

IC timer drives electric fuel pump

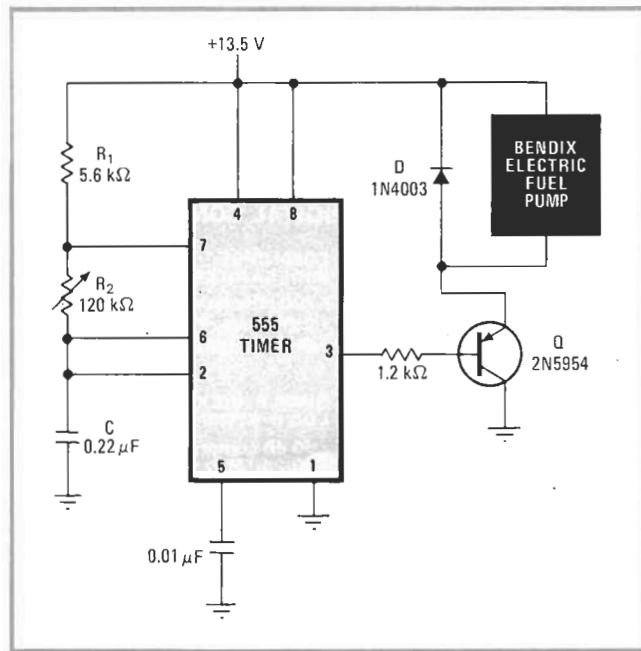
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A 555 integrated-circuit timer and a transistor provide an efficient driving system for a high-speed electric fuel pump. This arrangement allows the pumping rate to be adjusted and can be used with any pump of the solenoid-plunger type.

As the schematic diagram shows, the timer and components R_1 , R_2 , and C form a basic square-wave oscillator circuit. The output at pin 3 drives transistor Q on and off and so operates the solenoid-driven plunger of the pump. Commutating diode D protects the transistor from surges at turnoff.

The components shown are used to drive a Bendix fuel pump at 16 strokes per second, with the speed adjustable by change of R_2 . If a different pump is used that requires current of more than 1 ampere, a different transistor must be chosen. □



Adjustable-speed pump driver. This IC timer arrangement drives the Bendix plunger-type electric fuel pump at a rate of 16 strokes per second. Adjustment of R_2 permits other pumping rates.