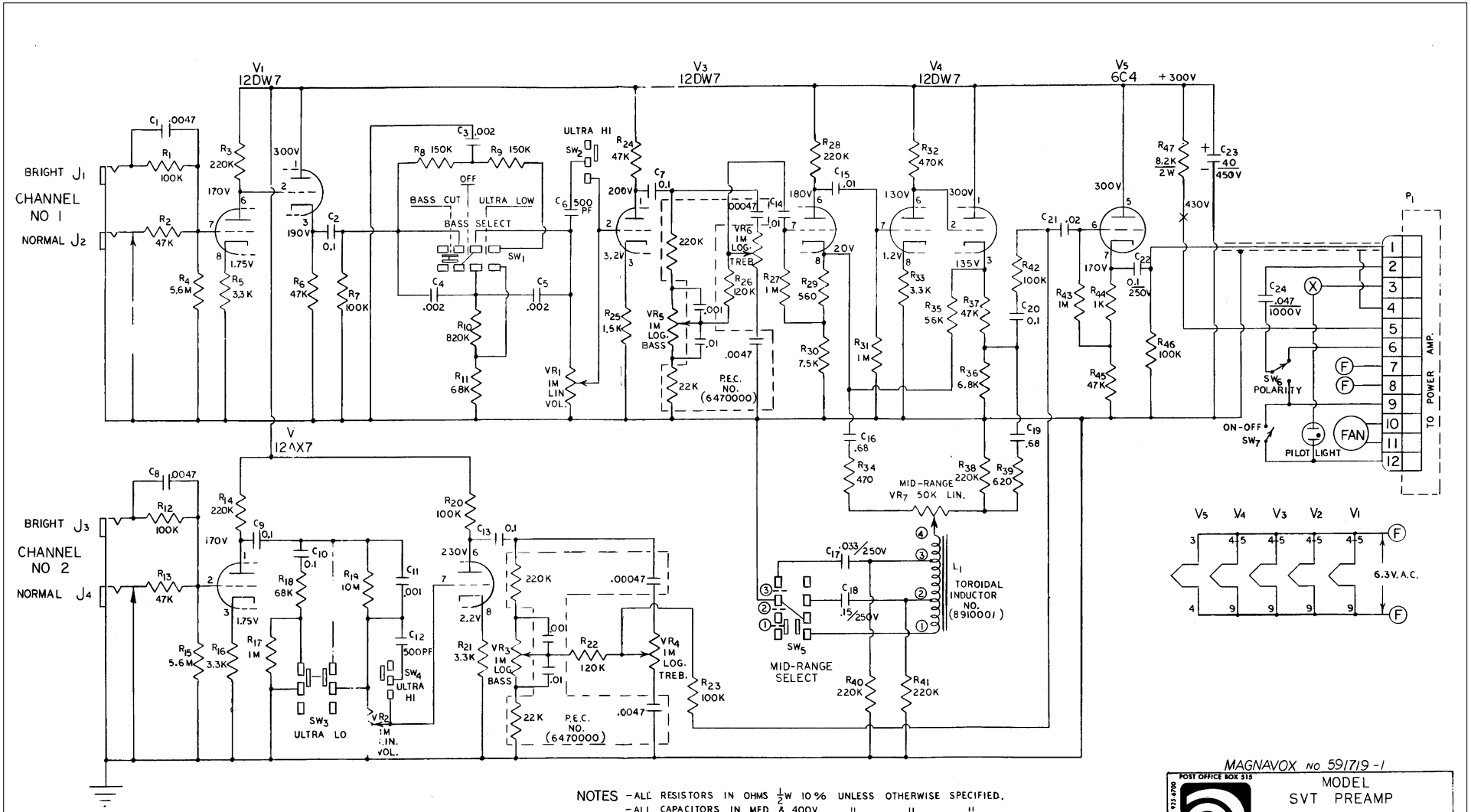
MODEL
SVT PREAMP
U.S. PATENT PENDING

DRN. BY	DATE	DNG. NO.	PART NO.	REV.
S.C.	669	05804	4010204	


SVT ENCLOSURE
CHANNEL NO1
CHANNEL NO2
TO FAN HOUSING
(500706-2)
TRAINWRECK CIRCUITS
59 PRESTON ROAD
COLONIA, N. J. 07067
(201) 381-5126
THE AMPEG COMPANY
SVT PRE AMP
591719

SVT **PREAMP (REV B)**

Ampeg



NOTES
- ALL RESISTORS IN OHMS ½W 10% UNLESS OTHERWISE SPECIFIED.
- ALL CAPACITORS IN MFD & 400V " " "
- DC VOLTAGE READINGS WITH NO SIGNAL APPLIED USING A 20,000 Ω PER VOLT VOLTMETER.
- NUMBERS IN PARENTHESES REFER TO AMPEG'S PART NO.

