



R18	33k
R19	33k
R20	390k
R21	100k
R22	12k
R23	2.7k
CLR	4.7k

C8	500p
C9	100n
C10	4n
C11	10n
C12	100n
C13	100n
C14	100n
C15	100μ

#### Capacitors

C1	100n
C2	500p
C3	100n
C4	100n
C5	500p
C6	100n
C7	100n

#### Semiconductors

Q1-4	FS36999
D1-4	1N914
D5	1N4001

#### Electromechanical

All pots	B100k
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### “VIOLET” RAMS HEAD

#### Resistors

R1	1M
R2	33k
R3	100k
R4	100Ω
R5	470k
R6	12k
R7	560Ω
R8	8.2k
R9	100k
R10	470k
R11	12k
R12	100Ω
R13	8.2k
R14	100k
R15	470k
R16	12k
R17	100Ω
R18	33k
R19	33k
R20	470k
R21	100k

R22	12k
R23	2.7k
CLR	4.7k

#### Capacitors

C1	100n
C2	470p
C3	100n
C4	100n
C5	470p
C6	100n
C7	100n
C8	470p
C9	100n
C10	4n
C11	10n
C12	100n
C13	100n
C14	100n
C15	100μ

### Semiconductors

Q1-4	2N5133
D1-4	1N4148
D5	1N4001

### Electromechanical

All pots	B100k
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## SUPA TONEBENDER

### Resistors

R1	1M
R2	33k
R3	100k
R4	100Ω
R5	470k
R6	15k or 18k
R7	820Ω
R8	8.2k
R9	100k
R10	470k
R11	10k
R12	100Ω
R13	8.2k
R14	100k
R15	470k
R16	15k or 18k
R17	100Ω
R18	33k
R19	33k
R20	390k
R21	100k
R22	10k
R23	2.7k
CLR	4.7k

### Capacitors

C1	100n
C2	470p
C3	100n
C4	100n
C5	470p
C6	omit
C7	100n
C8	470p
C9	100n
C10	4.7n
C11	10n
C12	100n
C13	100n
C14	100n
C15	100μ

### Semiconductors

Q1-4	BC184
D1-2	omit
D3-4	1N4148
D5	1N4001

### Electromechanical

All pots	A100k
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## “CIVIL WAR” RUSSIAN

### Resistors

R1	1M
R2	39k
R3	100k
R4	390Ω

R5	470k
R6	12k
R7	1k
R8	10k
R9	100k

R10	470k
R11	12k
R12	390Ω
R13	10k
R14	100k
R15	470k
R16	12k
R17	390Ω
R18	20k
R19	22k
R20	470k
R21	100k
R22	10k
R23	2.7k
CLR	4.7k

#### Capacitors

C1	100n
C2	430p
C3	100n

C4	100n
C5	430p
C6	47n
C7	100n
C8	430p
C9	47n
C10	3.9n
C11	10n
C12	100n
C13	100n
C14	100n
C15	100μ

#### Semiconductors

Q1-4	KT3102E
D1-4	1N4148
D5	1N4001

#### Electromechanical

All pots	B100k
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### "TALL FONT" GREEN RUSSIAN

#### Resistors

R1	1M
R2	39k or 43k
R3	100k
R4	390Ω
R5	470k
R6	12k
R7	1k
R8	10k
R9	100k
R10	470k
R11	12k
R12	390Ω
R13	10k
R14	100k
R15	470k
R16	12k
R17	390Ω

