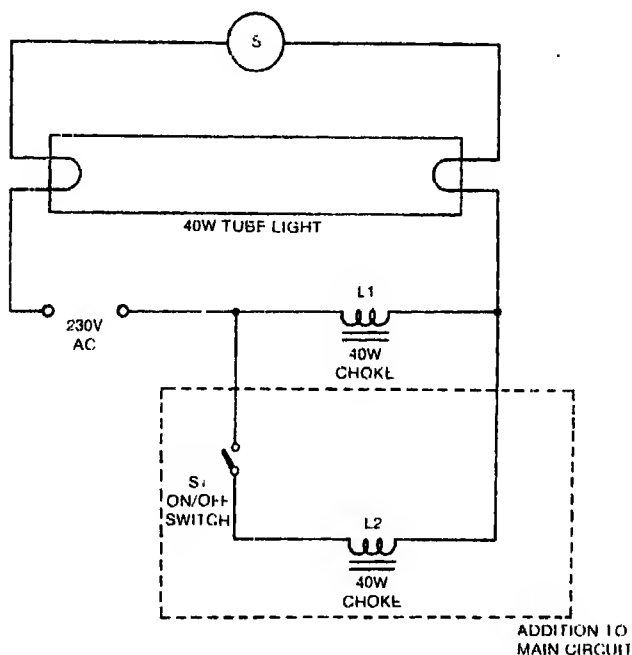


SPECIAL FEATURE

Troublesome Tubelight

Tubelights can be very troublesome at times. They flicker on and on but refuse to glow. One may find to his surprise that while this is the case with his tubelight, his neighbour's tubelight in another apartment of the same block is functioning quite well.

The problem is more prevalent in the evenings and is easily traceable to voltage fluctuations. The tube works well at the normal voltage of 220V but flickers when it drops to, say 170V, while others' tubes work well even at this reduced supply voltage. Replacing the tubelight and choke with new ones does not end the trouble. There is still one way out of the dilemma and to make your tubelight glow even at 170 V. This circuit explains just that.



The actual circuit of the tubelight is shown in figure. Now make a small modification. Add one additional choke of the same rating (i.e., 40W) in parallel to the existing one through an on/off switch (bed light switch type). The modified circuit (after adding an additional choke) is also shown in the circuit as the dotted box.

The following points should be kept in mind:

1. The additional switch connected should be operated only when there is drop in voltage and the tube is flickering.
2. If the voltage fluctuation persists keep the switch 'on' till such time as the voltage is constant at 220 V.
3. The second choke can be mounted either on the base of the tubelight itself or fixed separately.

Some tubes flicker even at 180/195 V. This is due to the

Circuit Ideas

age of the tube and the choke and also due to different choke standards. The above circuit has been tested successfully with a 36-watt slim Philips tube.

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