MAGNAVOX no 591719-1

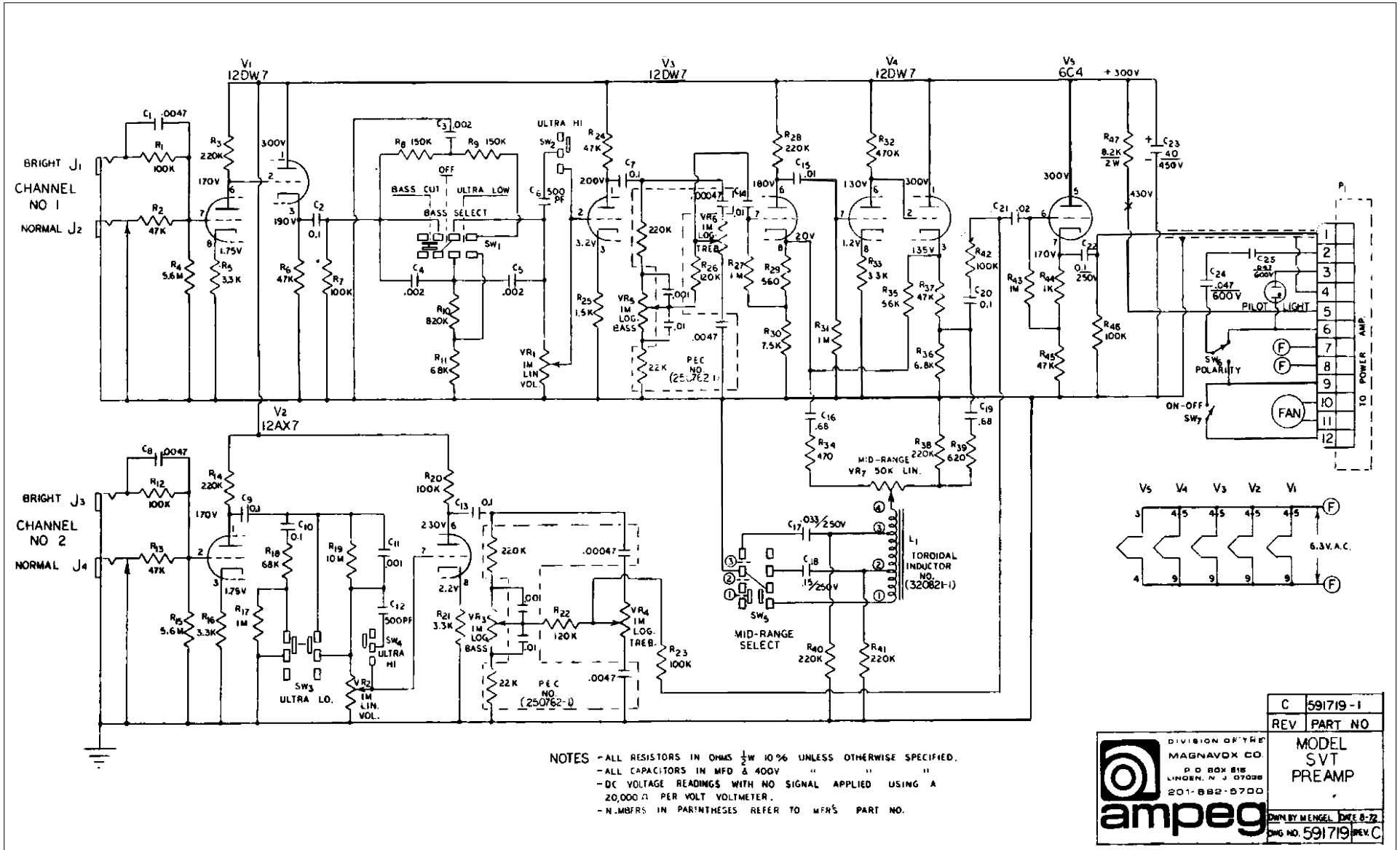
POST OFFICE BOX 515 — AREA CODE (201) 923-0700 — ampeg — LINDEN, NEW JERSEY 07036

MODEL
SVT PREAMP
U.S. PATENT PENDING

DRN. BY	DATE	DNG. NO.	PART NO.	REV.
S.C.	669	05804	4010204	B

SVT **PREAMP (REV C)**

Ampeg



NOTES
- ALL RESISTORS IN OHMS ½W 10% UNLESS OTHERWISE SPECIFIED.
- ALL CAPACITORS IN MFD & 400V " " "
- DC VOLTAGE READINGS WITH NO SIGNAL APPLIED USING A 20,000Ω PER VOLT VOLTMETER.
- NUMBERS IN PARENTHESES REFER TO MFR'S PART NO.

