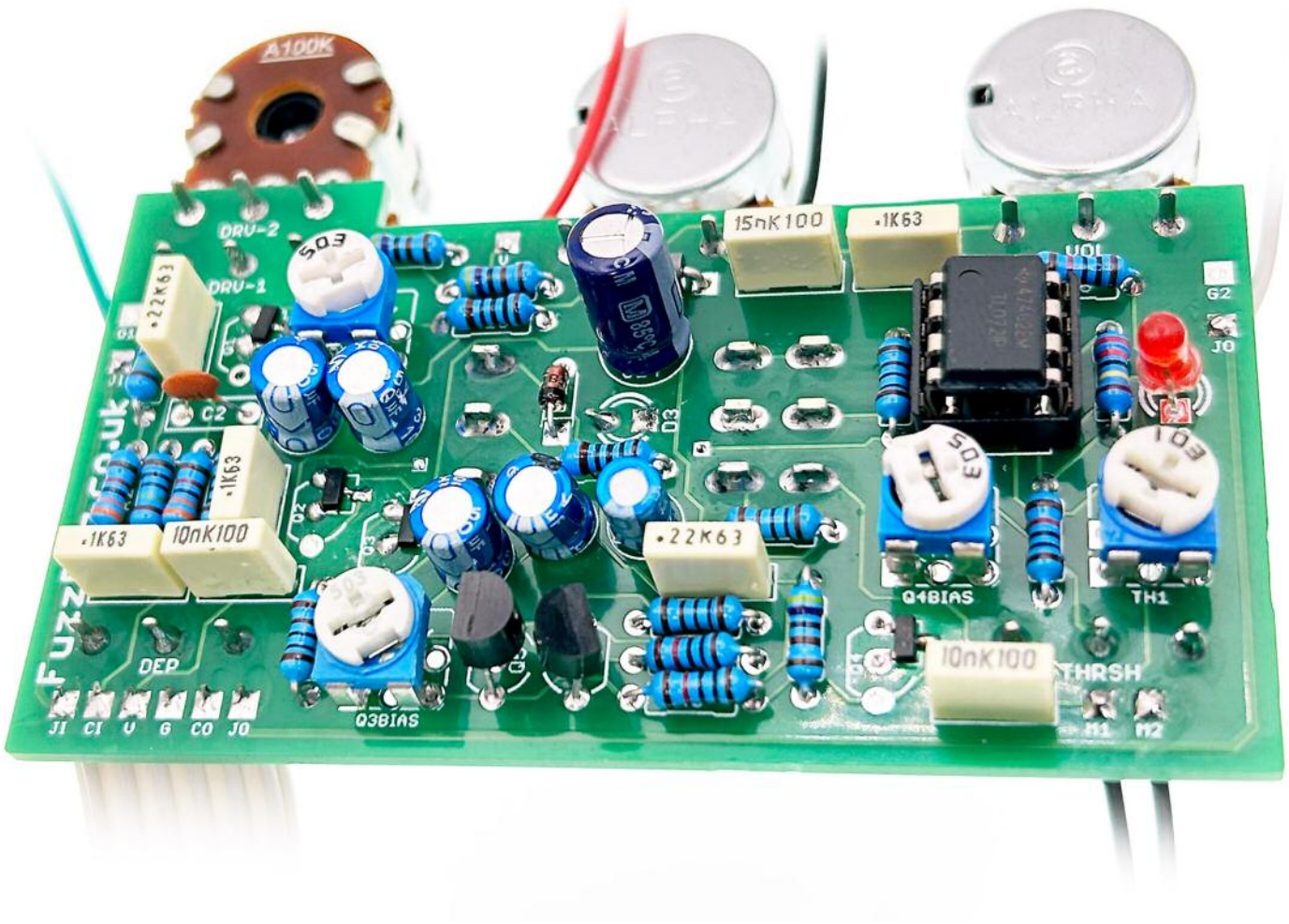
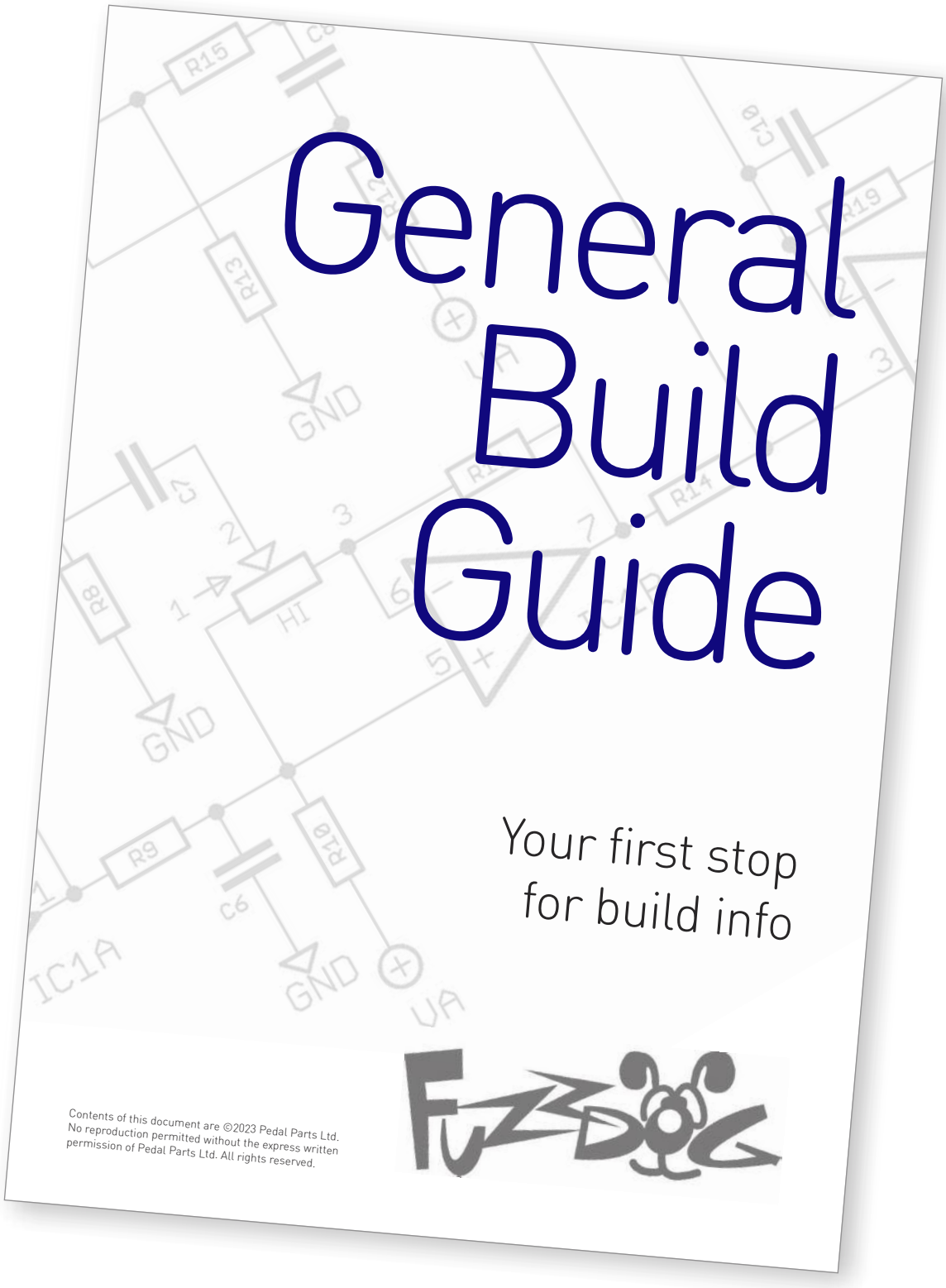


