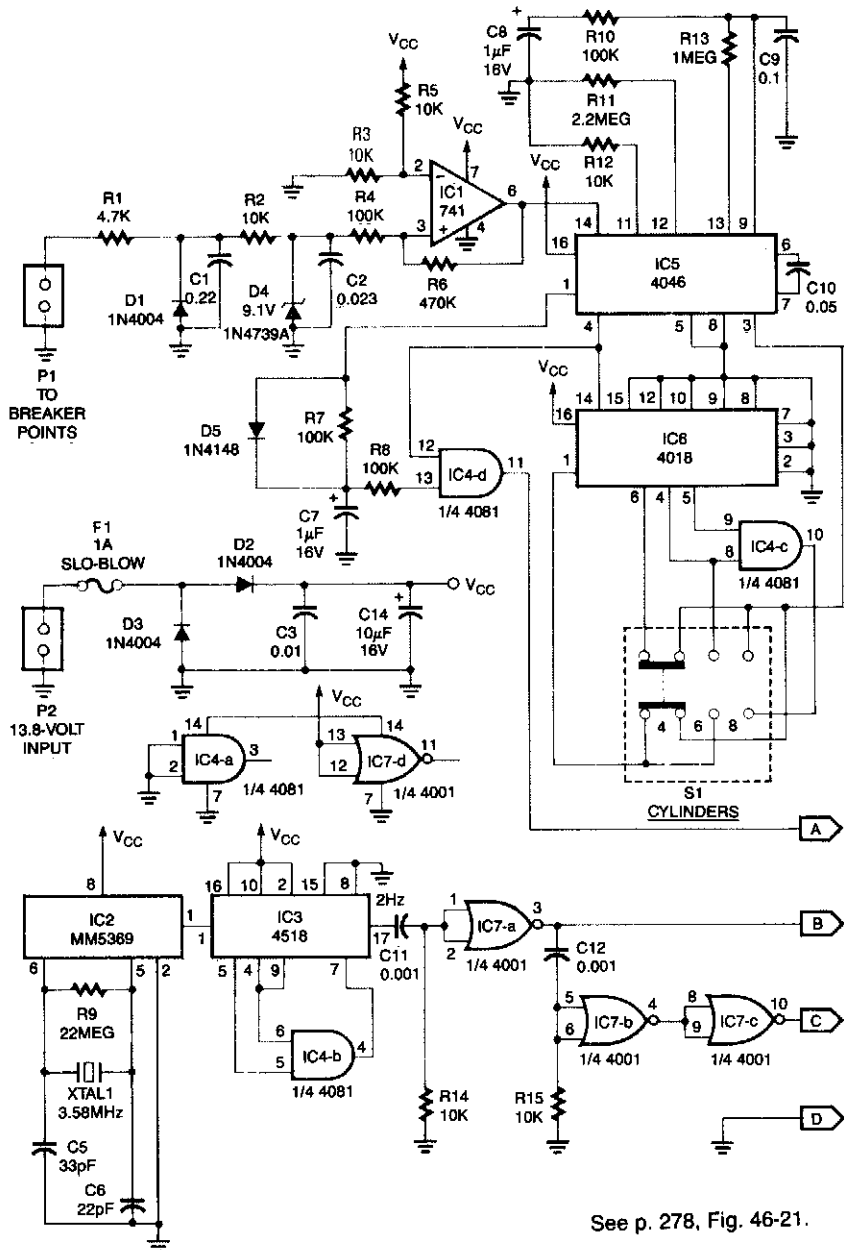


# DIGITAL TACHOMETER CIRCUITRY



See p. 278, Fig. 46-21.

## DIGITAL TACHOMETER CIRCUITRY (Cont.)

This system can be used with 4-, 6-, or 8-cylinder automobiles. The timebase formed by IC5 is an oscillator that drives counter IC6, which divides by 6, 4, or 3 for 4-, 6-, or 8-cylinder engines, respectively. S1 selects this number. IC5 produces a signal that is phaselocked to this multiple of the ignition system frequency, which in turn depends on engine speed.

$$\text{freq} = \text{rpm} \times \frac{\# \text{ cylinders (4, 6, or 8)}}{120} \text{ Hz}$$

IC1 conditions the ignition input at P1 to feed IC5. The output of IC4D, which is the same frequency as the VCO in IC5, is fed to the frequency display.

IC2 generates a 60-Hz signal using a 3.58-MHz reference. IC3 and IC4B divide this by 30 to produce 2 Hz. IC7B/IC7C and C12/R15 produce a delayed 2-Hz signal. These signals are fed to the counter circuit.