



Figure 16. Test between conductors on branch circuit where several points are looped together

The actual steps to be taken in testing a circuit in which several points are looped together can perhaps be more clearly understood by reference to Figure 16.

Assume, for instance, that the branch circuit shown in Figure 16 is faulty. Proceed as follows:—

Open switch K1 and test again between S and T. If the fault has cleared it is apparent that it lies somewhere in the section of wiring between K1 and J1, i.e. in conduit N, ceiling rose J1 or the lamp flexible. If, however, the fault has not cleared, open switch K2 and repeat the test. If the fault now disappears it must have been in tube L, ceiling rose J.2, or the corresponding lamp flexible.

If, after opening in turn each of the switches in the circuit, the fault still persists, it is evident that it does not lie in any of the wires between the switches and the lamps they control.

Start, therefore, the eliminating process again, this time not only opening the switch but disconnecting in turn at switches K2, K3, K4, etc., where the switch feed is looped out of each switch to the next one, at the point marked R on the enlarged view of the switch. This will eliminate in turn each switch feed, i.e. the wire which in the diagram is shown as the centre wire X, passing through the tube L. As soon as a disconnection in this way has resulted in a good test it may be concluded that the fault lies in the switch feed loop last removed.