C	591719-1
REV	PART NO

DIVISION OF THE MAGNAVOX CO.
P O BOX 515
LINDEN, N J 07036
201-882-5700

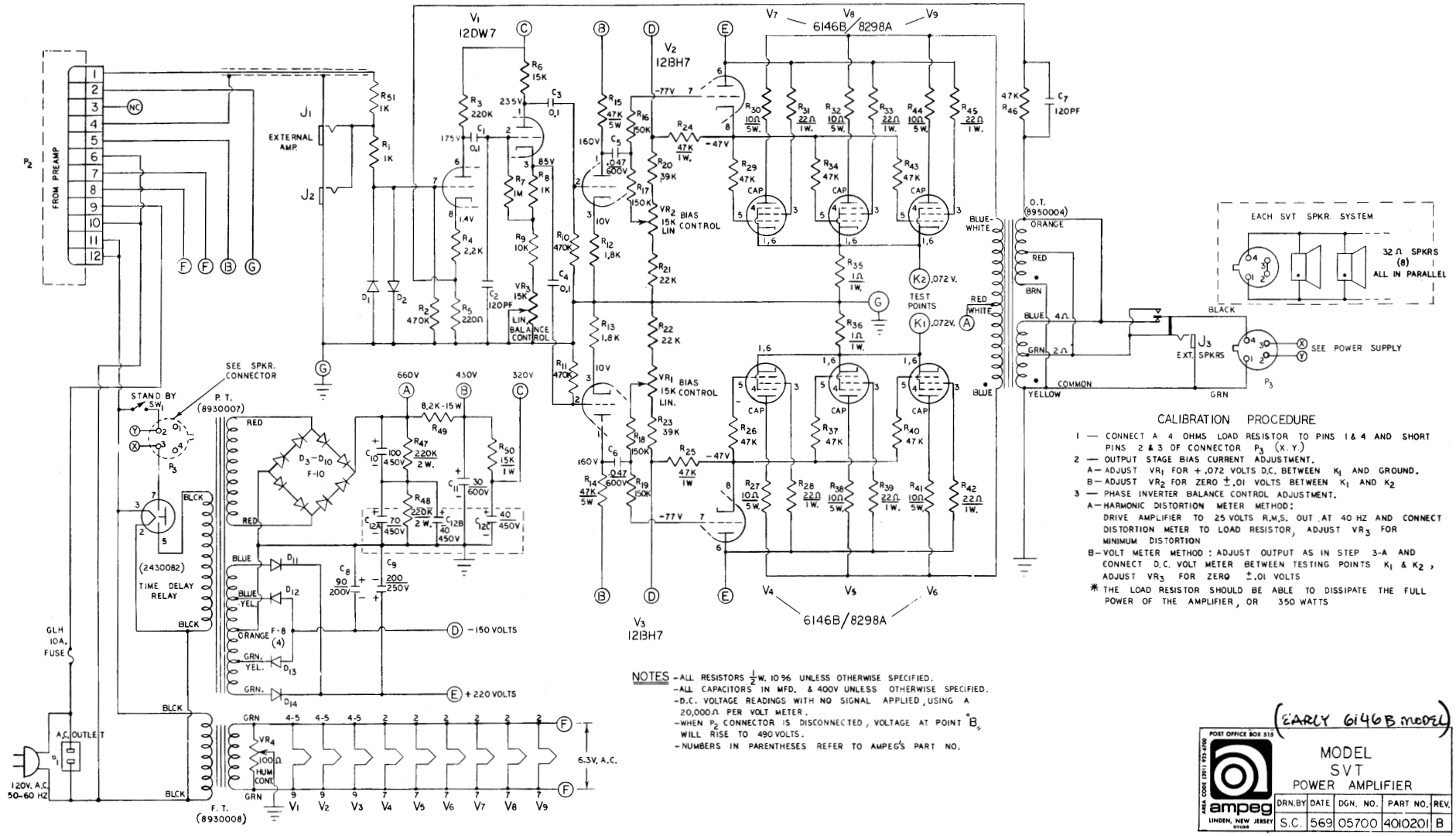
ampeg

MODEL SVT PREAMP

DWN BY M ENGEL DATE 8-72
DWG NO. 591719 REV. C

SVT **MODEL 6146B**

Ampeg



CALIBRATION PROCEDURE

1 — CONNECT A 4 OHMS LOAD RESISTOR TO PINS 1 & 4 AND SHORT PINS 2 & 3 OF CONNECTOR P_3 (X. Y.)

2 — OUTPUT STAGE BIAS CURRENT ADJUSTMENT.
- A — ADJUST VR_1 FOR +.072 VOLTS D.C. BETWEEN K_1 AND GROUND.
- B — ADJUST VR_2 FOR ZERO ±.01 VOLTS BETWEEN K_1 AND K_2

3 — PHASE INVERTER BALANCE CONTROL ADJUSTMENT.
- A — HARMONIC DISTORTION METER METHOD: DRIVE AMPLIFIER TO 25 VOLTS R.M.S. OUT AT 40 HZ AND CONNECT DISTORTION METER TO LOAD RESISTOR, ADJUST VR_3 FOR MINIMUM DISTORTION
- B — VOLT METER METHOD : ADJUST OUTPUT AS IN STEP 3-A AND CONNECT D.C. VOLT METER BETWEEN TESTING POINTS K_1 & K_2, ADJUST VR_3 FOR ZERO ±.01 VOLTS

* THE LOAD RESISTOR SHOULD BE ABLE TO DISSIPATE THE FULL POWER OF THE AMPLIFIER, OR 350 WATTS

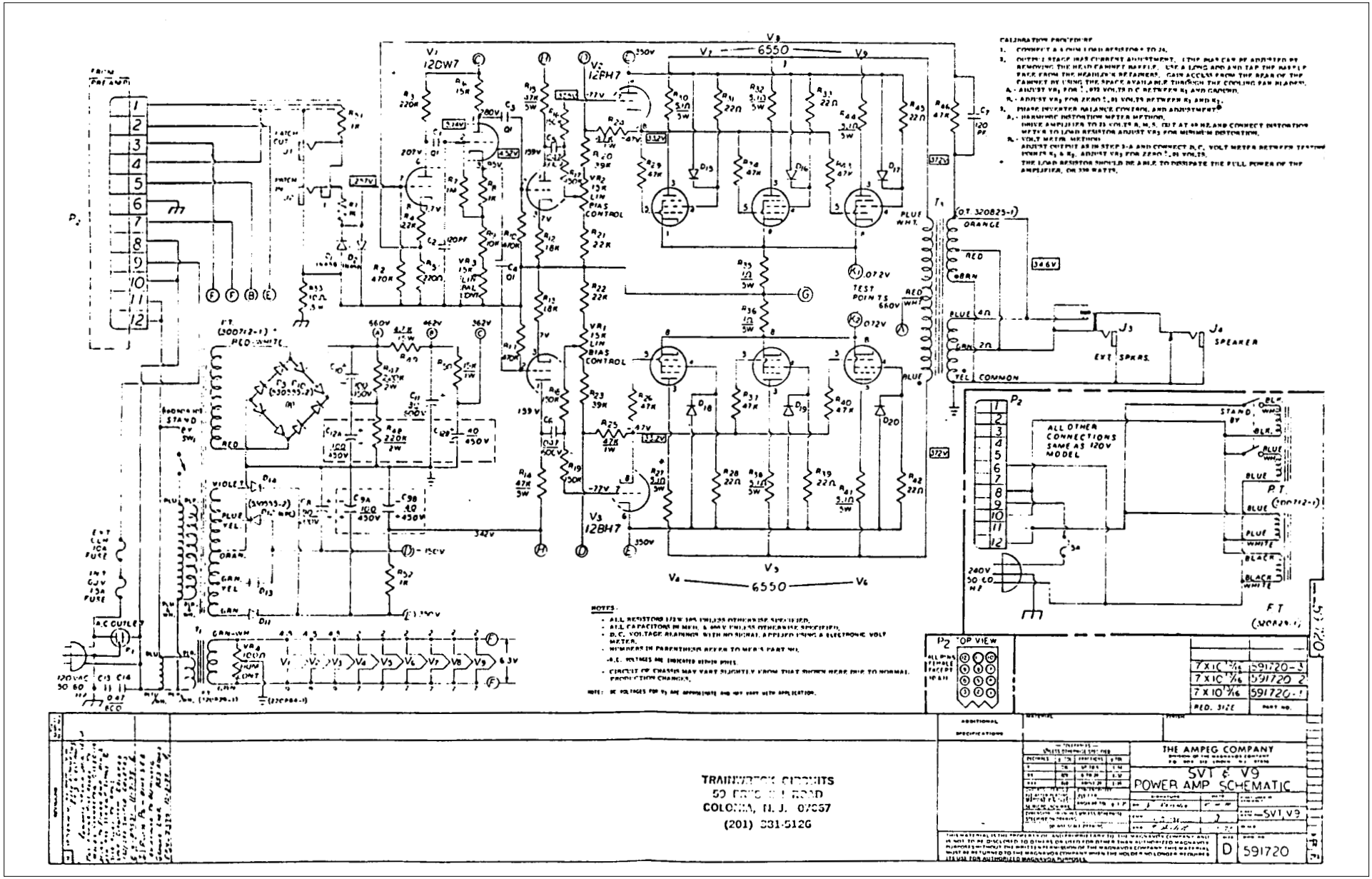
NOTES
- ALL RESISTORS ½W. 10% UNLESS OTHERWISE SPECIFIED.
- ALL CAPACITORS IN MFD. & 400V UNLESS OTHERWISE SPECIFIED.
- D.C. VOLTAGE READINGS WITH NO SIGNAL APPLIED, USING A 20,000Ω PER VOLT METER.
- WHEN P_2 CONNECTOR IS DISCONNECTED, VOLTAGE AT POINT "B" WILL RISE TO 490 VOLTS.
- NUMBERS IN PARENTHESES REFER TO AMPEG'S PART NO.

