

PARTS LIST

B1—9-volt battery
 C1—0.27- μ F capacitor
 C2—0.001- μ F capacitor
 C3—0.47- μ F capacitor
 J1—Phone jack
 Q1,Q2—2N3565, MPS6514, or similar
 R1—47,000-ohm, $\frac{1}{2}$ -watt resistor
 R2—15,000-ohm, $\frac{1}{2}$ -watt resistor
 R3—470-ohm, $\frac{1}{2}$ -watt resistor
 R4—680,000-ohm, $\frac{1}{2}$ -watt resistor
 R5—4.7-megohm, $\frac{1}{2}$ -watt resistor
 R6—50,000-ohm linear potentiometer
 R7—6800-ohm, $\frac{1}{2}$ -watt resistor
 R8—68,000-ohm, $\frac{1}{2}$ -watt resistor
 R9—10,000-ohm, $\frac{1}{2}$ -watt resistor
 S1—S.p.s.t. switch
 S2—2-pole, double-throw switch

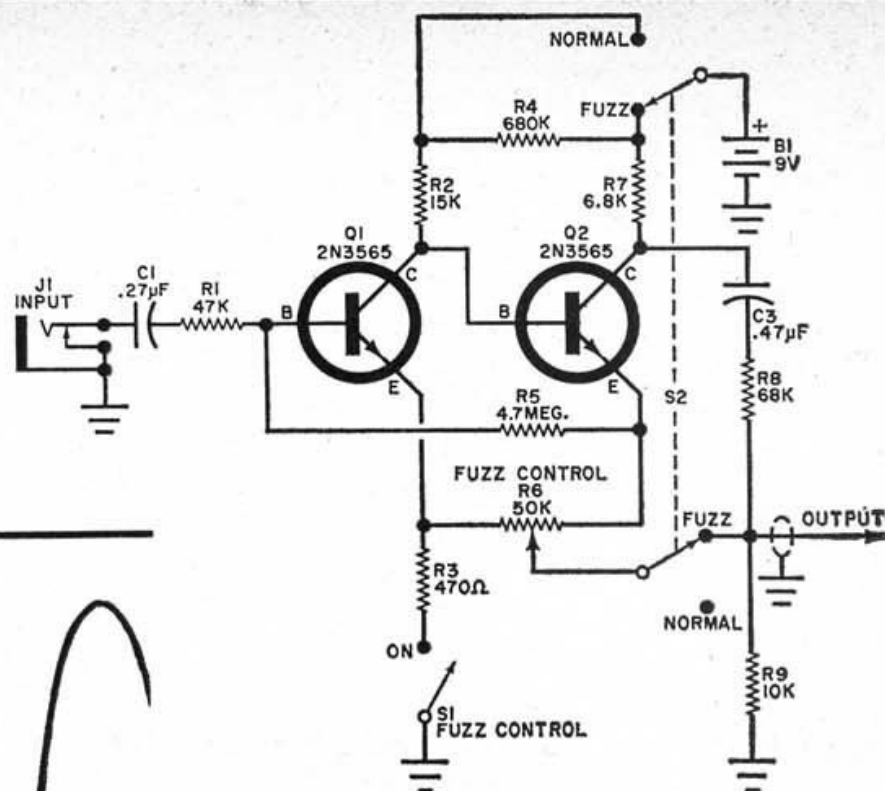


Fig. 1. Switch S1 in the Fuzz-Box is part of potentiometer R6. Turn it off to extend battery life.



Fuzz "On"—Control R6 at minimum—30-mV input



Fuzz "On"—Control R6 at maximum—30-mV input



Fuzz "On"—Control R6 at minimum—60-mV input



Fuzz "On"—Control R6 at maximum—60-mV input

Fig. 2. The amount of distortion introduced by this circuit is largely independent of guitar output.

A considerably neater method is to pass the guitar signal through a small transistorized amplifier whose operating conditions can be modified to go into the overload mode—using only the direct guitar signal voltage. This method has the additional obvious advantage that the relative loudness of the guitar signal, with and without fuzz, can be made without continuously readjusting the guitar amplifier volume.

As seen in Fig. 1, this "fuzz-box" contains a two-stage direct-coupled transistor amplifier with a means to switch the fuzz-tone in or out, as well as to adjust the basic fuzz-tone waveform. Typical waveforms obtained from the output of the "fuzz-box" are shown in Fig. 2.

Construction. The most important factor to consider in constructing this device is that it must be small and robust. The prototype was housed in a small steel box that contains the entire circuit (including battery) and has the "fuzz-normal" switch on the sloping panel and the "fuzz-control" potentiometer (R6) on the top panel. The bottom plate has

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