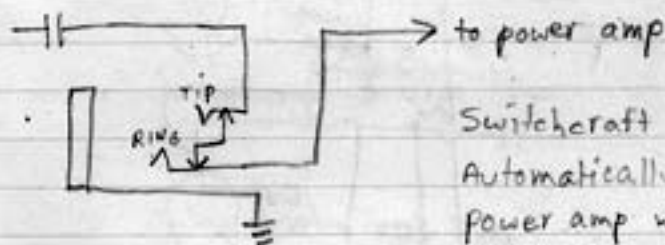


## FENDER ALEMBICIZATION

### I Preamp outs:

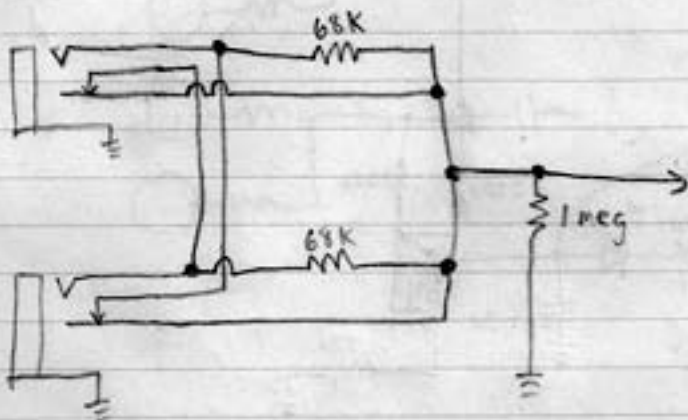


Switchcraft #14-B  
Automatically grounds  
power amp w/ mono plug.

Usable in one-preamp amps like Princeton.

For two-preamp amps like Twin, user may wish to play one channel thru Fender pwr amp and other thru ext pwr amp so input to pwr amp cannot be grounded.

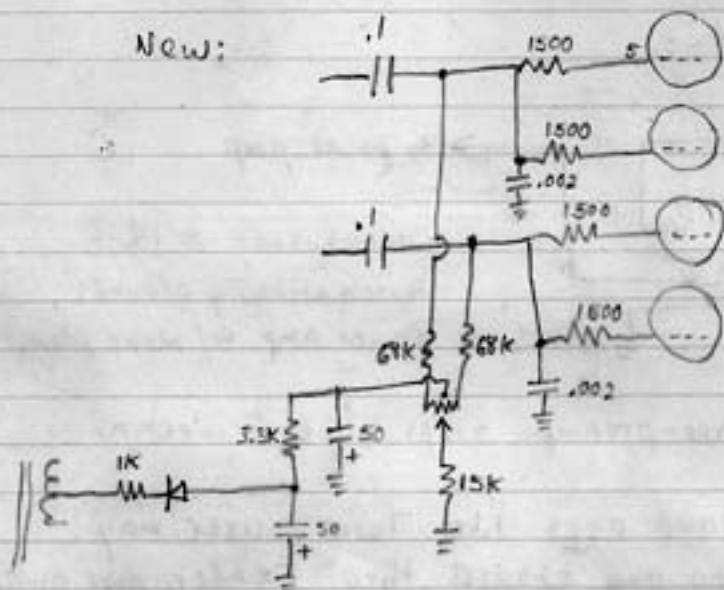
### II Inputs:



