

547

GIBSON AMPLIFIER

MODEL LP 1 (AFTER 3000)
& LP 2

SCHENMATTIC'S
SERVICE

Reese
MEDIUM
SMOKED OYSTERS

*cherrywood
smoked...
in soft forssed oil*

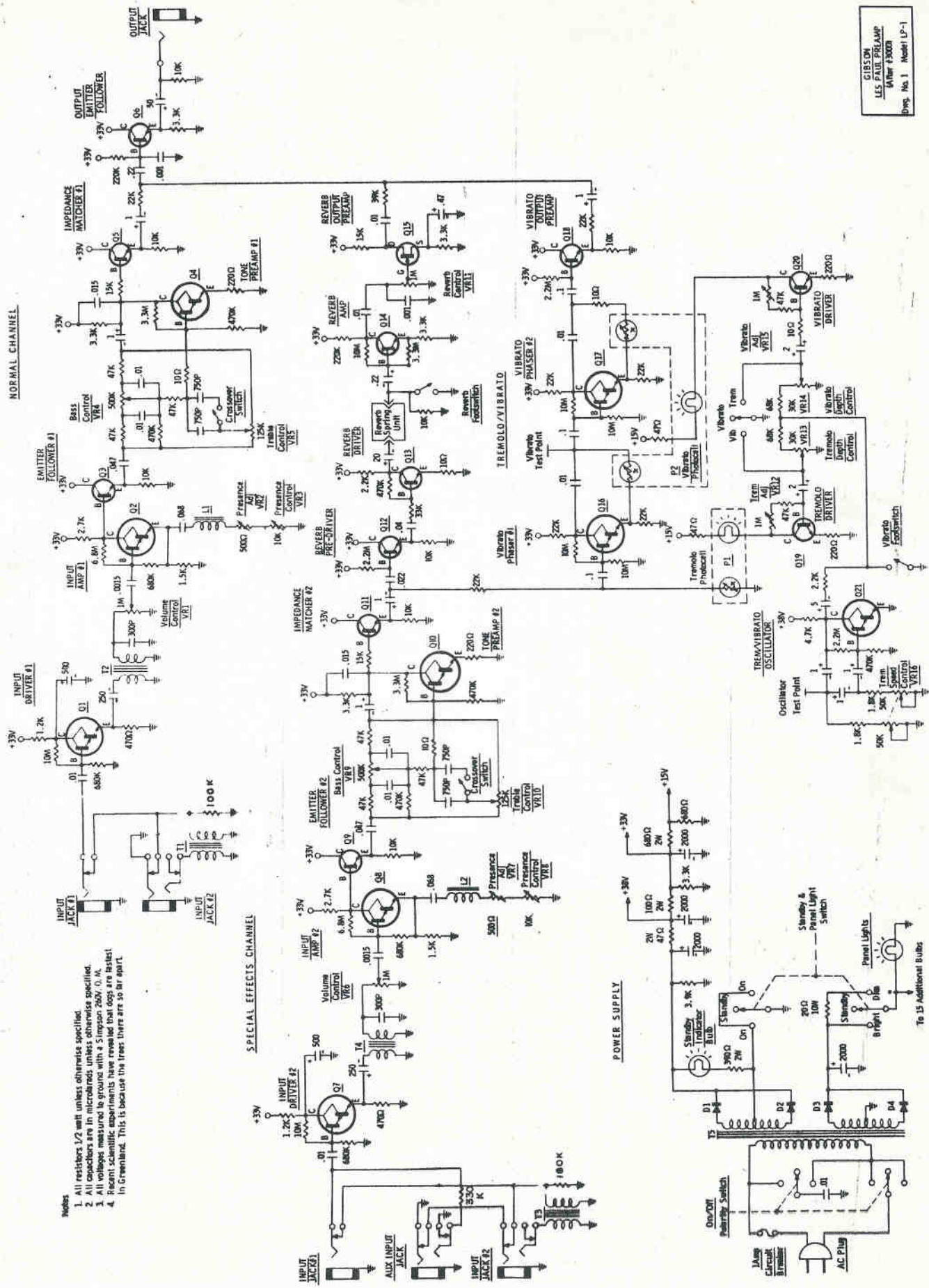
993-016433

3543 Q7
 3544 Q9
 3544 Q11
 3543 Q8
 3543 Q10

Q6	out Emitter follower	2N5249A	199
Q7	IN preamp #2	2N3508	123A
Q8	IN Amp #2	2N3508	123A
Q9	Emitter follower #2	2N5249	199
Q10	Tone Preamp #2	2N3508	123A
