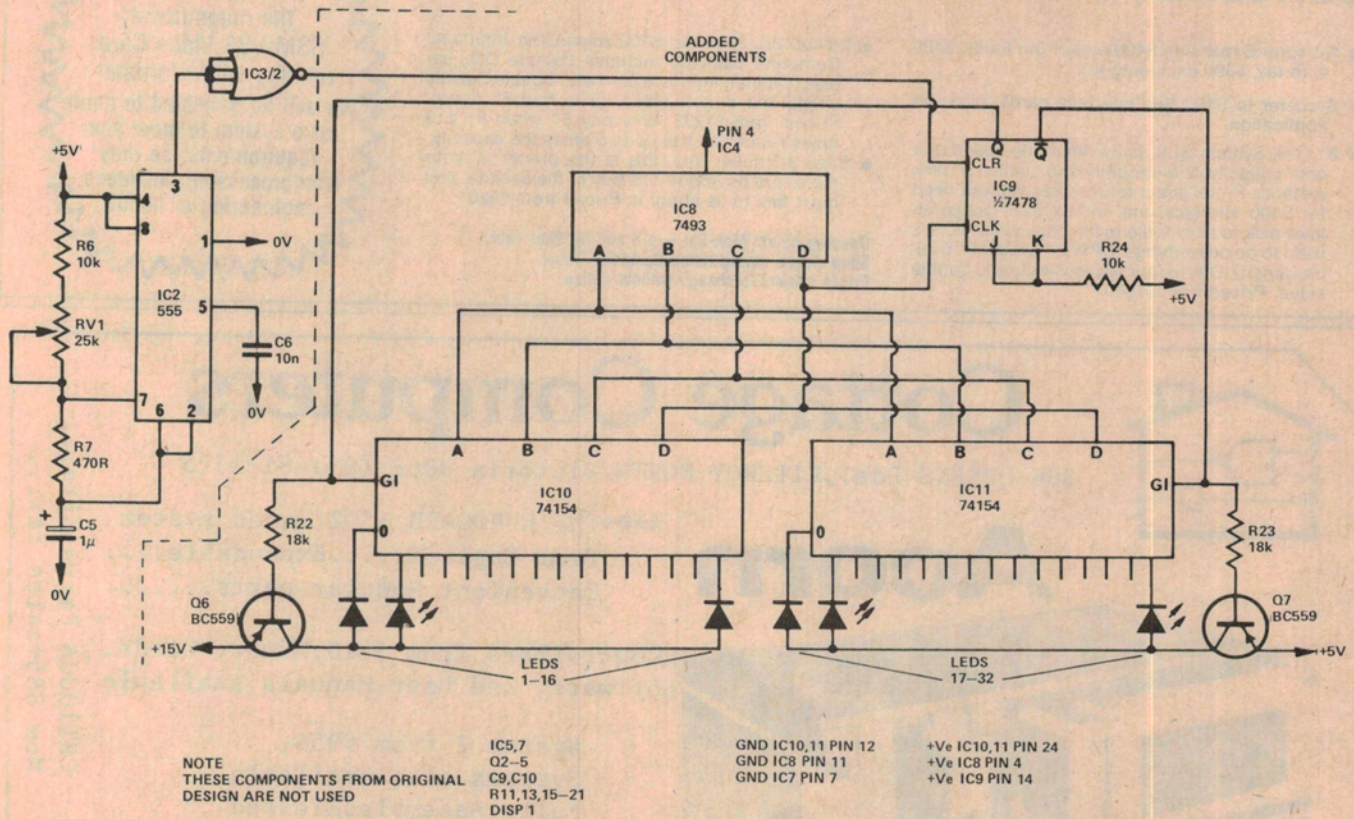


# Ideas for Experimenters

These pages are intended primarily as a source of ideas. As far as reasonably possible all material has been checked for feasibility, component availability etc, but the circuits have not necessarily been built and tested in our laboratory. Because of the nature of the information in this section we cannot enter into any correspondence about any of the circuits, nor can we produce constructional details.



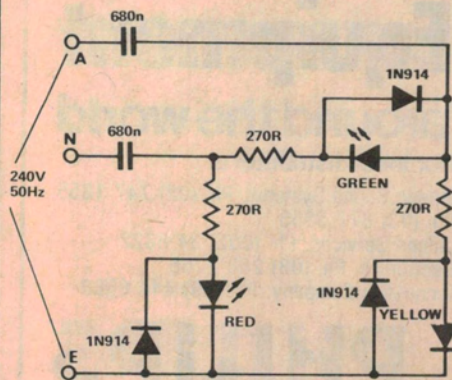
## Analogue readout for ETI-318 digital tachometer

Here is a modification to the ETI-318 digital car tachometer to produce an analogue

readout in a bar or ring display of LEDs. The LEDs each represent 200 rpm, when the unit is calibrated properly, which gives a range of 0-6200 rpm, sufficient for most cars.

The prototype had the LEDs mounted

in a ring surrounding a digital clock and the LEDs were green from 0-4800 rpm and red above 5000 rpm. This gave a clear indication when the engine was being over-revved. Another fine idea from D.L. Shaw of North Ryde, NSW.



NOTE  
BOTH CAPACITORS MUST BE GREATER THAN 350V DC WORKING

## Simple LED mains tester

This simple little circuit from D.L. Shaw of North Ryde NSW, will help you find out if your power wiring is ok. The circuit indicates the following wiring conditions:

Normal ... green and yellow LEDs lit  
Active and Neutral Interchanged ... red and yellow LEDs lit  
Earth open-circuit ... all LEDs lit

## Neutral open-circuit

Active open-circuit

all LEDs lit  
none of LEDs lit  
Note that when Active and Neutral are interchanged the red LED will be lit even when the power switch is off. Both 680n capacitors should be rated at 350 Vdc working or greater — 630 V polystyrene or 1kV polyester capacitors would be preferred.