71 Ignition Key Alarm

☐ This ignition key alarm replaces the loud, annoying buzzer in your car with a pleasing tone of about 2000 Hertz. One section of an LM3900 quad operational amplifier is connected as a

square wave generator, which is rich in harmonies and produces a pleasant sound. Current amplification to drive the speaker is provided by Q1. The frequency of oscillation is determined by C1 and R2. Total current drawn by the circuit is about 75 milliamperes at 12 volts.

PARTS LIST FOR IGNITION KEY ALARM

C1—0.01-uF ceramic capacitor, 15 VDC
C2—10-uF electrolytic capacitor, 20 VDC
IC1—LM 3900 quad amplifier
R1—2,700,000-ohm, ½-watt resistor
R2—33,000-ohm, ½-watt resistor
R3, R4—10,000,000-ohm, ½-watt resistor
R5—10,000-ohm, ½-watt resistor
R6—100,000-ohm, ½-watt resistor
SPKR—8-ohm PM type speaker