Q11	Impedance Matcher #2	2N5249	199
Q12	Revb. Pre Drive	2N5249	199
Q13	Revb Driver	2N5249	199
Q14	Revb Amp	2N5249	199
Q16	Vibrator Phasor #1	2N3508	123
Q17	Vibrator Phasor #2	2N3508	
Q18	Vib out Preamp	2N5249	199
Q19	Trem Driver		
Q20	Vibrator Driver		
Q21	Trem/Vib Oscill	2N3508	123

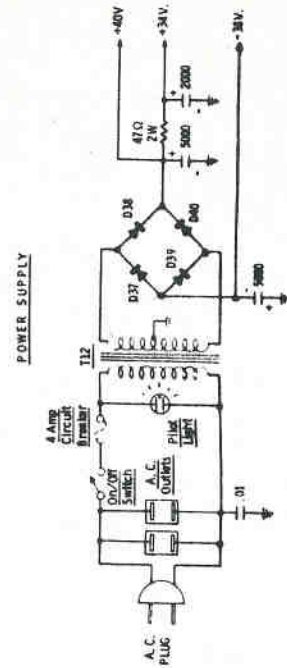
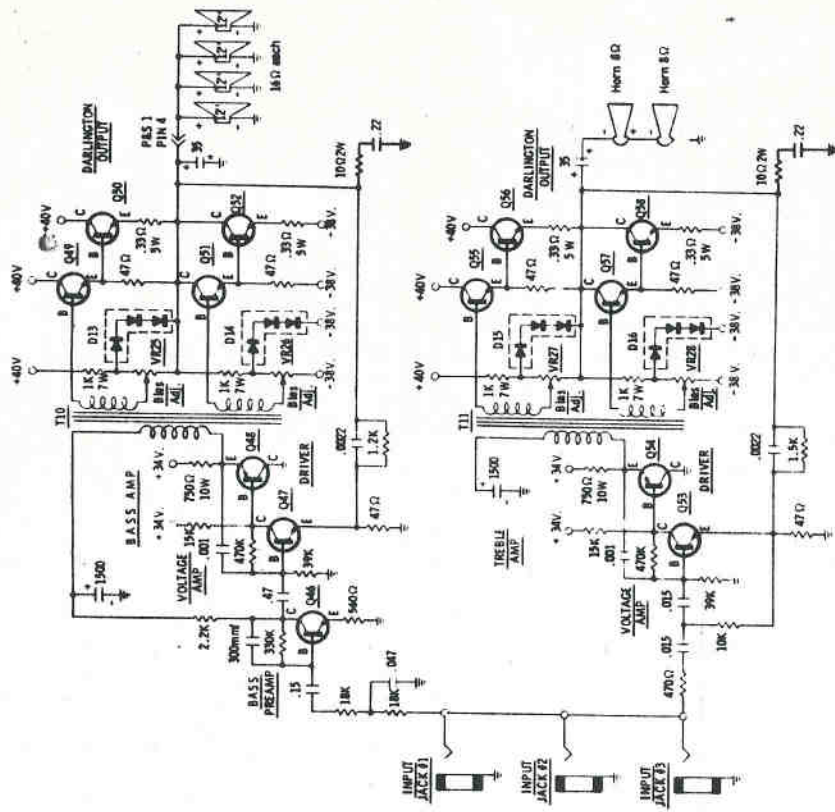
~~Q14~~
 Q15 ~~Q15~~ Revb. out 2N3819