Snuggle

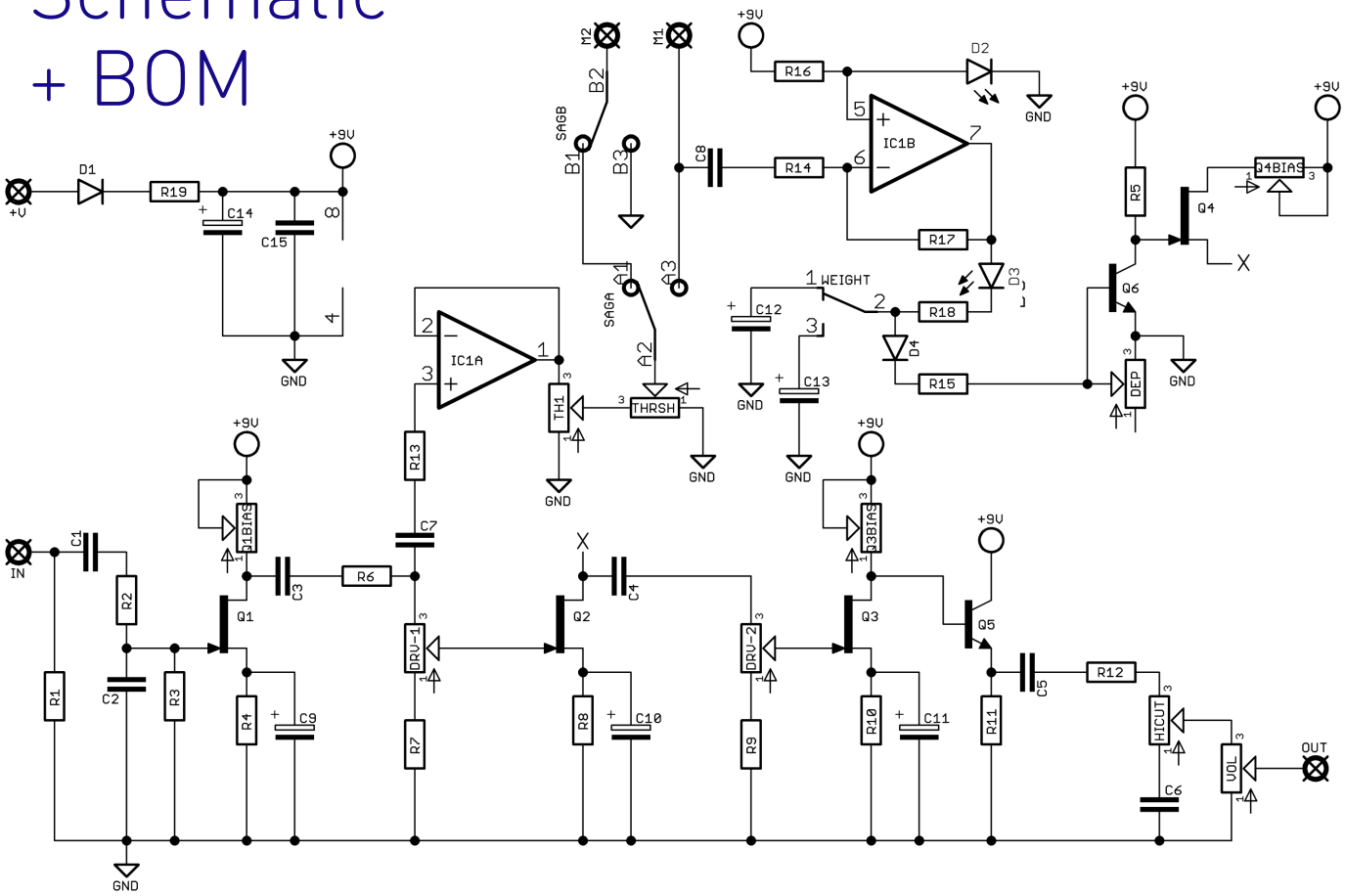
Mighty overdrive with handy sagged mode

Before you dig in, ensure you download and read the **General Build Guide**.

It contains all the information you need for a successful outcome.



Schematic + BOM



R1	1M
R2	33K
R3	1M
R4	1K
R5	10K
R6	33K
R7	4K7
R8	1K
R9	4K7
R10	1K
R11	4K7
R12	1K
R13	1K
R14	10K
R15	10K
R16	10K
R17	2M2
R18	100R
R19	100R

Q1-3	J201*
Q4	2N5457*
Q5-6	2N5089

C1	100n
C2	220p
C3	220n
C4	100n
C5	220n
C6	15n
C7	10n
C8	10n
C9	10u elec
C10	10u elec
C11	10u elec
C12	1u elec
C13	10u elec
C14	100u elec
C15	100n

