

Killer Bee

The Killer Bee uses a BS170 MOSFET to overdrive four J201 JFETs to produce a wide range of overdrive/distortion sounds. The **PreGain** control not only reduces the gain of the first stage, but also gently alters the tone. Use the **PostGain** and **Boost** trimpots to dial in the basic distortion sound that will be controlled with the **PreGain** and **Drive** controls. You may notice that the tone control is derived directly from Jack Orman's modified Big Muff tone circuit, which is one of the most useful versions out there.

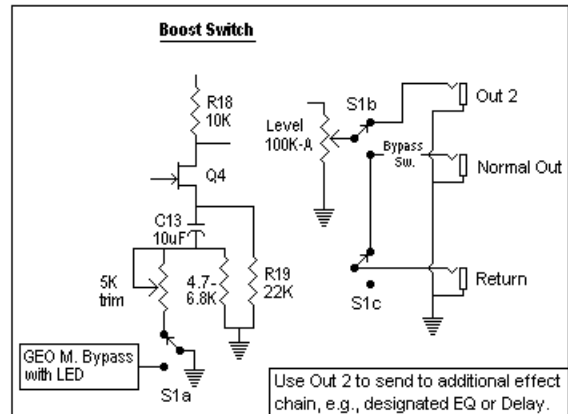
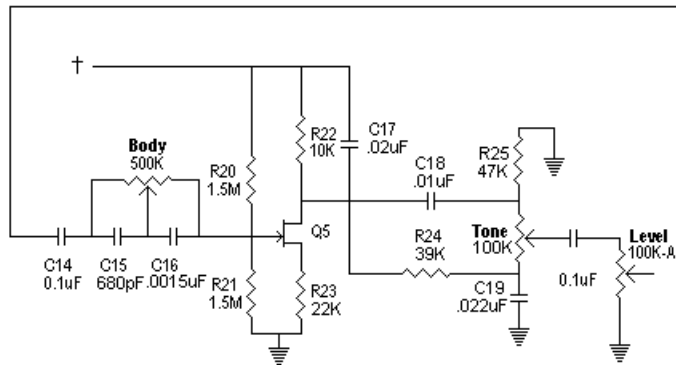
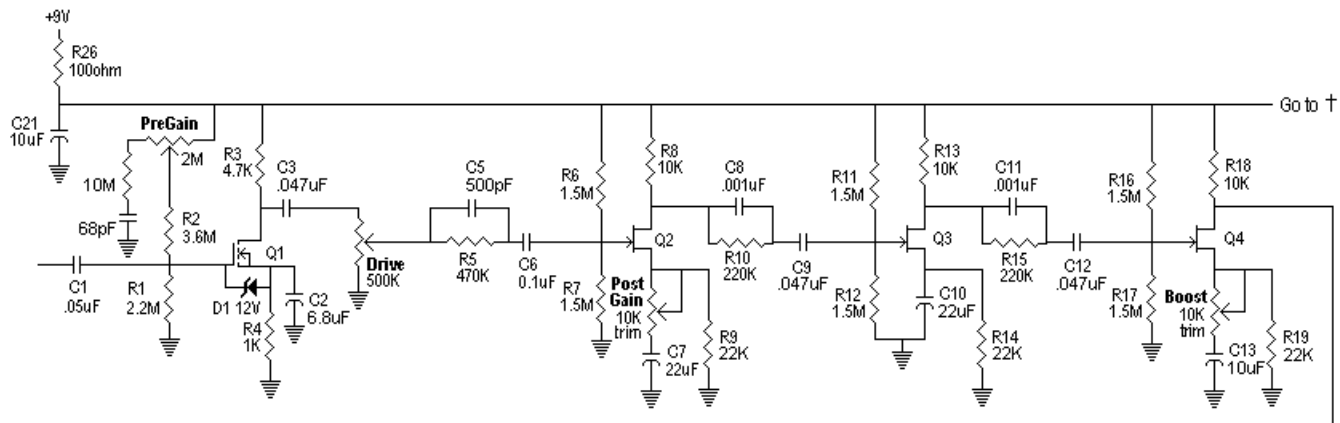
The JFETs are biased such that the gate has been significantly raised to a positive voltage. This arrangement stabilizes bias voltages, thus drastically reducing by about 10-fold the variation among different J201s (and even among different types of JFETs). Instead of seeing differences of 1 to 2 Volts at the drains of different JFETs,

the differences now run between 0.0 and 0.2 volts, and the need for trim pots at the drains is eliminated.

This design was originally released on 4/23/01, and has not been refined much. It is being re-released for fun, so be prepared to experiment.

Modifications: Make C15 .001uF and C16 .22uF for a thicker range in the **Body** control. Experiment with the C2, C7, and C13 values. Experiment with tone control (try a deeper notch). Use the **Boost Switch** mod to switch in increased distortion/volume while adding a designated effect string.

Circuit design and drawings Copyright 2001 J. Nagy. All Rights Reserved. V1.3



(C) 2001 J. Nagy