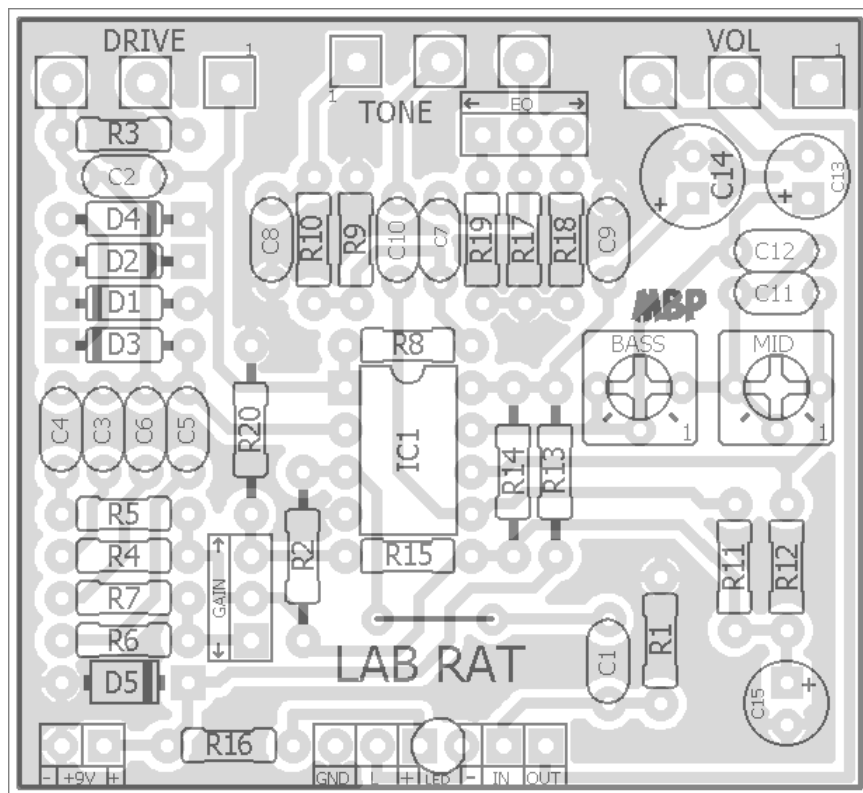


# LAB RAT

**FX TYPE: Overdrive**

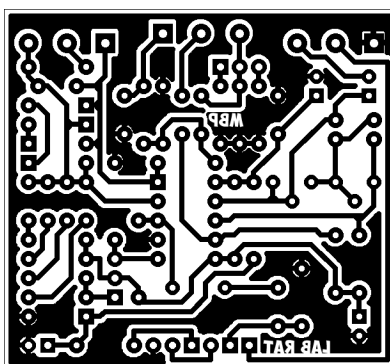
*Based on the Barber® Gain Changer™*

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*Note the jumper*

**2.05" W x 1.88" H**



*Etcher's Paradise projects are intended for DIY use only! Commercial pedal manufacturing using these materials is strictly forbidden.*

