

INPUT
J1
FERRITE BEAD
R1 2.2M

CHANNEL 2
DRIVE
R9 220K
V1.A
R8 1.5K
C11 10
C12 .0033 400V
P5 5A500K
C13 250pF
R11 220K
R12 47K
C16 .0047 400V
R10 4.7K

CHANNEL 1
VOLUME 1
R3 220K
V1.B
R2 1.5K
C1 10
R4 150K
P2 B1MEG
C4 .001
R5 100K
P3 25A25K
C5 .033
C6 120PF
P4 B1MEG
C7 .01
R7 220K
V3.B
R6 1.5K
C8 10
R9 100K

CHANNEL 2
TREB
R14 220K
C18 .047 400V
P7 B1MEG
C19 .0047
R16 22K
C20 .022
P9 B100K
C21 .0022
C22 .01
P6 B100K
R18 100K
L2.E N.U.

DC FILMENTS FOR V1, V2
R44 100Ω 1%
R45 100Ω 1%
C45 2200μF 6V
C46 2200μF 6V
D6
D7
D8
D9

30-77503 2/2
RETURN
J3
H1B-3
B1

REVERB
R21 47K 1W
R20 2.2M
R19 220Ω
C27 10
R22 2.2M
R23 220K
C29 .0022
R24 1.5K
R25 220K
R27 22K
C31 .0022 400V
P10 B100K
R28 2.2K
R26 1M

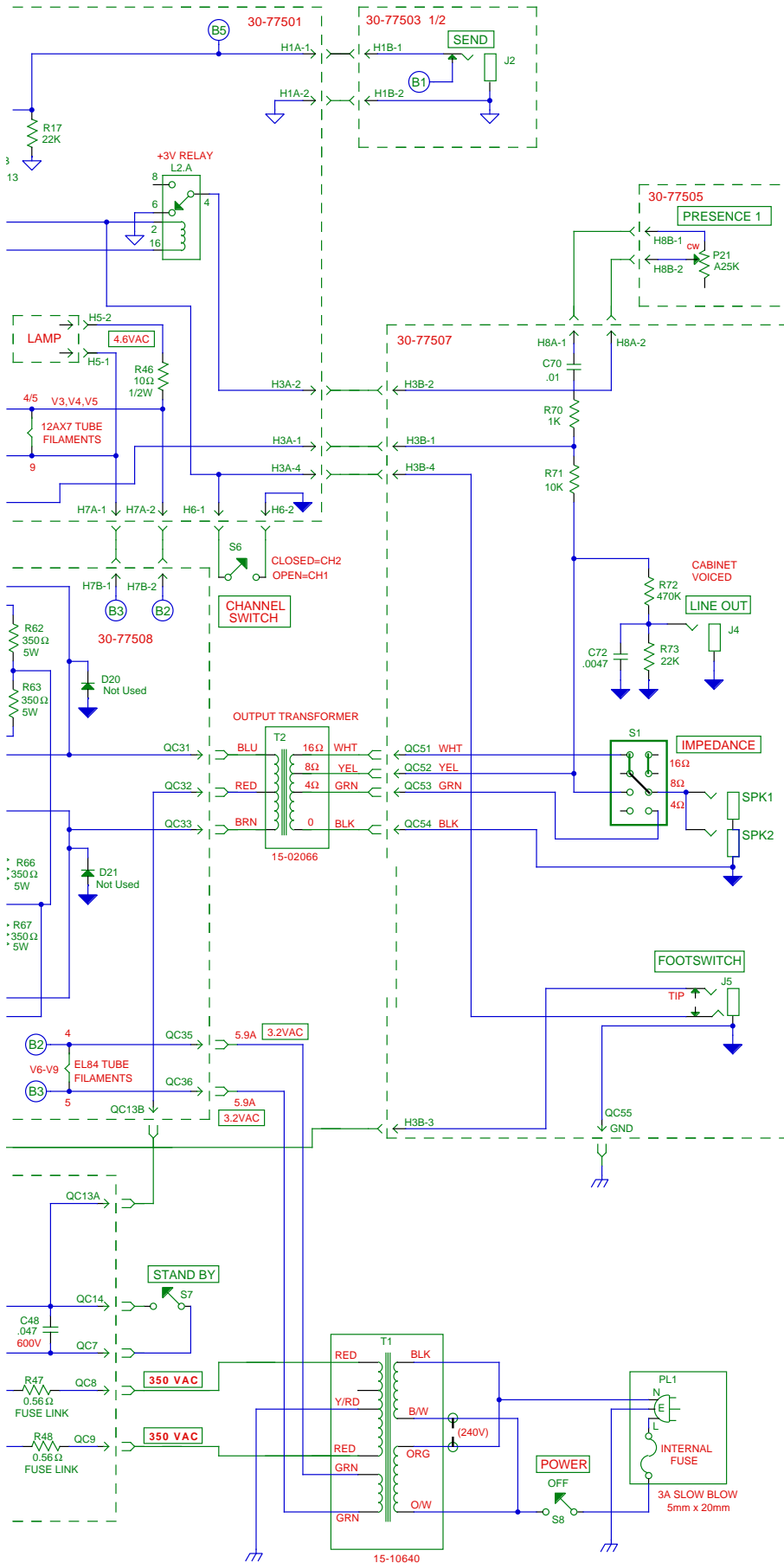
C34 STOPS OSCILLATION ON TOP WAVE WITH SPKR LOAD.
R29 220K
C33 .001 400V
V3.A
R30 100K
R31 560Ω
R32 100K
C35 .047
R34 22K
R35 100K
R36 100K
R37 220K
R38 220K
C37 .047 400V
H2A-1
H2B-1
H2A-2
H2B-2
R60 56K
R61 56K
V6
V7
V8
V9
R64 56K
R65 56K

