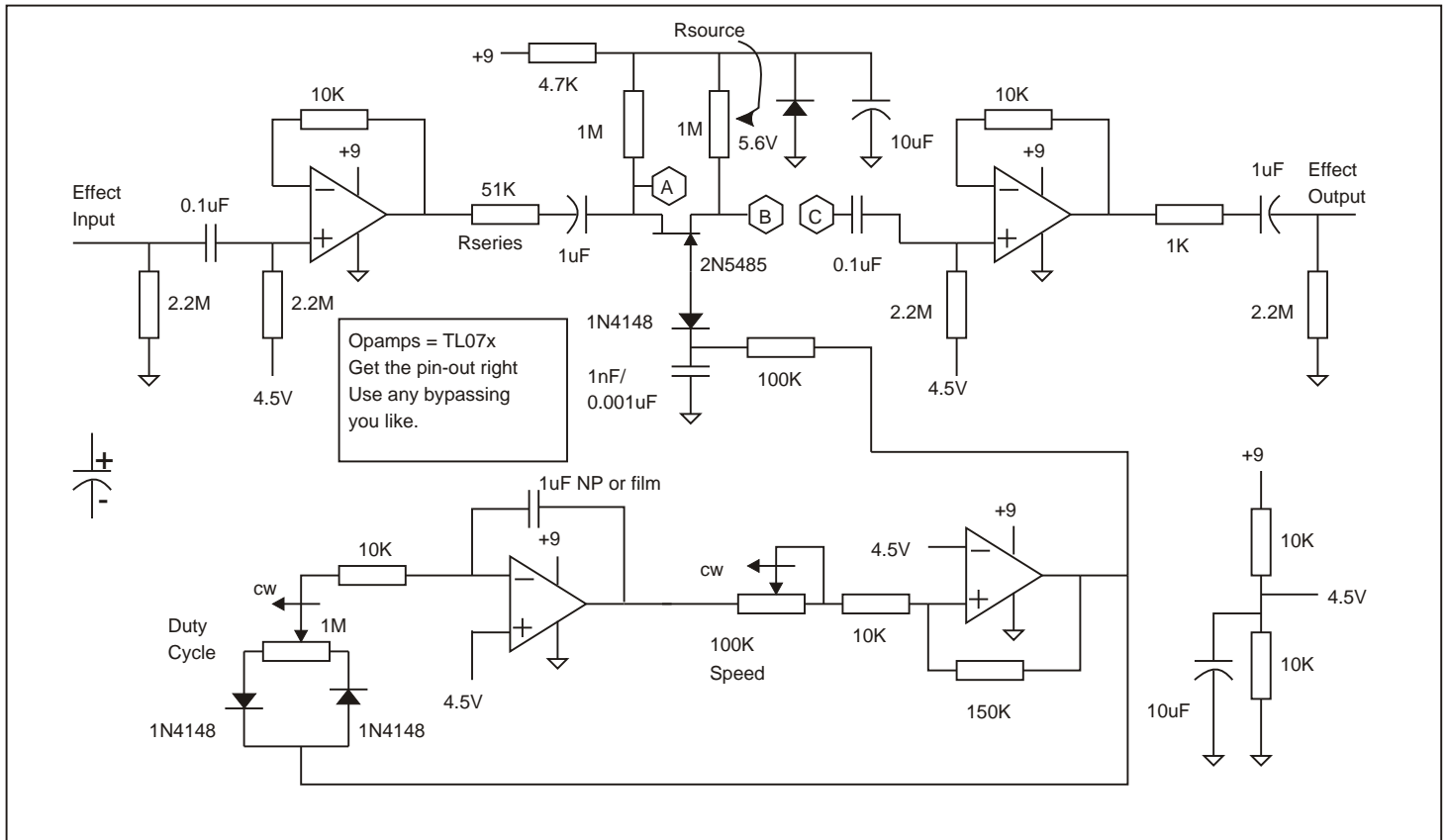


# Variable Stuttering Pedal



Stuttering pedal. 2N5485 switches signal on and off. Top two opamps do buffering in and out. Lower two opamps do a variable duty cycle, variable speed control signal to the switch. I think I got the pot rotation directions right, but I always mess that up until I actually hook them up. The curvy sided caps are electros. The curvy side is negative. Look up the pinout on the JFET you use and get it right. Other JFETs work, anything with  $V_{gsoff}$  less than the zener voltage of 5.6V. 2SK30A works. The BF 24x series does funny stuff to the signal that I haven't figured out. TL07x opamps work. Look up the pinout for the particular opamp you use, and get the pinout right. I didn't find a ticking problem with the reference, but that's always a possibility during layout. Change the 1uF NP or film on the integrator up to slow the max speed down; decrease it to speed the speed range up.

About A B and C: You can hook this up two ways, as a series switch or a shunt switch. As a series switch, connect B to the JFET then acts like a switch which opens to turn the signal off. This can sometimes be noisier than shunt switching. If you connect A to C and change  $R_{source}$  to a dead short, then the JFET mutes the signal when it's turned on by shunting the signal to AC ground.

The shunt switching is more flexible. If you change  $R_{source}$  to a 1M pot, the "off" signal level is variable from 0 up to no noticeable "off".

C.