R18	20k
R19	22k
R20	470k
R21	100k
R22	10k
R23	2.7k
CLR	4.7k

#### Capacitors

C1	100n
C2	500p
C3	100n
C4	100n
C5	500p
C6	47n
C7	100n
C8	500p
C9	47n

C10	3.9n
C11	10n
C12	100n
C13	100n
C14	100n
C15	100μ

#### Semiconductors

Q1-4	2N5089
D1-4	1N4148
D5	1N4001

#### Electromechanical

All pots	B100k
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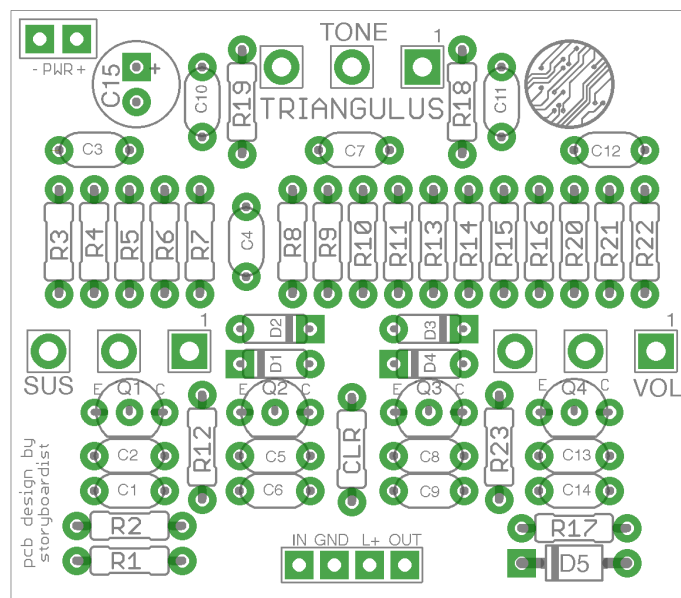
### NOTES

Finding the original transistors of the Triangle version will be next to impossible, and the 2N5133s used in the original Rams Head were much higher gain than the ones produced today. The nature of the Big Muff™ circuit is such that just about any medium-high gain transistors can be used with significantly altering the sound of the circuit. Good alternatives to the transistors listed are 2N5088, 2N5089, MPSA18, BC549C, and BC550C. Always double check the pinout of the transistors you are using. This board is set up for CBE pinout with collectors and emitters labeled on the silkscreen.

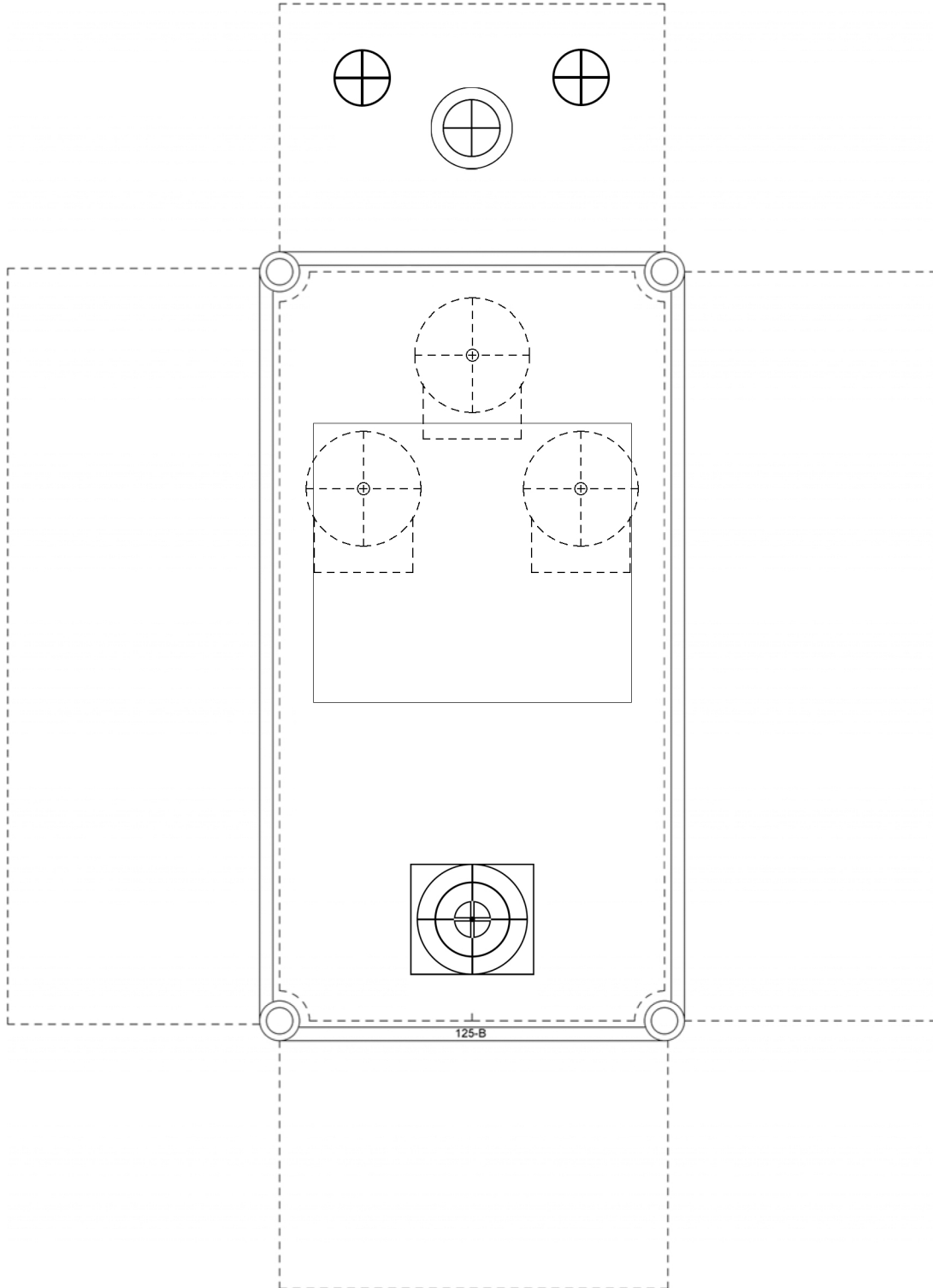
In the original Colorsound Supa ToneBender, there is an extra 100n capacitor between the 2<sup>nd</sup> gain stage and the tone stack. This cap has been omitted as it is not present in the other versions of the Big Muff™.