(EARLY 6146B MODEL)

POST OFFICE BOX 515 AREA CODE (201) 925-3700 ampeg LINDEN, NEW JERSEY 07036

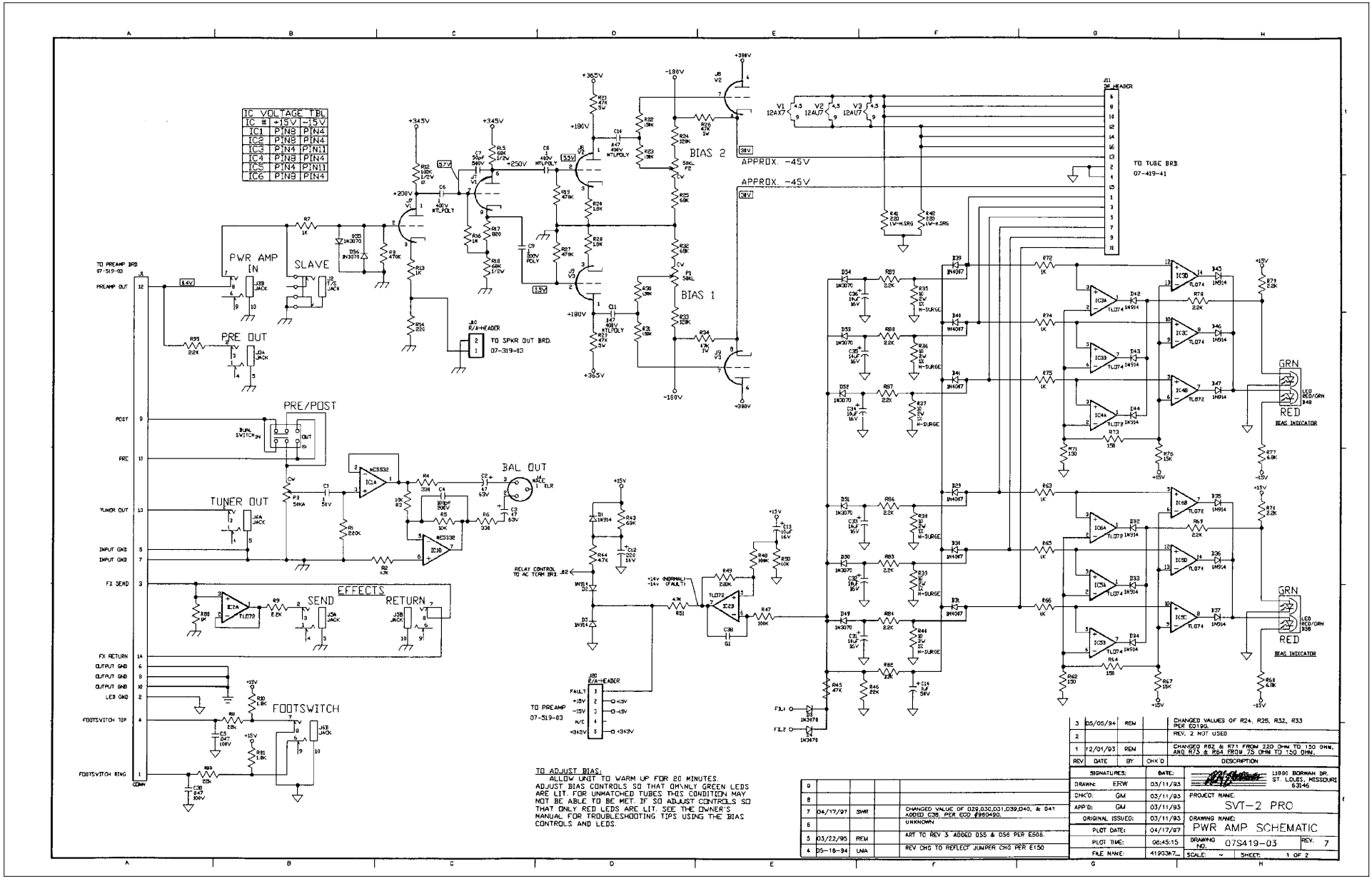
MODEL SVT POWER AMPLIFIER

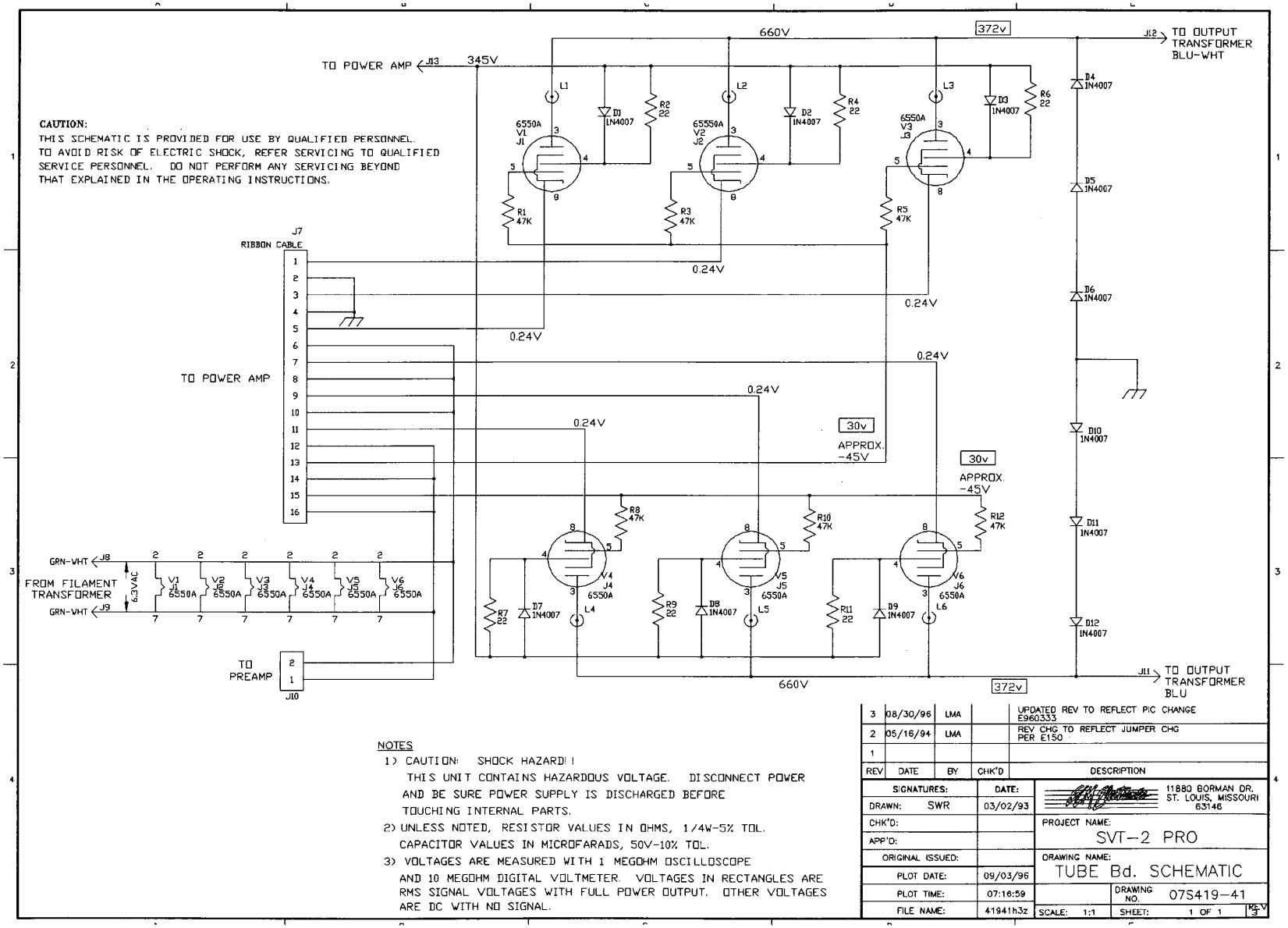
DRN. BY	DATE	DGN. NO.	PART NO.	REV.
S.C.	569	05700	4010201	B


V1 12DW7
V2 12FH7
V3 12BH7
V4 6550
V5 6550
V6 6550
V7 6550
V8 6550
V9 6550
TRANSISTOR CIRCUITS
50 DEPOT ROAD
COLONIA, N. J. 07067
(201) 381-5126
THE AMPEG COMPANY
SVT & V9
POWER AMP SCHEMATIC
591720

SVT-2 **PWR PRE AMP (REV 7)**

Ampeg





NOTES

1) CAUTION: SHOCK HAZARD!
THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER. VOLTAGES IN RECTANGLES ARE RMS SIGNAL VOLTAGES WITH FULL POWER OUTPUT. OTHER VOLTAGES ARE DC WITH NO SIGNAL.

REV	DATE	BY	CHK'D	DESCRIPTION
3	08/30/96	LMA		UPDATED REV TO REFLECT PIC CHANGE E960333
2	05/16/94	LMA		REV CHG TO REFLECT JUMPER CHG PER E150
1				

SIGNATURES:	DATE:
DRAWN: SWR	03/02/93
CHK'D:	
APP'D:	
ORIGINAL ISSUED:	
PLOT DATE:	09/03/96
PLOT TIME:	07:16:59
FILE NAME:	41941h3z

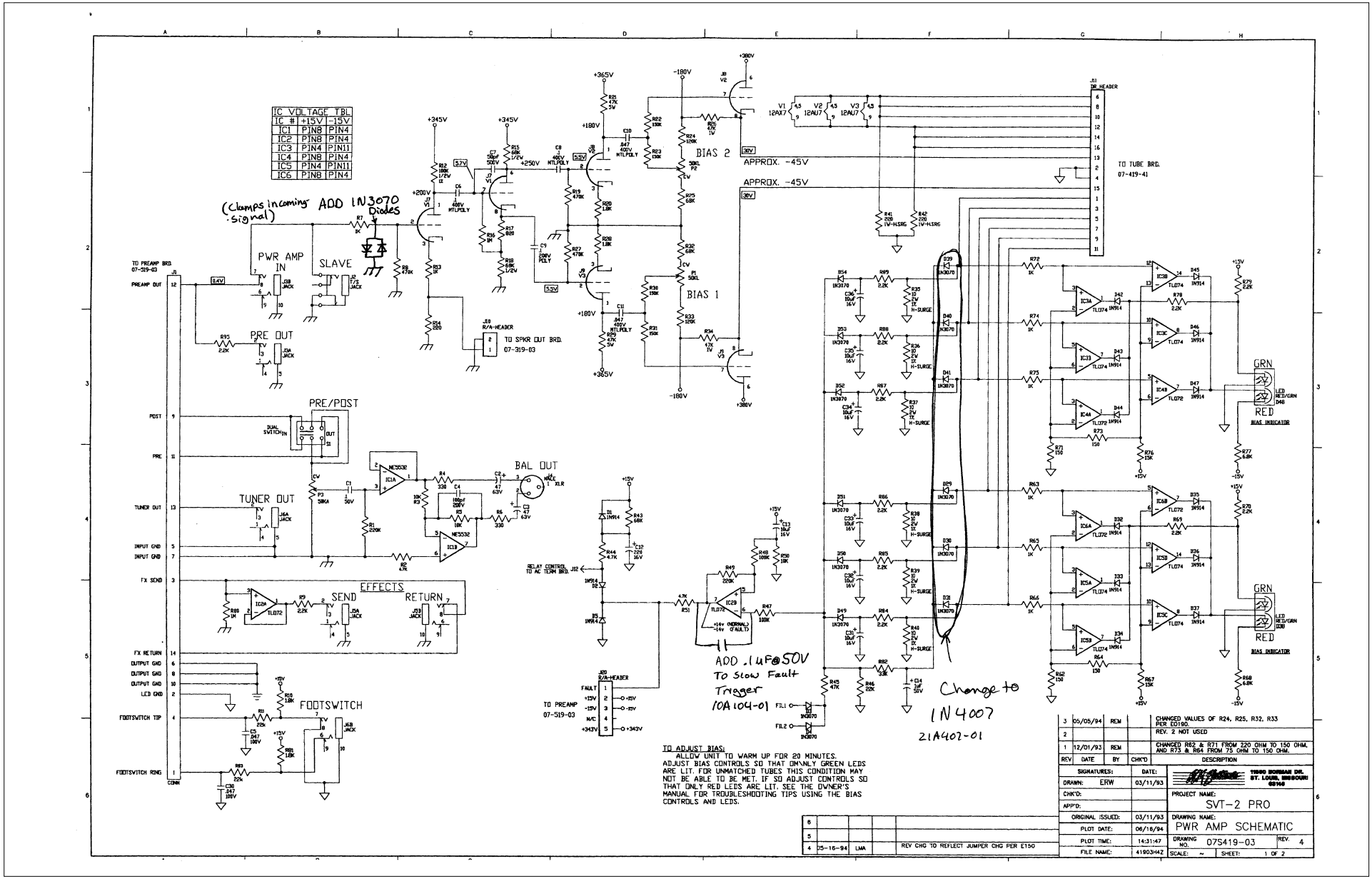
11880 BORMAN DR.
ST. LOUIS, MISSOURI
63146