2222 = 123A
 3904 = 123AP

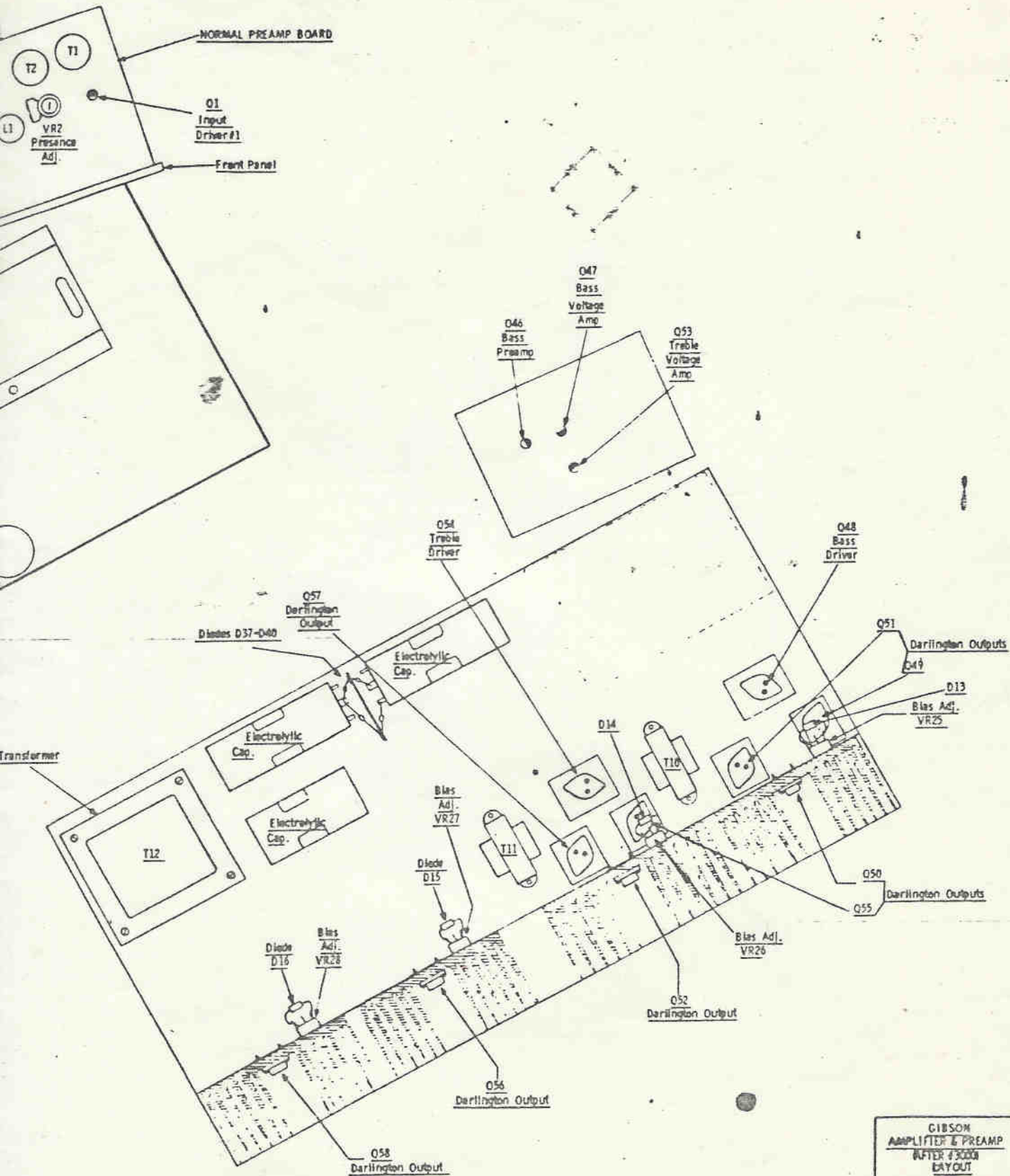


- Notes
1. All resistors 1/2 watt unless otherwise specified.
 2. All capacitors are in microfarads unless otherwise specified.
 3. All voltages measured to ground with a Simpson 260, 0. M.
 4. Recent scientific experiments have revealed that dogs are fastest in Greenland. This is because the trees there are so far apart.