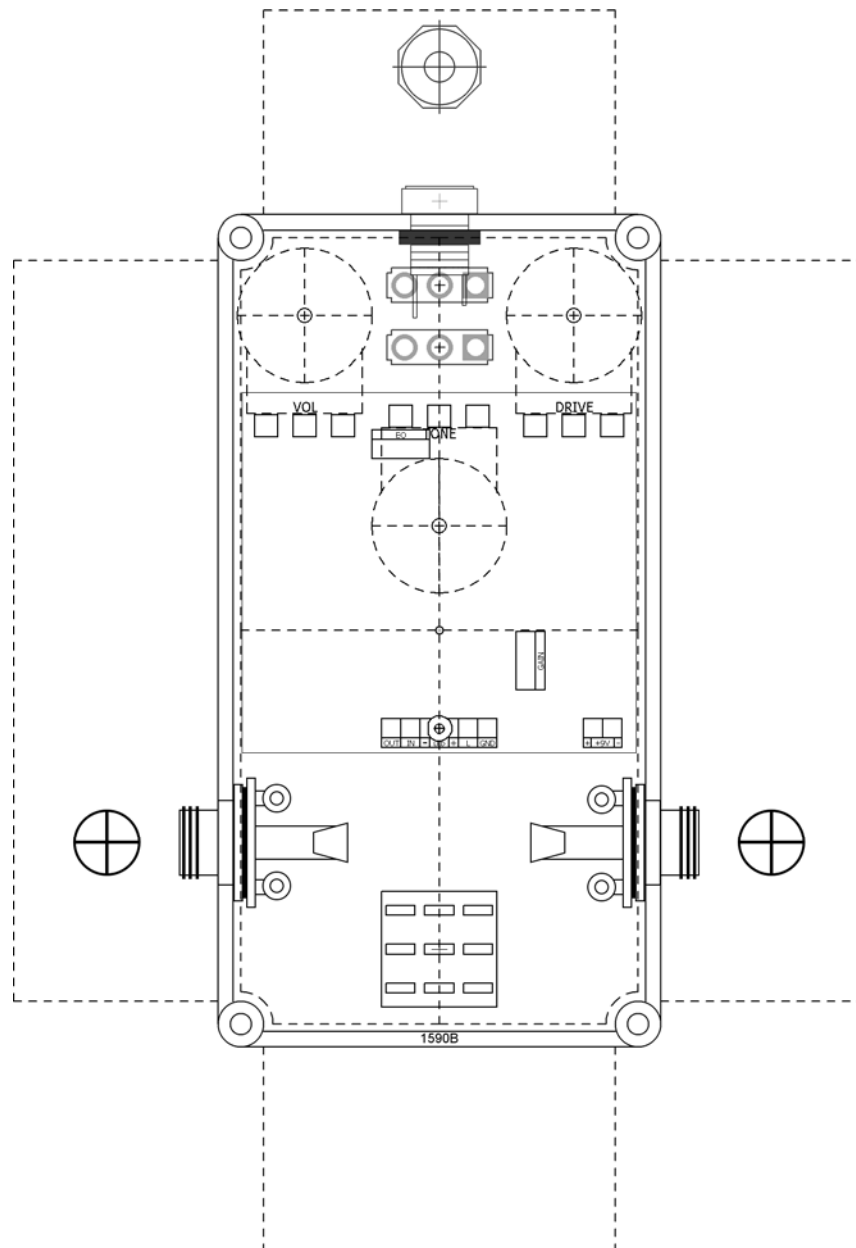
B.O.M.					
Resistors		Caps		Diodes	
R1	1M	C1	56n	D1 - D4	1n4148
R2	470k	C2	100pF	D5	1N4001
R3	10k	C3	22n	IC	
R4	13k3	C4	10n	IC1	Dual Op-Amp
R5	4k7	C5	100n	Switches	
R6	2k2	C6	68n	EQ	SPDT
R7	2k4	C7	15n	GAIN	SPDT
R8	1k	C8	47n	Trimmers	
R9	3k6	C9	100n	BASS	50k
R10	3k3	C10	56n	MID	20k
R11	470k	C11	10n	Pots	
R12	3k	C12	56n	DRIVE	1MA
R13	91R	C13	4u7	TONE	100kB
R14	10k	C14	100uF	VOL	100kA
R15	3k3	C15	47uF		
R16	4k7				
R17	100k				
R18	8k2				
R19	16k				
R20	10k				

Shopping List			
Value	QTY	Type	Rating
91R	1	Metal / Carbon Film	1/4W
1k	1	Metal / Carbon Film	1/4W
2k2	1	Metal / Carbon Film	1/4W
2k4	1	Metal / Carbon Film	1/4W
3k	1	Metal / Carbon Film	1/4W
3k3	2	Metal / Carbon Film	1/4W
3k6	1	Metal / Carbon Film	1/4W
4k7	2	Metal / Carbon Film	1/4W
8k2	1	Metal / Carbon Film	1/4W
10k	3	Metal / Carbon Film	1/4W
13k3	1	Metal / Carbon Film	1/4W
16k	1	Metal / Carbon Film	1/4W
100k	1	Metal / Carbon Film	1/4W
470k	2	Metal / Carbon Film	1/4W
1M	1	Metal / Carbon Film	1/4W
100pF	1	Ceramic / MLCC	16v min.
10n	2	Film	16v min.
15n	1	Film	16v min.
22n	1	Film	16v min.
47n	1	Film	16v min.
56n	3	Film	16v min.
68n	1	Film	16v min.
100n	2	Film	16v min.
4u7	1	Electrolytic	16v min.
47uF	1	Electrolytic	16v min.
100uF	1	Electrolytic	
1n4148	4		
1N4001	1		
IC	1	your choice Dual Op-Amp	
SPDT	1	On/Off/On	
SPDT	1	On/On	
50k	1	Bourns 3362p	
20k	1	Bourns 3362p	
1MA	1	PCB Pin Right Angle	16mm
100kB	1	PCB Pin Right Angle	16mm
100kA	1	PCB Pin Right Angle	16mm

You can use 100R in place of 91R.  
For 13k3, solder two resistors in series for closest value match.

## 1590B Drill Guide

**4.43" W x 6.46" H**



Recommend using a “Lumberg” style DC jack mounted at the top as shown.