IC1	TL072

D1	1N5817
D2	3mm yellow LED
D3**	3mm red LED
D4	1N4148

DEPTH	5KB***
DRIVE	100KA Dual Gang
HICUT	10KB
THRESH	10KB
VOL	100KA

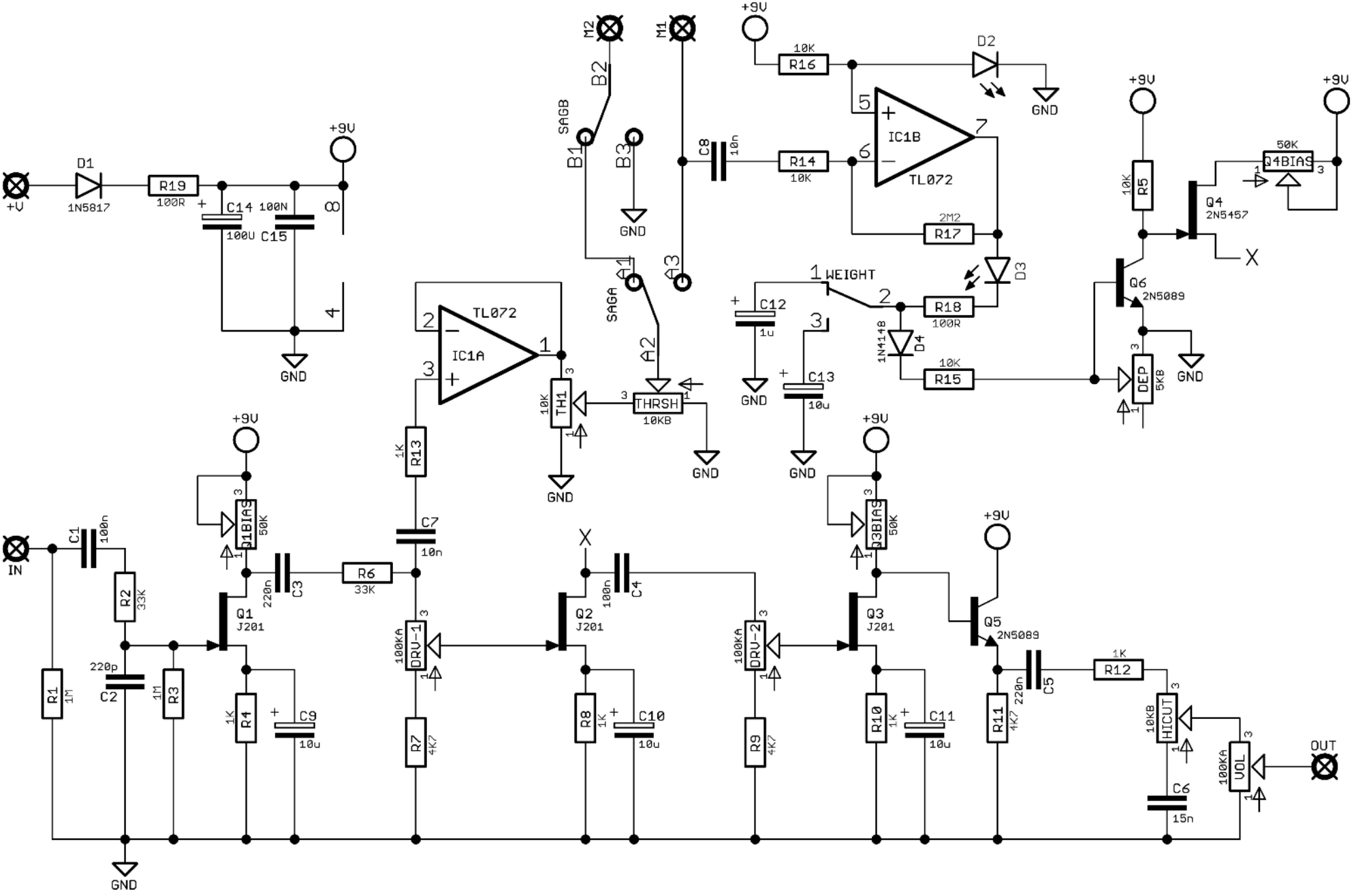
Q1-3 BIAS	50K trimmer
TH1	10K trimmer

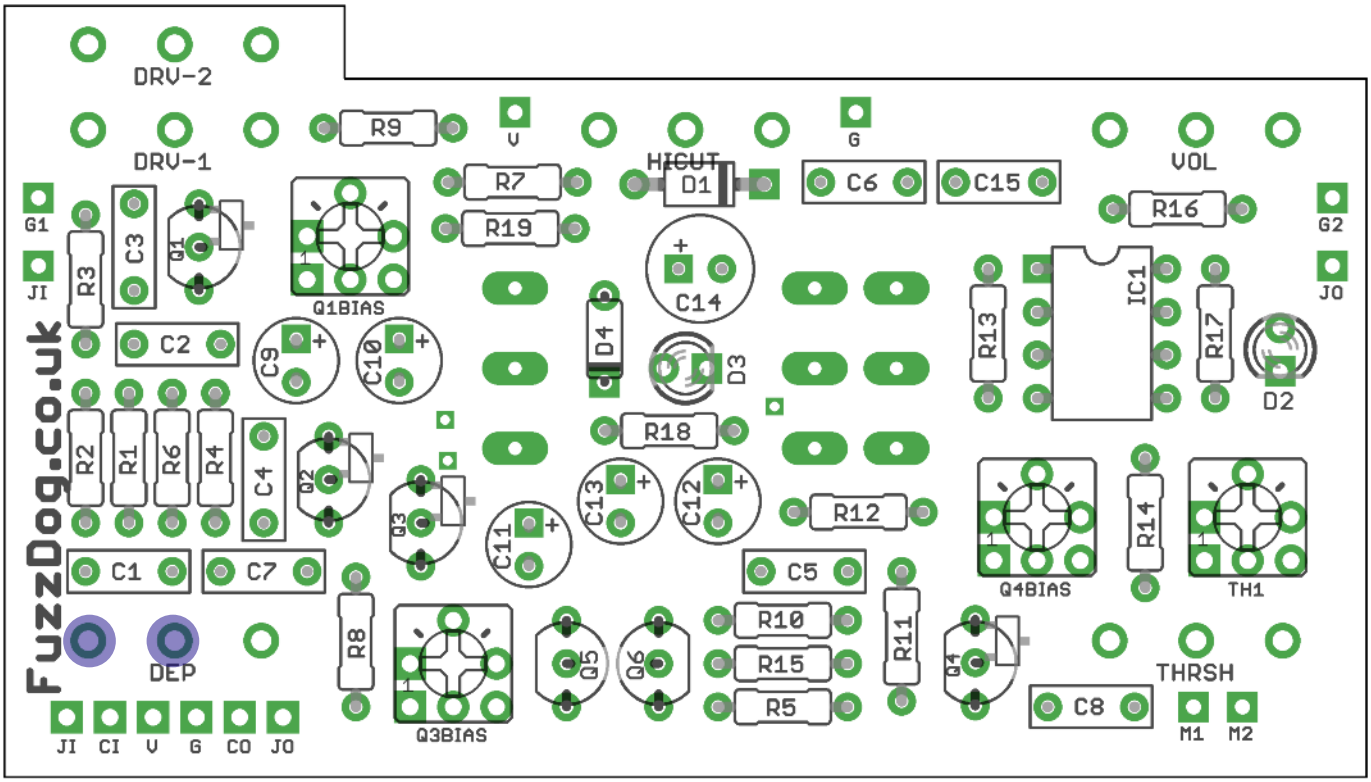
SAG	DPDT ON-ON
WEIGHT	SPDT ON-ON

*There are pads for through-hole or SMT parts for these. The SMT versions are MMBFJ201 and MMBF5457.