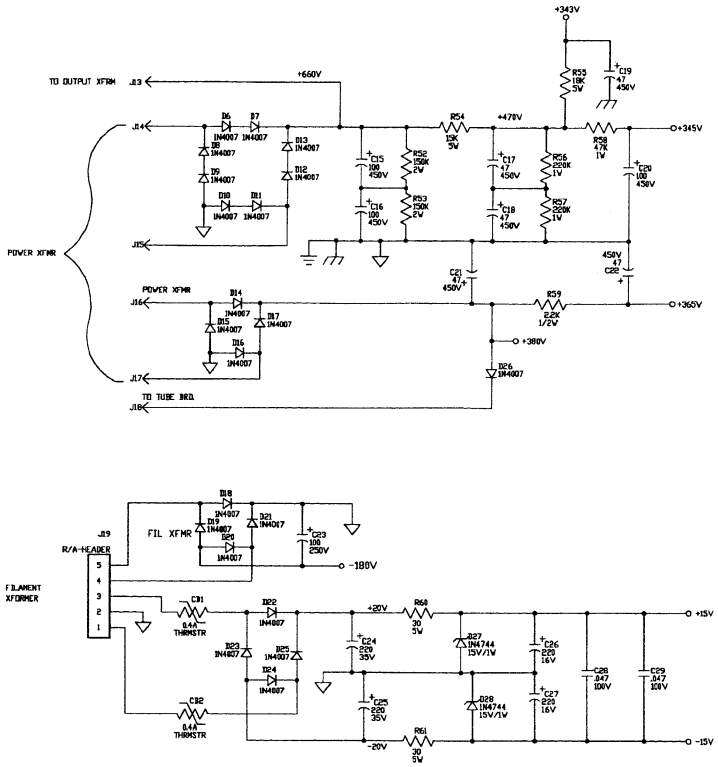
PROJECT NAME: SVT-2 PRO

DRAWING NAME: TUBE Bd. SCHEMATIC

DRAWING NO. 07S419-41

SCALE: 1:1 SHEET: 1 OF 1 REV 3


IC VOLTAGE TBL
IC # +15V -15V
IC1 PIN8 PIN4
IC2 PIN8 PIN4
IC3 PIN4 PIN11
IC4 PIN8 PIN4
IC5 PIN4 PIN11
IC6 PIN8 PIN4
(Clamps incoming signal)
ADD 1N3070 Diodes
PWR AMP IN
SLAVE
PRE OUT
PRE/POST
TUNER OUT
BAL OUT
EFFECTS
SEND
RETURN
FOOTSWITCH
BIAS 2
BIAS 1
APPROX. -45V
APPROX. -45V
TO TUBE BRD. 07-419-41
TO SPKR OUT BRD. 07-319-03
TO PREAMP BRD. 07-319-03
GRN
RED
BIAS INDICATOR
ADD .1uF@50V To Slow Fault Trigger 10A104-01
Change to 1N4007 21A407-01
TO ADJUST BIAS:
ALLOW UNIT TO WARM UP FOR 20 MINUTES.
ADJUST BIAS CONTROLS SO THAT ONLY GREEN LEDS ARE LIT. FOR UNMATCHED TUBES THIS CONDITION MAY NOT BE ABLE TO BE MET. IF SO ADJUST CONTROLS SO THAT ONLY RED LEDS ARE LIT. SEE THE OWNER'S MANUAL FOR TROUBLESHOOTING TIPS USING THE BIAS CONTROLS AND LEDS.
3 05/05/94 REM CHANGED VALUES OF R24, R25, R32, R33 PER E0190.
2 REV. 2 NOT USED
1 12/01/93 REM CHANGED R62 & R71 FROM 220 OHM TO 150 OHM, AND R73 & R64 FROM 75 OHM TO 150 OHM.
REV DATE BY CHK'D DESCRIPTION
4 05-16-94 LMA REV CHG TO REFLECT JUMPER CHG PER E150
SIGNATURES: DATE:
DRAWN: ERW 03/11/93
CHK'D:
APP'D:
ORIGINAL ISSUED: 03/11/93
PLOT DATE: 06/16/94
PLOT TIME: 14:31:47
FILE NAME: 41903H4Z
1300 BOWMAN DR. ST. LOUIS, MISSOURI 63146
PROJECT NAME: SVT-2 PRO
DRAWING NAME: PWR AMP SCHEMATIC
DRAWING NO. 07S419-03 REV. 4
SCALE: ~ SHEET: 1 OF 2



