

# RABUGGI

## 'Headlights-on' Alert Buzzer

10-09-23 R.A.B.

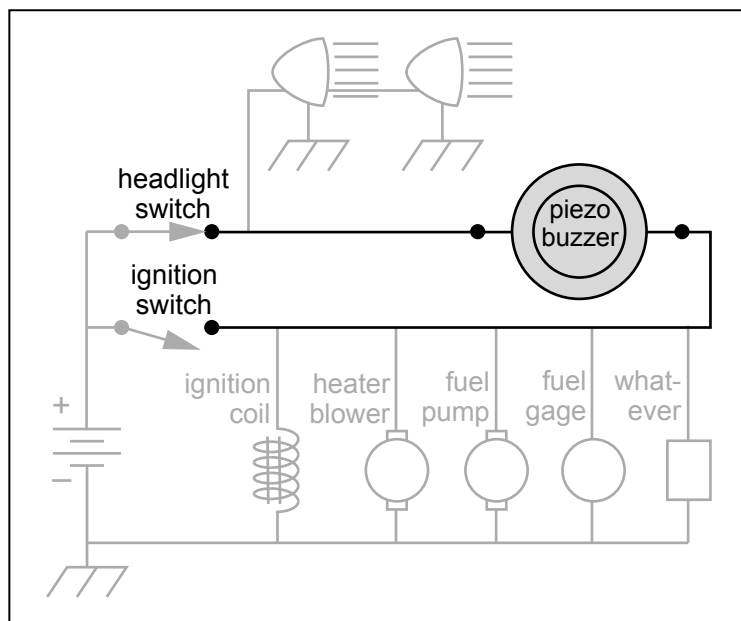
A clever and simple approach is found on this MG MGA website...

Reference: <http://www.mgaguru.com/mgtech/electric/et245.htm>

[“... The piezo buzzer works like a diode, only passing current in one direction. These will then be polarized, so you have to connect the positive wire to battery positive. Nice thing about this is that you do not need a relay for this application.

Connect the piezo buzzer between the ignition switch output and the lighting switch parking light output. Switch on parking lights. If it doesn't buzz, swap the wires on the piezo buzzer.

With ignition and lights on at the same time the buzzer has 12 volts on both sides, will pass no current, and will not sound. With ignition switch on but no lights, the piezo buzzer has 12 volts on one side but will not pass current in that direction, so also does not sound. With lights on and ignition switch off, the piezo buzzer gets power from the lighting circuit and finds ground return through the ignition coil (when ignition contact points are closed) or through the fuel pump or fuel gauge. The piezo buzzer has such high internal resistance (only a 10mA device) that the lower resistance circuits conduct current like ground connection for the buzzer. Current is limited to 10mA by the buzzer, so nothing happens in the ignition or fuel pump or fuel gauge (or heater fan, wipers or radio if any of those were left on). The little piezo buzzer could buzz loudly for six weeks before it would bleed 10 Amp-Hr of power out of the car battery. ...”]



YWBL-WH 12VDC Electronic Piezo Buzzer

Model: 2312

Color: Black

SPL: 85 to 95 dB (~3.65 kHz)

Working Voltage Range: 3V-24V

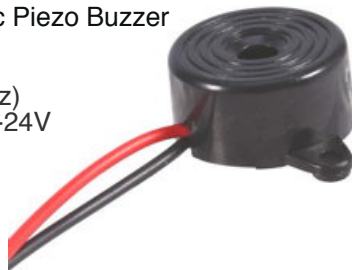
Max Current: 10mA

Cable Length: 100mm

Diameter: 23mm

Height: 12mm

Weight: 0.352 ounces



Buzzer strapped to aluminum bracket mounted inside firewall using front brake reservoir bolts.