**External threshold indicator LED.

**Fixed 1K5 resistor in original. Feel free to replace.


+V
D1
1N5817
R19
100R
C14 100N
100U C15
+9V
GND
M2
M1
B2
B1
B3
SAGB
SAGA
A1
A2
A3
GND
+9V
10K
R16
D2
GND
IC1B
TL072
C8 10n
R14
10K
2M2
R17
D3
1 WEIGHT
2
3
C12
1u
R18
100R
1N4148
D4
10K
R15
C13
10u
GND
GND
+9V
50K
Q4BIAS
10K
R5
Q4
2N5457
X
Q6
2N5089
DEP
5KB
GND
IC1A
TL072
10K
TH1
THRSH
10KB
GND
GND
1K
R13
C7
10n
Q1BIAS
50K
IN
C1
100n
R2
33K
220n
C3
R6
33K
Q1
J201
220p
C2
R1
1M
R3
1M
1K
R4
C9
10u
100KA
DRV-1
R7
4K7
X
C4
100n
Q2
J201
R8
1K
C10
10u
100KA
DRV-2
R9
4K7
Q3BIAS
50K
Q3
J201
R10
1K
C11
10u
Q5
2N5089
R11
4K7
220n
C5
1K
R12
10KB
HICUT
C6
15n
100KA
VOL
OUT
GND



Snap the small metal tag off the pots so they can be mounted flush in the box.

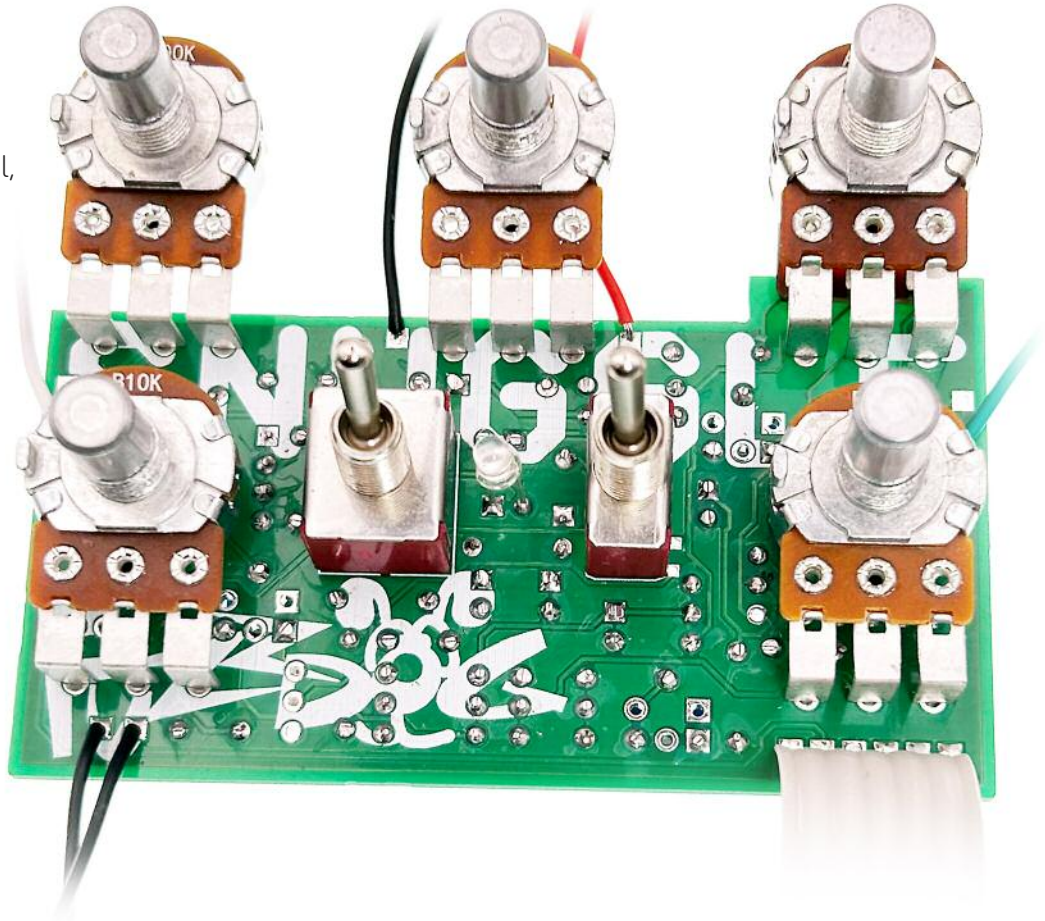
You should solder all other board-mounted components before you solder the pots.

Once they're in place you'll have no access to much of the board.

The SAG footswitch should be a momentary SPST, normally open footswitch.