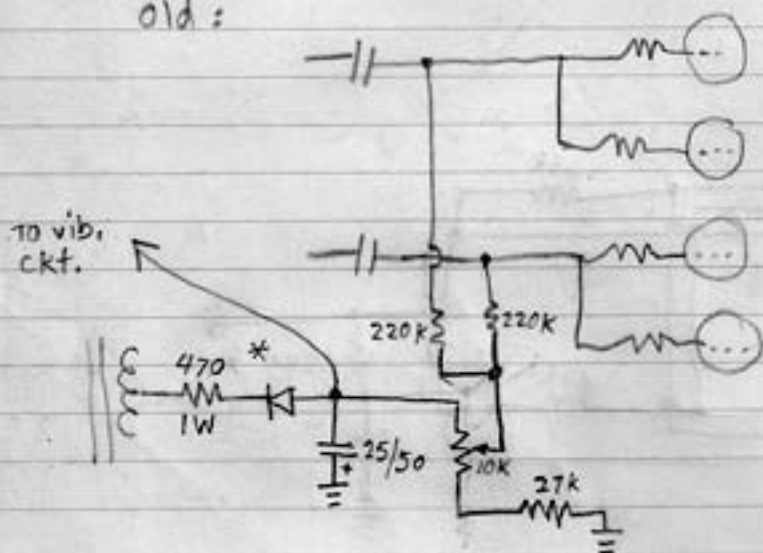
Switchcraft #13E (norm. closed)

### III Old vs. New

New:



old:

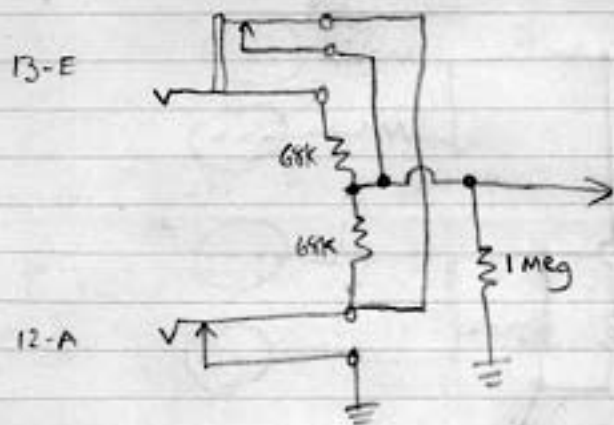


\* For Bassman (no vibrato) use 3.3K  $\frac{1}{2}$ W



4 tubes 51V  $R_e$  1.5k  $R_i$  100 $\Omega$   
 2 tubes 43V  $R_e$  2.2k  $R_i$  100 $\Omega$

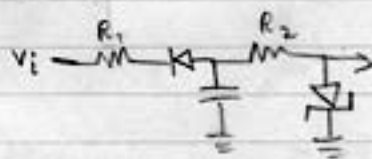
### New Input scam



#2

#1

Bias supply calculations:



1N4755 (43V) Test current = 6 ma

$$R = R_1 + R_2 \quad V_i = 50 \text{ to } 70 \text{ V} \approx 60 \text{ V (dc equiv)}$$

$$R = \frac{60 - 43}{6} = 3 \text{ K} \quad \text{range } 1 \text{ K to } 4.7 \text{ K}$$

1N4757 (51V) Test current = 5 ma

$$R = \frac{60 - 51}{5} = 2 \text{ K} \quad \text{range } .2 \text{ K to } 4 \text{ K}$$

with  $R = 700$   $I = 1.5 \text{ ma @ } 1 \text{ V}$

$40 \text{ ma @ } 27 \text{ V}$

with  $R = 2.5 \text{ K}$   $I = .4 \text{ ma @ } 1 \text{ V}$

$12 \text{ ma @ } 27 \text{ V}$

## IV Power transformer color code

- Regulars:
- Green - Fil.
  - Black - Pri. (also Bl + Wh)
  - Red - B+
  - Blue - B+ Tap for bias (also Red/Bl)
  - Red/Yel - B+ center tap gnd.
  - Orange - gnd (Fil center tap)

## Line Volt, Sw:

- Black - Fuse
- White - 117
- Or/Blk - 200
- Wh/Blk - 210
- Yel/Blk - 220
- Grn/Blk - 230
- Red/Blk - 240
- Red/Yel } Gnd
- Grn/Yel }
- Red - B+
- Red/Blu - B+ tap for bias
- Grn - Fil

Authority: Phils Showman A05869

Fender input sens @ vol control set to 5:  $\approx .1V$   
Above showman measures 1.5 db less gain  
in vib channel, w/mid control at 6.8k

Preamp outs (only one shown)