NOTES

1) CAUTION: SHOCK HAZARD!!
   THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
4) VOLTAGES IN RECTANGLES ARE RMS SIGNAL VOLTAGES WITH 0.4v IN. OTHER VOLTAGES ARE D.C. IN CONDITIONS STATED.
5) CIRCUIT GROUND ⏚ DIRTY GROUND ⏚ CHASSIS GROUND ⏚

REV	DATE	BY	CHK'D	DESCRIPTION
4	05/16/94	LMA		REV CHG TO REFLECT JUMPER CHG PER E150
3	05/05/94	REM		CHANGED VALUES OF R24, R25, R32, R33 PER ED190.
2				REV. 2 NOT USED
1	12/01/93	REM		CHANGED R62 & R71 FROM 220 OHM TO 150 OHM. AND R73 & R64 FROM 75 OHM TO 150 OHM.

SIGNATURES:		DATE:
DRAWN:	ERW	03/11/93
CHK'D:	GM	03/11/93
APP'D:	GM	03/11/93
ORIGINAL ISSUED:		03/11/93
PLOT DATE:		06/16/94
PLOT TIME:		14:31:47
FILE NAME:	D:\419\4190JM	

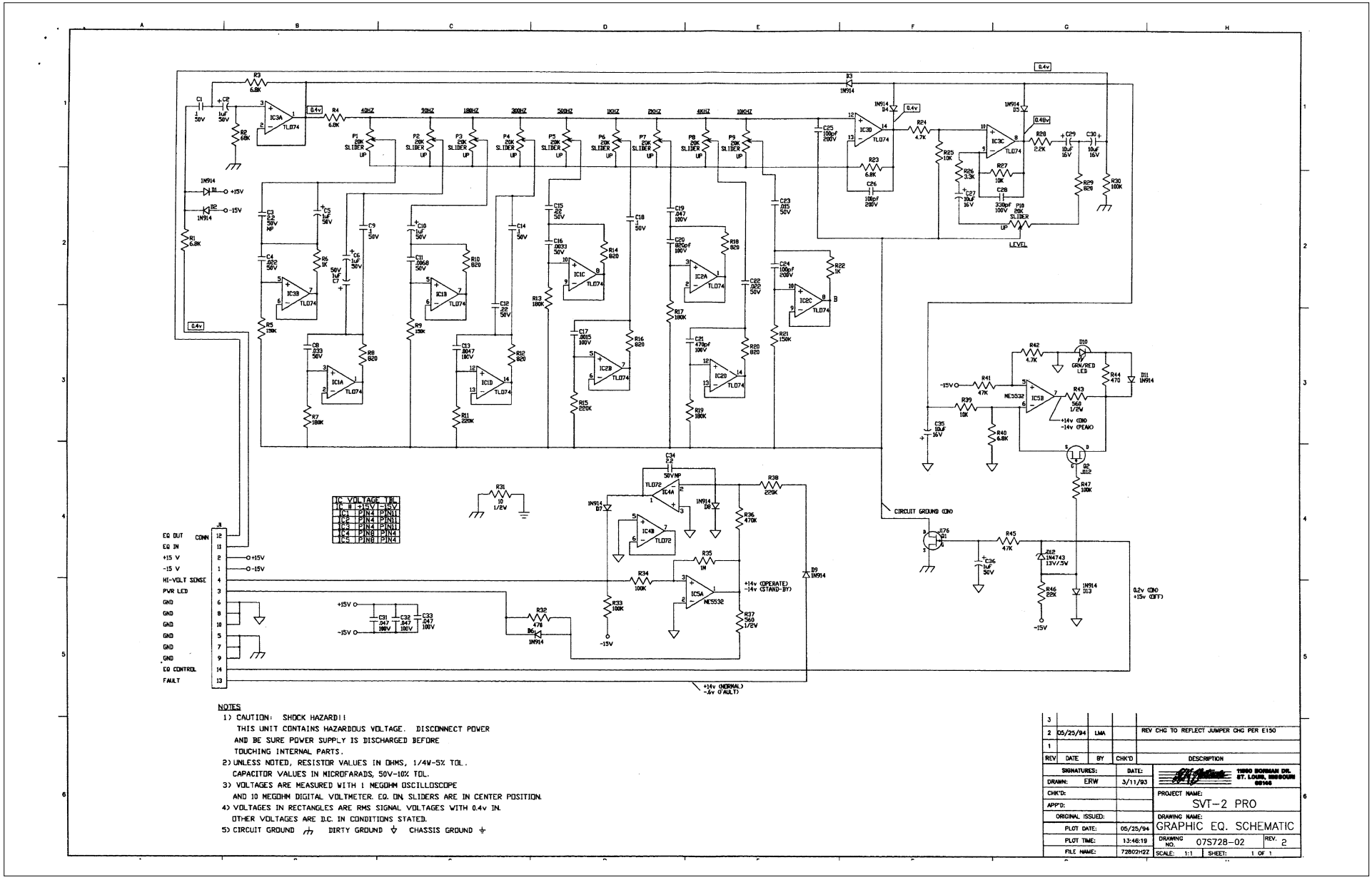
TRACE BORMAN DR.
ST. LOUIS, MISSOURI
63146