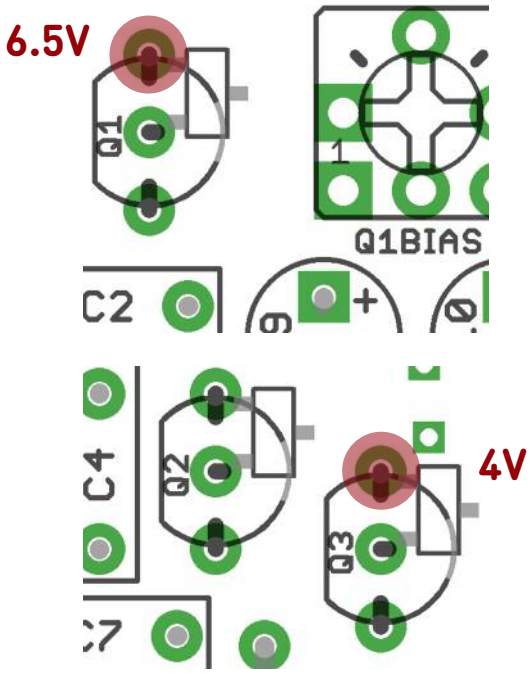
With the SAG toggle in the up position, this turns OFF the sag function. With it down, it engages it.

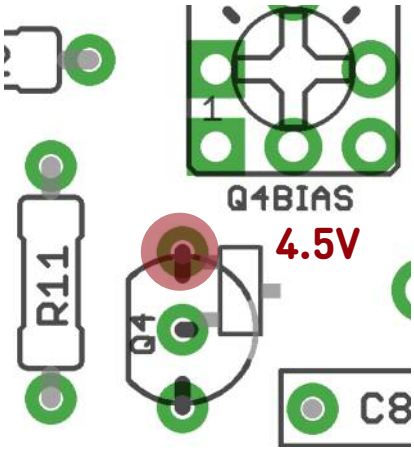
If you want to replace the Depth pot with a fixed resistor as per the original, mount it across the two pads marked in blue above.



Biasing the FETs

Adjust the appropriate trimmers until you get readings close to those shown below.
To measure, set your multimeter to DC Voltage, place the common probe on any ground point, and the + lead to the spot you're testing. Measure with GAIN set to zero and SAG toggle in the down position. Don't get *too* hung up on numbers. If it sounds good, good.