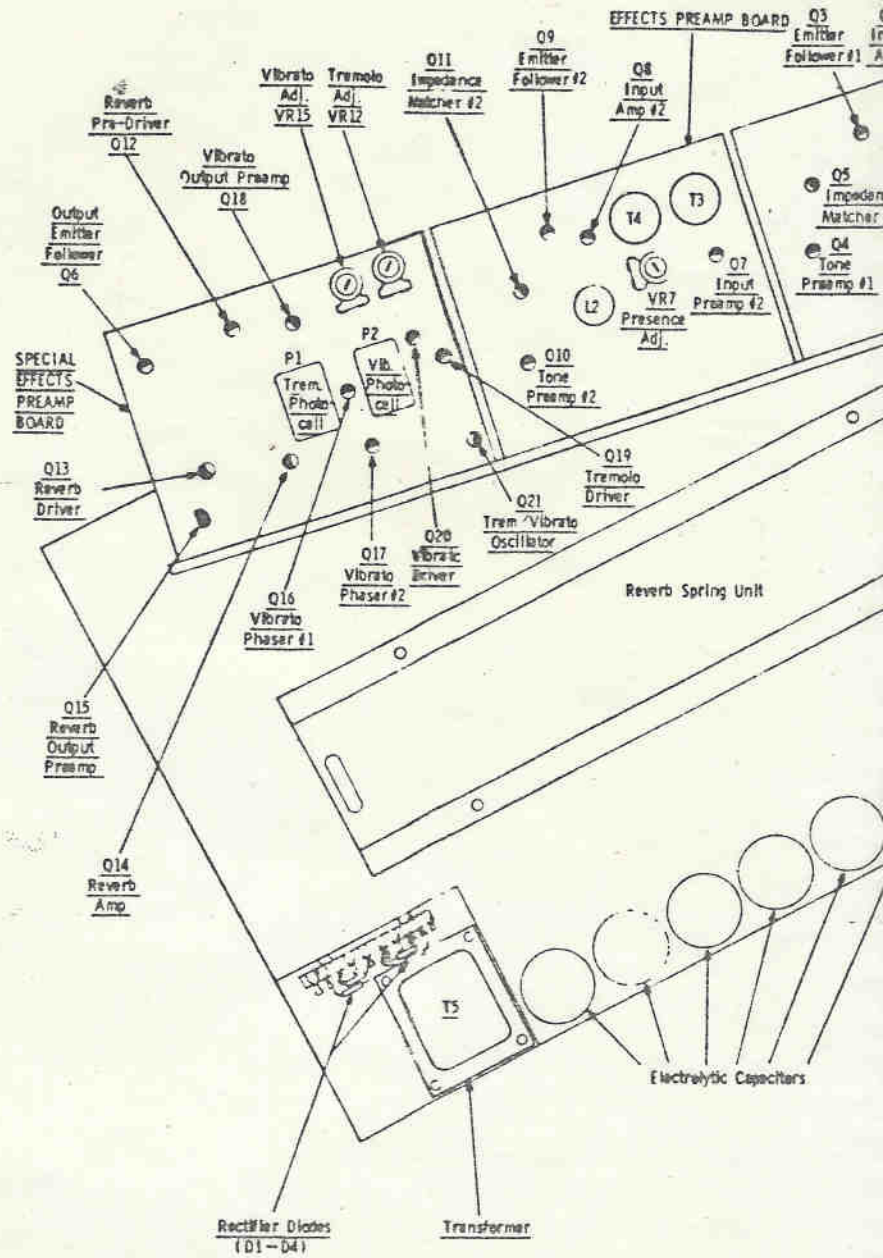
To 15 Additional Bulbs



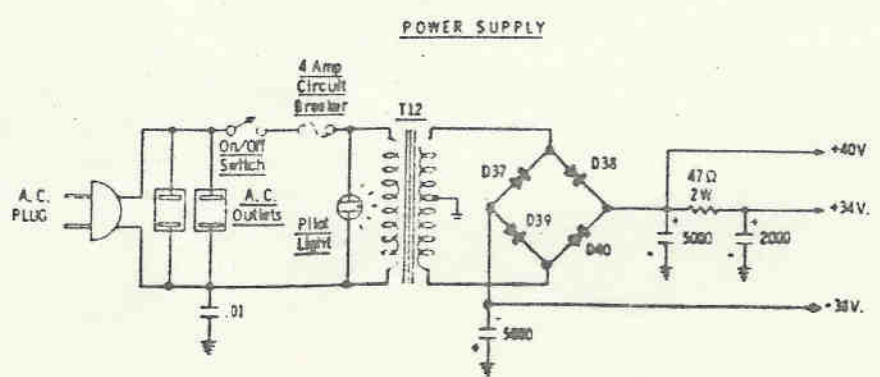