With pots, typically whatever was on hand was used in original production units. It's not a bad idea to use A100k (log) pots for Sustain and Volume controls and a B100k (lin) pot for the Tone control.

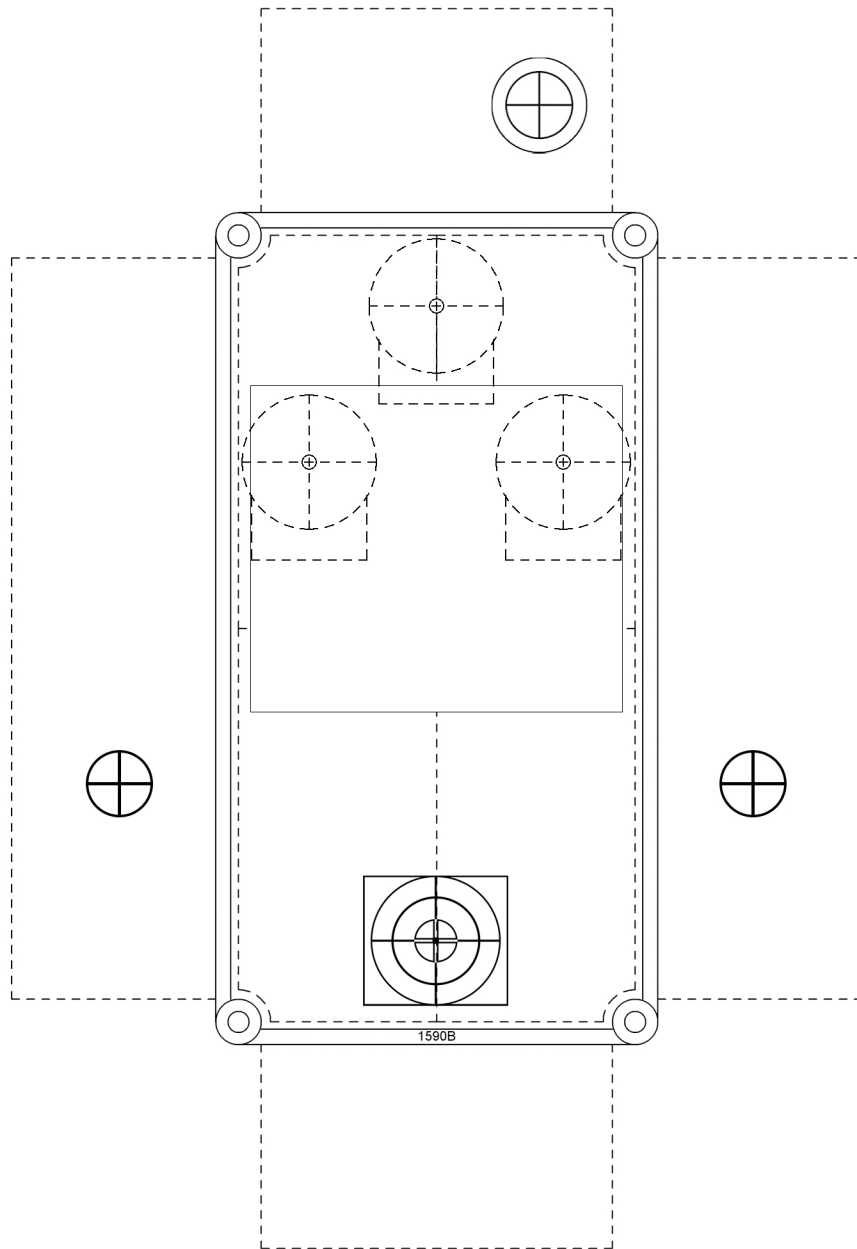
### LAYOUT



125B DRILL TEMPLATE



# 1590B DRILL TEMPLATE



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