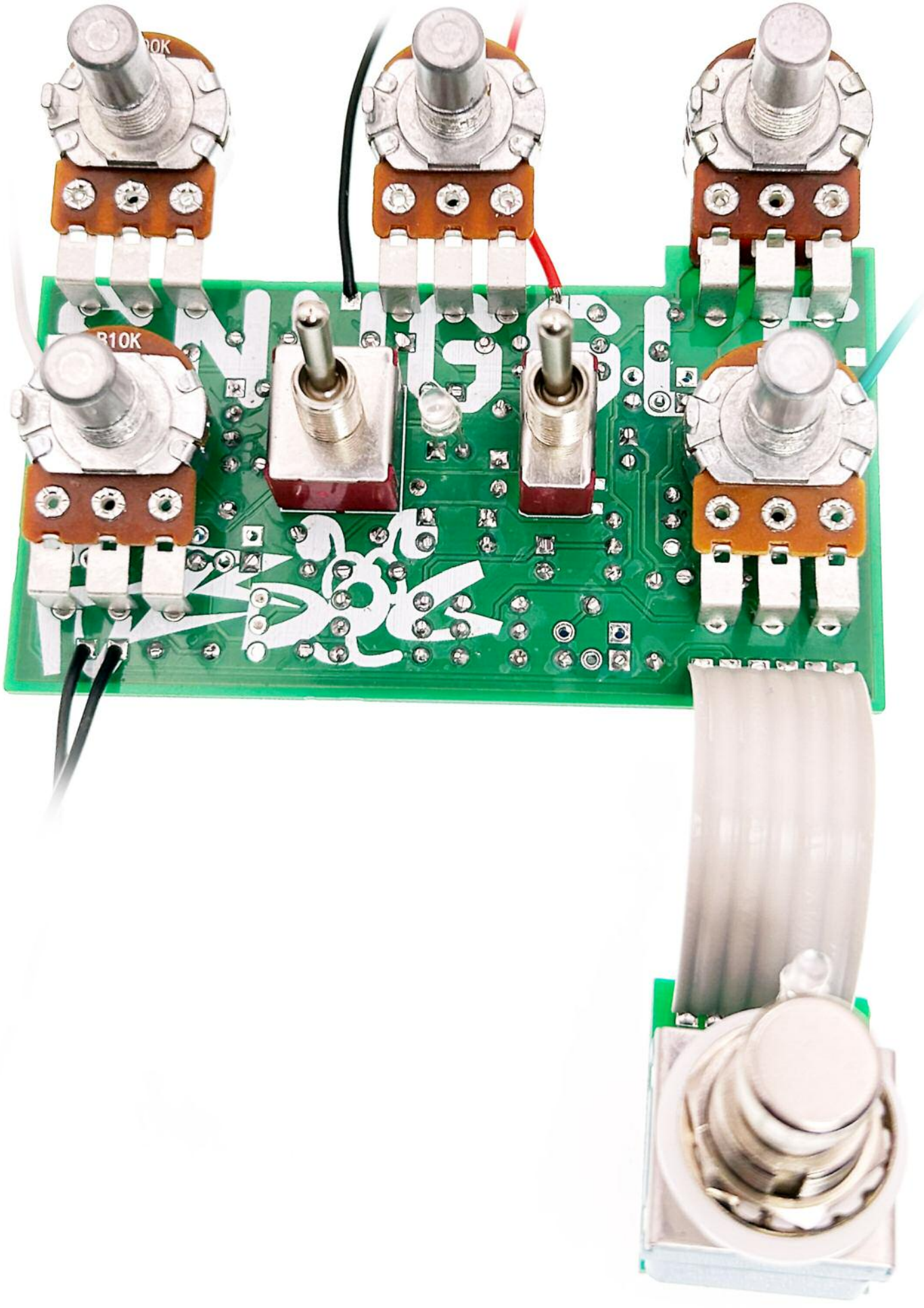




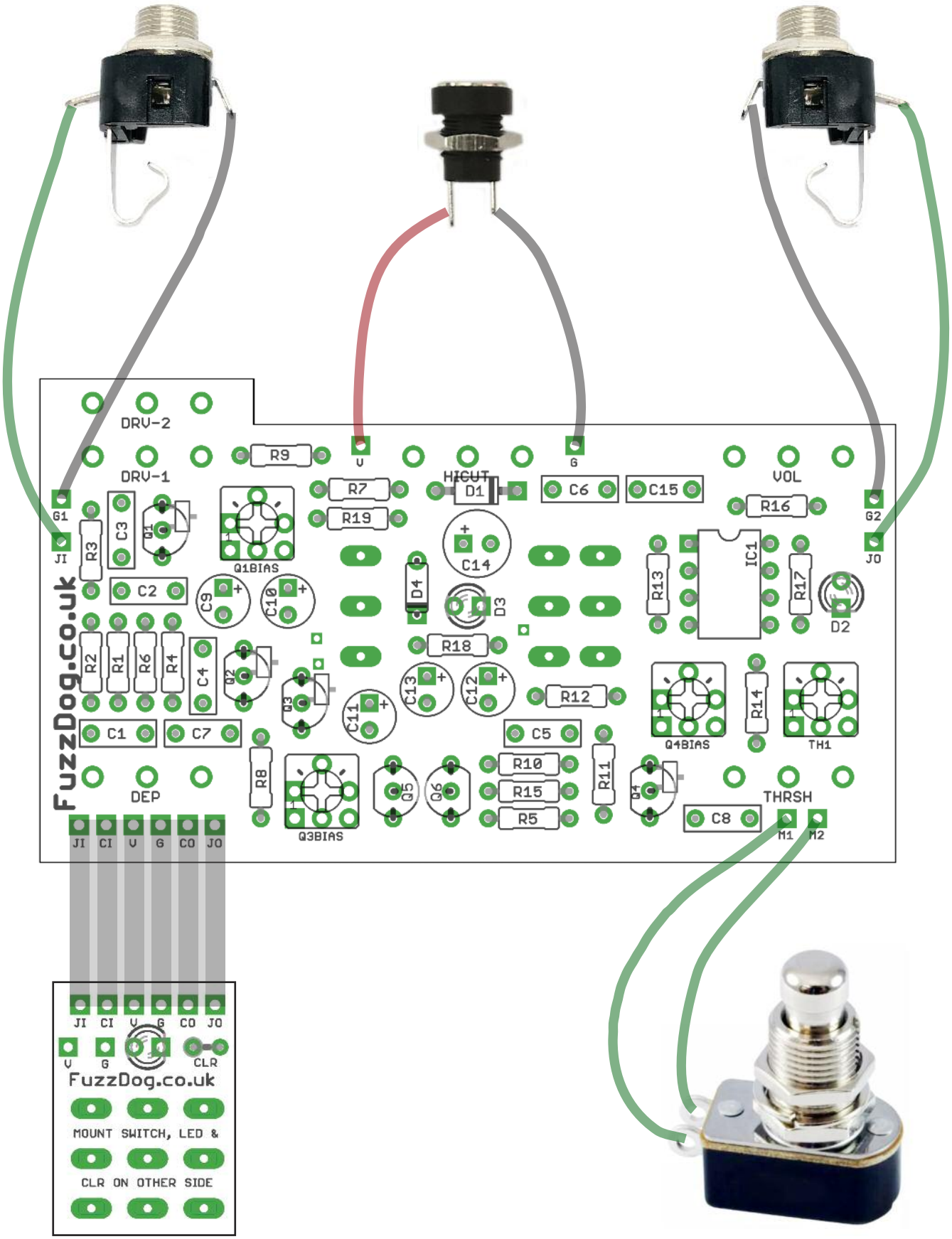
Adjusting SAG

Set SAG mode on - toggle switch up. Set GAIN, THRESH and DEPTH to 12 o'clock.

Strum a chord and check how D3 responds. Adjust the trimmer TH1 until doing this lights up the LED for 3-4 seconds. From there simply adjust to your taste. Some people like things saggier than others.