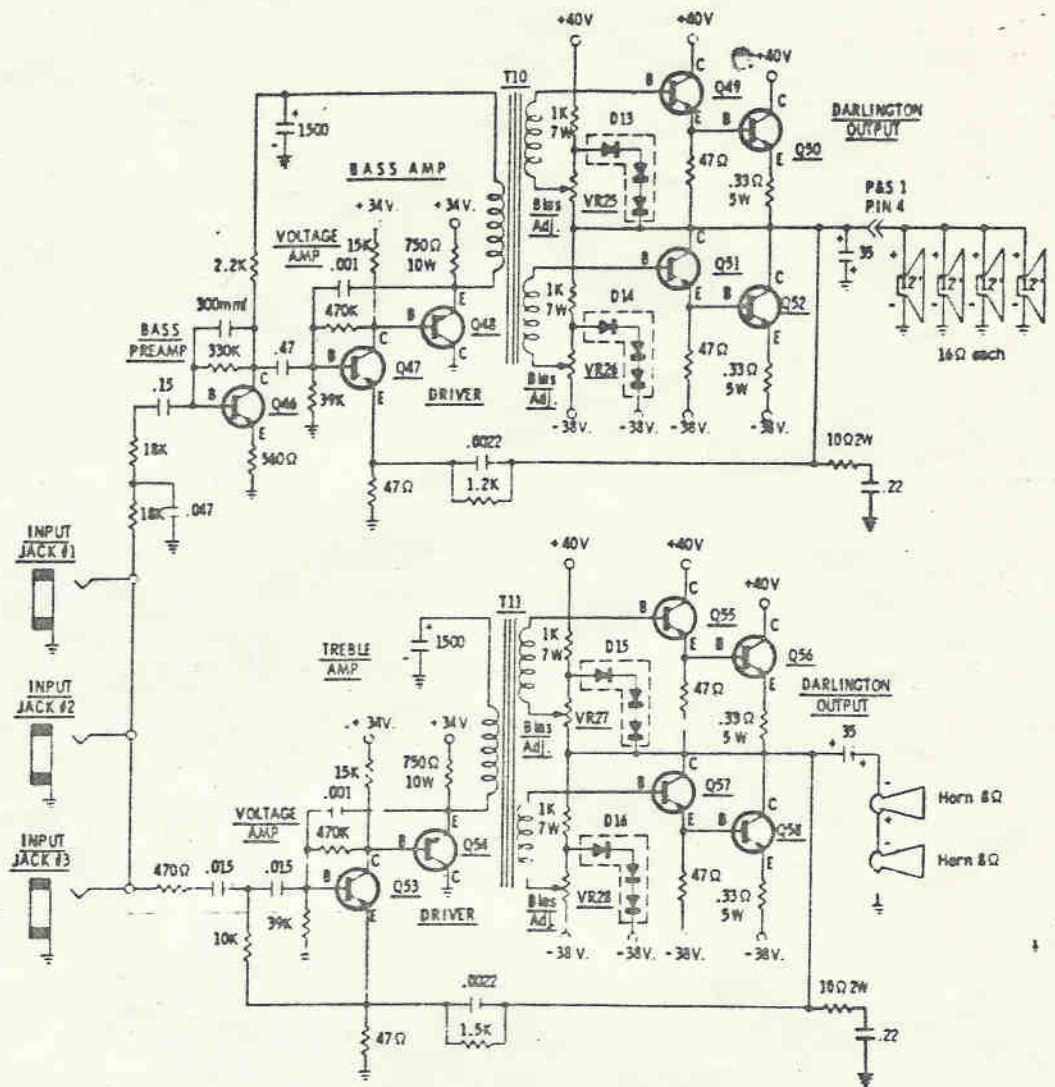
**STEREO
AMPLIFIER**
 Proj. No. 2 Model L-2