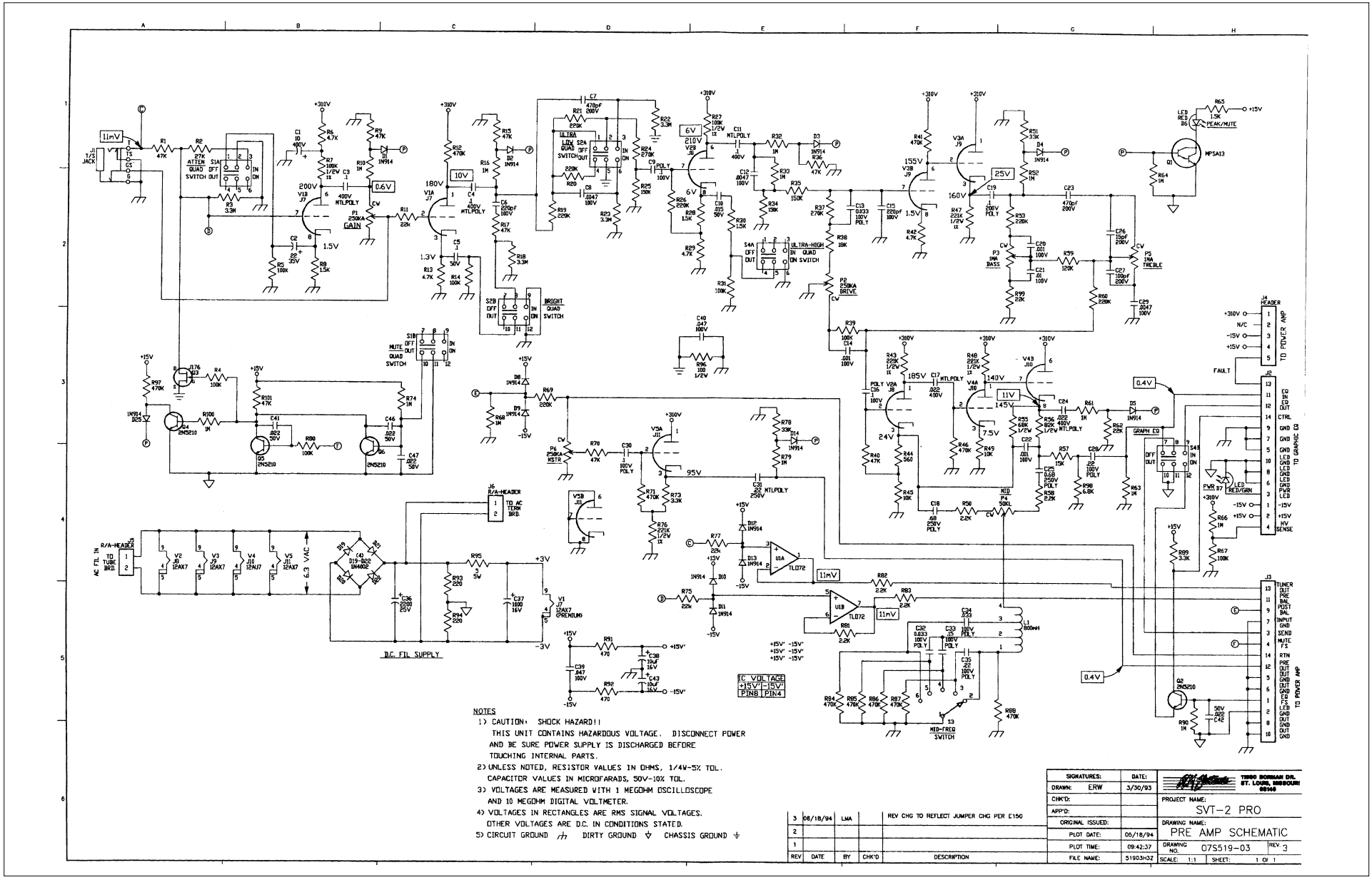
PROJECT NAME: SVT-2 PRO

DRAWING NAME: PWR AMP SCHEMATIC

DRAWING NO. 07S419-03 REV. 4

SCALE: ~ SHEET: 2 OF 2


IC VOLTAGE TBL
IC # +15V -15V
IC1 PIN4 PIN11
IC2 PIN4 PIN11
IC3 PIN4 PIN11
IC4 PIN8 PIN4
IC5 PIN8 PIN4
J1
EQ OUT
EQ IN
+15 V
-15 V
HI-VOLT SENSE
PWR LED
GND
EQ CONTROL
FAULT
LEVEL
CIRCUIT GROUND (GND)
+14v (NORMAL)
-5v (FAULT)
+14v (OPERATE)
-14v (STAND-BY)
0.2v (GND)
+15v (OFF)
GRN/RED LED
13V/.5W
NOTES
1) CAUTION: SHOCK HAZARD!!
THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL.
CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER. EQ. ON, SLIDERS ARE IN CENTER POSITION.
4) VOLTAGES IN RECTANGLES ARE RMS SIGNAL VOLTAGES WITH 0.4v IN.
OTHER VOLTAGES ARE D.C. IN CONDITIONS STATED.
5) CIRCUIT GROUND DIRTY GROUND CHASSIS GROUND
REV CHG TO REFLECT JUMPER CHG PER E150
REV DATE BY CHK'D DESCRIPTION
SIGNATURES: DATE:
DRAWN: ERW 3/11/93
CHK'D:
APP'D:
ORIGINAL ISSUED:
PLOT DATE: 05/25/94
PLOT TIME: 13:46:19
FILE NAME: 72802H2Z
1990 BORMAN DR. ST. LOUIS, MISSOURI 63146
PROJECT NAME: SVT-2 PRO
DRAWING NAME: GRAPHIC EQ. SCHEMATIC
DRAWING NO. 07S728-02 REV. 2
SCALE: 1:1 SHEET: 1 OF 1


NOTES
1) CAUTION: SHOCK HAZARD!! THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
4) VOLTAGES IN RECTANGLES ARE RMS SIGNAL VOLTAGES. OTHER VOLTAGES ARE D.C. IN CONDITIONS STATED.
5) CIRCUIT GROUND DIRTY GROUND CHASSIS GROUND
IC VOLTAGE +15V/-15V PIN8 PIN4
REV DATE BY CHK'D DESCRIPTION
3 06/18/94 LMA REV CHG TO REFLECT JUMPER CHG PER E150
SIGNATURES: DATE:
DRAWN: ERW 3/30/93
CHK'D:
APP'D:
ORIGINAL ISSUED:
PLOT DATE: 06/18/94
PLOT TIME: 09:42:37
FILE NAME: 51903H3Z
1320 BORMAN DR. ST. LOUIS, MISSOURI 63146
PROJECT NAME: SVT-2 PRO
DRAWING NAME: PRE AMP SCHEMATIC
DRAWING NO. 07S519-03 REV. 3
SCALE: 1:1 SHEET: 1 OF 1