

IMPROVED BLOWN-FUSE INDICATOR

By RONALD L. IVES

A NEON lamp and series resistor are usually shunted across the fuse protecting a piece of equipment to provide immediate indication when the fuse blows. When the fuse is intact, it shorts out the lamp-resistor combination and the lamp is unlit.

When, as is often the case, the equipment is plugged in but not turned on, a blown fuse is not detected until the power switch is turned on. This usually leads to a missed operation which may disrupt an expensive and complicated test.

To indicate a blown fuse immediately when the equipment is plugged in but not turned on, a small resistive load is connected from the load side of the fuse to the cold side of the line as shown in the diagram.

As before, the neon lamp will not light as long as the fuse is intact. If, however, the fuse is opened the neon lamp will light whether the equipment is turned on or not.

The added resistor, about 47,000 ohms (value not critical), should have a minimum rating of $\frac{1}{2}$ watt. A 1-watt resistor is preferred as it has a much larger radiating surface and hence will run cooler, all other factors being the same. ▲