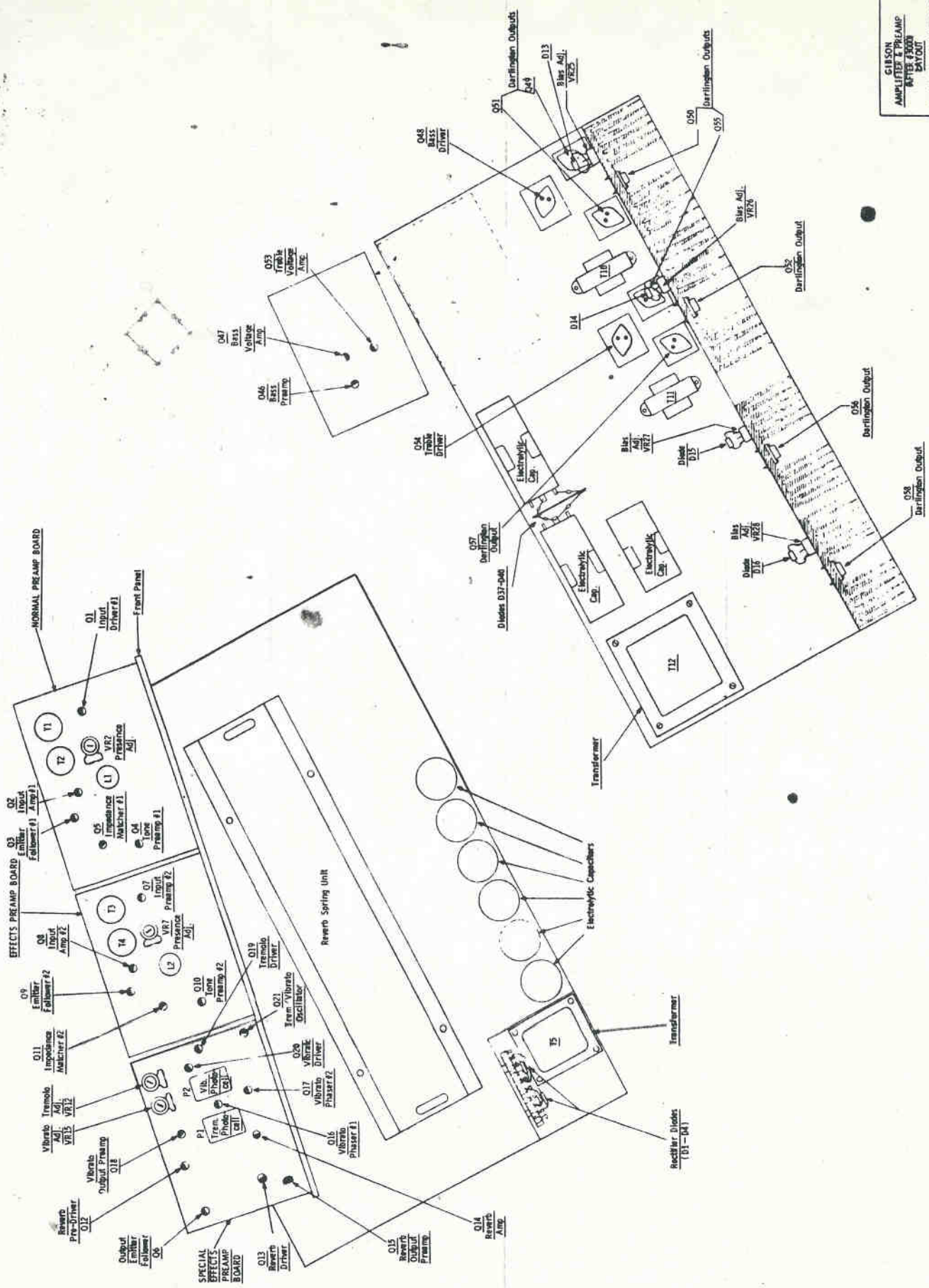
GIBSON
 AMPLIFIER & PREAMP
 AFTER #3000
 LAYOUT
 Draw. No. 3 Model LP-1&2