BIAS ADJ
R39 3.9K
P11
D12 1N4007
R40 100K
R41 4.7K 1W
R42 2.2K 1W
R43 350Ω 10W
R44 4.7K 1W
C40 22 500V
C41 22 500V
C42 22 500V
C43 22 500V
C44 22 500V
R45 100Ω 1%
R46 100Ω 1%
C45 2200μF 6V
C46 2200μF 6V
D6
D7
D8
D9
C38 47/63V
H3A-3
QC37
QC8B
QC6A

FOOTSWITCH FS22
RING
H10-1
SLEEVE
H10-2
TIP
H10-3
S10
CHANNEL
S11
REVERB

D13 D14
D15 D16
1N4007 1N4007

QC5 GNDA
QC6 GNDB



GAIN / OUTPUT			
FUNCTION	INPUT	FREQ.	SPEAKER OUTPUT TONE
CH1	8mV	1K	15VAC 8Ω ALL FULL
CH1	18mV	1K	40VAC 8Ω-EL34 ALL FULL
CH2	20mV	1K	52 VAC 8Ω - N/L ALL CENTER
CH2	.3mV	1K	DRIVE STARTS TO CLIP
REVERB REC.	18mV	1K	15VAC 8Ω NO LOAD -15dB @ 100 Hz
REVERB DRIVE	20mV	1K	WITH 15VAC 8Ω N/L -14.2dB @ 100Hz
CH1 HI FREQ RISE	(VOL1 @ 2)		ALL TONE FULL: 26dB
CH1 - VOL @ 2			26dB RISE FROM 1K TO 10K ALL TONE FULL 40dB RISE FROM 1K TO 10K MIDS OFF - BASS TREBLE FULL
CH1 PRESENCE			9.5dB @ 10K 2.2K IN SERIES WITH .01 FEEDBACK

Production Assembly Revision History

- (H1):
- Change H3 to a 4 pin Header ribbon.
 - All PCB wire to get Spade Connects.
 - Remove all unused parts.

- ADDED AS SECONDARY OPERATION.
- ALL OPEN GROUNDS ARE (A) EXCEPT AS NOTED.
- ALL DIODES ARE TYPE 1N4003, EXCEPT AS NOTED.
- ALL CAPACITORS IN MICROFARADS, EXCEPT AS NOTED.
- ALL RESISTORS ARE 1/4W, EXCEPT AS NOTED.

NOTES UNLESS OTHERWISE SPECIFIED.

PROBLEM	INSPECTION FOR	
BIAS SETS OK FOR POWER TUBES BUT CANT GET ANY SIGNAL FROM V5 TO V6-V9	H2A-1&2 H2B-1&2	SOLDER BRIDGE SOLDER BRIDGE
SQUARE WAVE OSCILLATOR AT SPKR OUT	H2B-1&2	PIN 1&2 REVERSED
NO AMP FEEDBACK - EXTREME GAIN	H3A-1 TO 4	PIN 1 REVERSED OR
SELECT SWITCH DOES NOT WORK- NO VOLTAGE ON RELAY	H3B- 1 TO 4	SOLDER BRIDGE

CARVIN 12340 WORLD TRADE DR.
SAN DIEGO, CA 92128
(619) 487-1600
FAX 487-6629

VINTAGE 50

ALL TUBE GUITAR AMP

DRAWN BY:	C. McEUEN	DATE:	2FEB94
APPROVED:		DATE:	
PCB NO.:	30-77501	REV.:	E1
ASSY. NO.:	80-77501	REV.:	H1
REVISED BY:	C. McEUEN	DATE:	5DEC97