B10K

Wiring


DRV-2
DRV-1
R9
V
HICUT
D1
G
C6
C15
VOL
R16
G1
JI
G2
JO
R7
R19
C14
R3
C3
Q1
Q1BIAS
C2
C9
C10
D4
D3
R13
IC1
R17
D2
R18
R2
R1
R6
R4
C4
Q2
Q3
C13
C12
R12
C1
C7
C11
C5
Q4BIAS
R14
TH1
R8
Q5
Q6
R10
R15
R5
R11
Q4
THRSH
C8
M1
M2
DEP
Q3BIAS
FuzzDog.co.uk
JI CI V G CO JO
V G CLR
FuzzDog.co.uk
MOUNT SWITCH, LED &
CLR ON OTHER SIDE

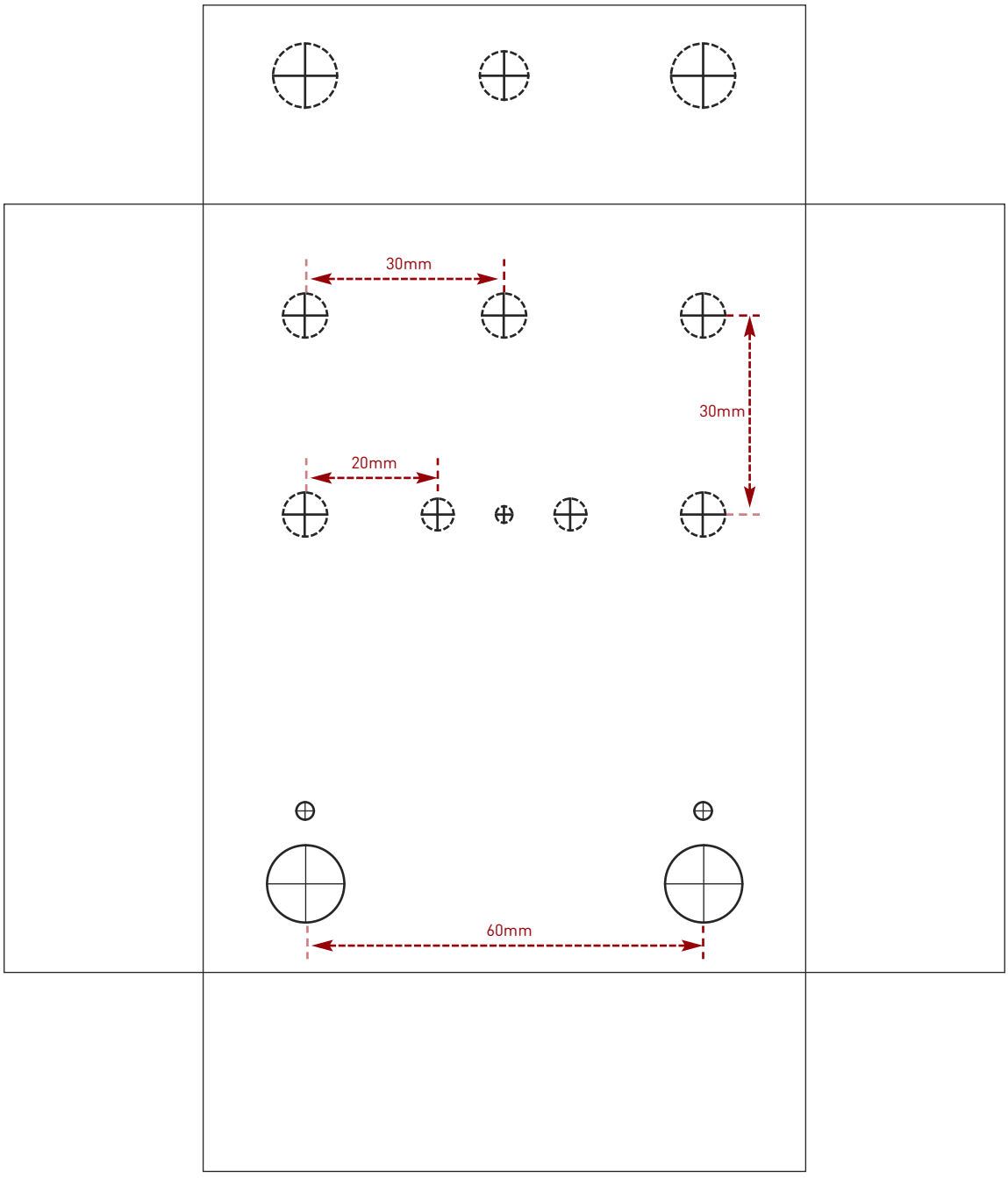
Drilling template

Hammond 1590BB

Drill sizes listed are minimum.
It's a good idea to add 1mm to anything mounted on the PCB that'll poke through the front of the enclosure.

Drill sizes:

Pots	7mm
Jacks	10mm
Footswitch	12mm
DC Socket	12mm
Toggle switches	6mm
Rotary switches	10mm



This template is a rough guide only. You should ensure correct marking of your enclosure before drilling. You use this template at your own risk.
Pedal Parts Ltd can accept no responsibility for incorrect drilling of enclosures.

FuzzDog.co.uk