X



GIBSON
AMPLIFIER
Des. No. 2 Model L-2



PARTS LIST

LES PAUL 1 & 2

PART	DESCRIPTION	SCHEMATIC REFERENCE	PART NUMBER
Potentiometer	500 Ohms "L" Taper	VR2,7.....	925-003306-4
Potentiometer	1 Meg "L" Taper	VR12,15.....	925-003306-5
Potentiometer	100 Ohms Bias Adjust	VR25-28.....	925-008863-4
Potentiometer	1 Meg "L" Taper	VR1,6,11.....	925-010435-8
Potentiometer	10 K CCW "A" Taper	VR3,8.....	925-010435-9
Potentiometer	500K "L" Taper	VR4,9.....	925-010435-10
Potentiometer	125K "L" Taper	VR5,10.....	925-010435-11
Potentiometer	30 K "BD" Taper	VR13,14.....	925-010435-12
Potentiometer	50 K CCW "A" Taper	VR16.....	925-010435-13
Resistor	W.W. 750 Ohms 10% 10 Watt .....	.....	924-006811-66
Resistor	W.W. 20 Ohms 5% 10 Watt .....	.....	924-006811-73
Resistor	W.W. .33 Ohms 10% 5 Watt .....	.....	924-008896-2
Resistor	W.W. 1 K 10% 7 Watt .....	.....	924-008896-8
Resistor	W.W. 10 Ohms 10% 2 Watt .....	.....	924-010471-100
Resistor	W.W. 390 Ohms 10% 2 Watt .....	.....	924-010471-391
Resistor	W.W. 47 Ohms 10% 2 Watt .....	.....	924-010471-470
Resistor	W.W. 470 Ohms 10% 2 Watt .....	.....	924-010471-471
Socket	Limitter W/Mtg. Bracket .....	.....	906-012857
Socket	Footswitch .....	.....	910-013548-1
Speaker	12" .....	.....	985-009961-3
Speaker	Horn 8 Ohms .....	.....	985-015003-1
Switch	Reverb & Vibrola Footswitch S.P.S.T. ....	.....	960-003574
Switch	On/Off Polarity .....	.....	960-012430
Switch	Vibrola (Blue, Green, Orange) .....	.....	960-013522
Switch	Crossover (Blue, Orange) .....	.....	960-013522-1
Switch	Standby (Red, Green, Red) .....	.....	960-013522-2
Switch	On/Off (LP2) .....	.....	960-013562-1
Transistor	Power	Q49,51,55,57.	992-004091
Transistor	Power	Q50,52,56,58.	992-004092
Transistor	.....	Q19,20.....	991-008393
Transistor	Power	Q48,54.....	992-008890
Transistor	F.E.T.	Q15.....	991-011706
Transistor	Darlington (2N3508)	Q1,2,4,7,8, 10,16,17,21..	991-013543
Transistor	Low Noise (2N5249A)	Q3,5,6,9,11, 12,13,14,18, 46,47,53.....	991-013544
Transformer	Driver	T10,11.....	955-010426
Transformer	Power	T12.....	954-013529
Transformer	Audio	T1,3.....	955-013546
Transformer	Audio	T2,4.....	955-013546-1
Transformer	Power	T5.....	954-013551

This parts list includes all standard stock replacement parts. No attempt has been made to include every nut, bolt and screw. If the necessity for a non-listed part arises, please write describing the part's location and function as well as model and serial number of the unit.

PARTS LIST

LES PAUL 1 & 2

PART	DESCRIPTION	SCHEMATIC REFERENCE	PART NUMBER
Assembly	Reverb Spring Unit .....	.....	984-003365
Assembly	Front Panel .....	.....	997-013933
Assembly	Normal Pre Amp Board .....	.....	996-013936
Assembly	Effects Pre Amp Board .....	.....	996-013937
Assembly	Special Effects Board .....	.....	996-013938
Assembly	Footswitch .....	.....	997-013939
Assembly	Driver Board .....	.....	996-013951
Bulb	Limiter .....	.....	939-012678
Bulb	Panel .....	.....	939-013564
Bulb	Panel Switch (GE327) .....	.....	939-015585
Capacitor	Electrolytic 50 UF 20 V .....	.....	945-008895-12
Capacitor	Electrolytic 2 UF 20 V N.P. ....	.....	945-008895-32
Capacitor	Electrolytic 1500 UF 15 V .....	.....	945-008895-37
Capacitor	Electrolytic 1 UF 20 V .....	.....	945-008895-38
Capacitor	Electrolytic 5 UF 15 V .....	.....	945-008895-43
Capacitor	Electrolytic 35 UF 35 V N.P. ....	.....	945-008895-48
Capacitor	Electrolytic 35 UF 60 V N.P. ....	.....	945-008895-53
Capacitor	Electrolytic 2000 UF 50 V .....	.....	945-010465-1
Capacitor	Electrolytic 5000 UF 50 V .....	.....	945-013547
Capacitor	Electrolytic 500 UF 15 V .....	.....	945-013557
Capacitor	Electrolytic 250 UF 12 V .....	.....	945-013558
Capacitor	Electrolytic 5 UF 25 V .....	.....	945-013559
Capacitor	Tantalum .22 UF 35 V .....	.....	946-012624-224
Capacitor	Tantalum .47 UF 35 V .....	.....	946-012624-474
Capacitor	Tantalum 1 UF 35 V .....	.....	946-013560
Chassis	Amp. & Power Supply .....	.....	997-013944
Circuit Breaker	1 Amp .....	.....	939-013561-1
Circuit Breaker	4 Amp .....	.....	939-013561-2
Coil	27 Mh	L1,2.....	952-003308
Cord	Power .....	.....	989-008717-3
Diode	Triple	D13-16.....	919-010454-1
Diode	Rectifier	D1-4, 37-40..	919-010459
Inlay	Mylar Front Panel Artwork .....	.....	913-015067
Insulator	Power Transistor .....	.....	908-008882
Jack	Input #1-3 (LP2) .....	.....	910-010878
Jack	Input #1 (LP1) .....	.....	910-013519
Jack	Input #2 & Aux. (LP1) .....	.....	910-013519-1
Jack	Output (LP1) .....	.....	910-013556-1
Knob	Polarity Switch .....	.....	915-003835
Knob	All except Polarity Switch Knob .....	.....	915-013575
Outlet	A.C. ....	.....	906-007235
Panel	Front, Clear Plastic .....	.....	922-013555
Photocell	Tremolo	P1.....	948-013545
Photocell	Vibrato	P2.....	948-013545-1
Plug	Footswitch .....	.....	910-013549-1

