AA1164 PRINCETON REVERB "BLACKFACE" AMP

Paul C Mod

Layout by RobRobinette.com

Pilot Light

6.3V Center Tap

To All 6.3V Fil

Bias Rectifier 1N4007

100K 1W 5%

Bias Board

Note Polarity
25uF 100v
Filter

22K

Bias Voltage Divider
Lower Value = Hotter Bias

Bias -34V

Power Transformer 125P1B
340-0-340VAC
6.3v
Twist
Red-Yellow HT Center Tap
5v Heater
Twist
HV
Twist
Primary
Twist

Power Amp Ground

D 240V B+4
20/20/20/20
Cap Can
GND
C
B
A
18K 2W

C 320V B+3
B 400V B+2
A 420V B+1
1K 3W

Max Speed
100K
Smaller = Faster

Tremolo Intensity
250K Rev log

Tremolo Speed
3M Rev log

Reverb
100K Lin

Bass
250K Log

Treble
250K Log

Volume
1M Log

Input
2 Low
1 High
Ground
Switch
Tip
Input
1M
Tip
Switch
68K
68K
Grid Stoppers
Preamp Chassis Ground

Bundle Tremolo Yellow, Brown & Blue Wires Together
Keep Away From Other Control Wires

6.8K
Mid

Preamp Ground Bus

Power Tube Grid Leak
220K 5%
220K 5%

.1uF 630v Coupling
.1uF 630v Coupling

P1 Plate Load
56K

P1 Grid Leak
1M

Bias -2.2M

P1 Cathode

P1 Grid

P1 Tail Load
56K

Oscillator Filter
.022uF 630v

V4A Plate Load
220K

.1uF 630v Coupling
1M

Tremolo

0.01uF
0.01uF
0.02uF

Tremolo Oscillator
1M

V4A Grid Leak
1M

25uF 25v Bypass
3.3K
V4A Cathode

Bypass
25uF 25v
1.5K
V3A Cathode

NFB Tail
47Ω

NFB
2.7K

V3B Cathode
1.5K

25uF 25v Bypass

.1uF 630v Coupling

V3 Plate Load
100K

.003uF 630v Coupling
V3A Coupling

Reverb Attenuation
470K
3.3K
10pF
Reverb Mix
Bright

Bypass
25uF 25v
2.2K
V2 Cathode

Bypass
25uF 25v
1.5K
V1B Cathode

V2 Grid Leak
1M

500pF
Reverb Filter

.02uF 630v Coupling
.05uF 630v Coupling

V1 Plate Load
100K

250pF
Treble

.047uF 630v Mid

.1uF 630v Bass

100K
Slope

V1A Cathode
1.5K

25uF 25v Bypass

Tone Stack

Fil 1
Fil 2

V7 5U4GB
Rectifier

DC B+ Out

V6 6V6GT

OT

V5 6V6GT

OT 125A10B 8.5k:8 Ohm

V4 12AX7
A Tremolo Oscillator
B Phase Inverter

V3 12AX7
A Reverb Recovery
B Vibrato Preamp 3

Reverb Transformer
125A20B 25k:8 Ohm

V2 12AT7
Reverb Driver

V1 12AX7
Preamp 1 & 2

Safety Ground Bolt

Chassis Ground
.047uF Class Y
Death Cap

Green = Ground
White = Neutral
Twist
Black = Hot

Power Cord

AC Receptacle
(Hot Black On Narrow Slot)

Ground Switch (Delete)
SPDT ON-OFF-ON

1A Slow Blow Fuse

Power
DPST

Twist
Ground
Switch
Tip
10" 8 Ohm Speaker

Ground
Tip
Aux Speaker

Vibrato Pedal

Reverb Pedal

V3A Grid Leak
220K

Chassis Ground
Reverb Pan Output

Reverb Pan Input

Fender cap specification was 400V unless specified
All resistors 1/2 watt 10% unless specified
O on caps indicates outer foil

By RobRobinette.com V1.3