CALCULATOR/STOPWATCH

Regarding the article on Build a Calculator/Stopwatch (**R-E,** November, 1975 and February, 1976.) I had a National Semiconductor model 600 calculator which had the right components to attempt the conversion, so I decided to attempt it.

The parts were procured for the added circuit and put together. When wiring the circuit I found that the driver IC was wired entirely different than the one shown in the article. After figuring out the correct combination of which driver went to which digit (new pin numbers are shown in circles on diagram), I wired in the Stopwatch unit and it worked fine. I adjusted it to within .03 seconds in 2 minutes.

Fine, but when I went to use the calculator I found that when entering 8 from the keyboard, a zero was automatically displayed and also stored in the register. This caused some head scratching since all other functions of the calculator performed normally. Through some consultation with local engineers, it was decided to try breaking the foil from pin 1 of the 5736 IC to the keyboard and connect the keyboard side to pin 14 of the driver IC. After accomplishing this, the calculator worked properly (including the 8) and the stopwatch ran fine.

Maybe other readers have run into this same problem and have wondered what to do. Also, since I could not find a source for the MC14571, I used a N4081 which seems to be an exact replacement. (MC14571 was a Motorola developmental type number. The production type number is MC14081. The RCA equivalent is CD4081.—Editor)

I enjoy your magazine very much—keep up the good work.
BILL WAINES