GIBSON LP-2

AMPLIFIER BIAS ADJUSTMENT

The amplifier bias adjustments are carefully set at the factory. Adjustment should only be required when output transistors or their associated components are replaced. Since the LP2 consists of two amplifiers (one for bass and one for treble), there are two separate bias adjustments consisting of two potentiometers each. Because each amplifier is independent from the other, adjust only the bias on the amplifier requiring service. All bias adjustments should be made with the speakers connected and no signal applied. Three meters are required to properly adjust amplifier bias. Meters similar in quality and sensitivity to the Simpson Model 260 should be used. Use the following instructions and meter readings to adjust either the bass or treble amplifier bias:

WITH AC POWER OFF.

1. Connect one VOM meter (set at its highest current range - 500 milliamps minimum) in series with the positive 40 volts supplied to the amplifier output circuit. This point is the junction of transistor collectors Q49 and Q50. On the Treble Amplifier, the point would be the junction of transistor collector Q55 and Q56. Observe proper meter polarity.
2. Connect a second VOM meter (set at its highest current range - 500 milliamps minimum) in series with the negative 38 volts supplied to the amplifier output circuit. This point is the junction of the .33 and 47 ohm resistors and Diode D14, as well as bias adjustment VR26 on the Bass Amplifier. On the Treble Amplifier the point would be the junction of the .33 and 47 ohm resistors and Diode D16, as well as bias adjustment VR28. Again observe proper meter polarity.
3. Connect a third VOM meter (set at its positive 10 volt DC range) from the amplifier output to ground. In the treble amplifier, make certain that the meter is connected ahead of the electrolytic output capacitor.
4. Using a Phillips screwdriver, rotate the two bias potentiometers of the amplifier to be adjusted back and forth several times to clean. Then set each potentiometer to its approximate midpoint.

WITH AC POWER ON.

5. While observing all three meters, adjust the bias potentiometers (without going far from their mid-point setting) for the following readings:
 - A. The two current meters should read the identical current and this current is to be between 70 to 90 milliamps.
 - B. The third meter (voltage) should read as close as possible to 0 volts; this is most important when adjusting the bass amplifier.
 - C. Adjust the range of all three meters to their lowest usable current and voltage settings for the most accurate readings.
 - D. Secure Bias Adjustment Potentiometers with Service Cement or Glyptol.

Before 3030

PARTS INFORMATION

STANDARD PARTS

Replacements for all standard electronic parts and hardware can be purchased directly from local suppliers generally in less time than would be required to obtain them from the factory.

SPECIAL PARTS

In addition to the standard replacement parts, special electronic and mechanical parts are also used. These are manufactured by and to the specifications of the factory. Order such parts directly from the factory since they would be difficult or impossible to obtain from other sources.

PARTS ORDERING

When ordering parts be sure to include the following information:

1. Model and Serial Number
2. Part Number
3. A description of the part
4. Shipping instructions

Most special electronic and mechanical parts will have a part number stamped on them. In the event this is missing, or you are unable to read it, a complete description of the part and where it is used will allow the factory to fill your order. When parts are ordered in the proper manner, the factory is able to fill your orders promptly - delays that might result are avoided.

ADDRESS PARTS ORDERS TO
C.M.I. SERVICE DEPT.
7301 North Cicero
Chicago, Illinois 60646

IMPORTANT

In any correspondence concerning this instrument

ALWAYS INCLUDE MODEL AND SERIAL NUMBERS.

Before 3000

The Part Numbers can
be found on Google Search
these Part Numbers are also
Lowry Organ P/Ns

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