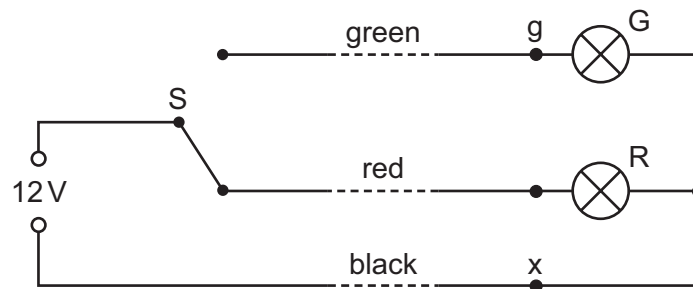
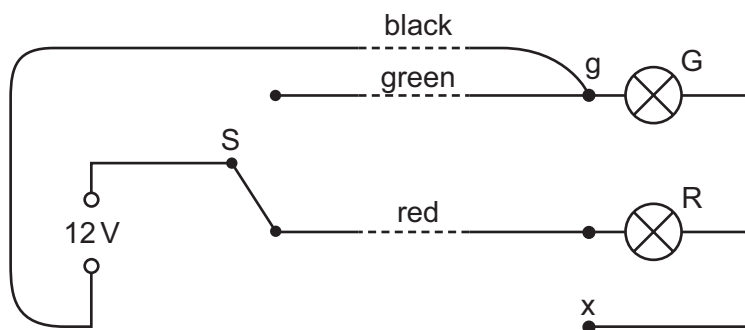


- 37 The diagram shows the circuit for a signal to display a green or a red light. It is controlled by the switch S.



The signal is some way from S to which it is connected by a cable with green, red and black wires. At the signal, the green and red wires are connected to the corresponding lamp and the black wire is connected to a terminal x to provide a common return. The arrangement is shown correctly connected and with the switch set to illuminate the red lamp.

During maintenance, the wires at the signal are disconnected and, when reconnected, the black wire is connected in error to the green lamp (terminal g) instead of terminal x. The red wire is connected correctly to its lamp and connections at S remain as in the diagram.



When the system is tested with the switch connection to the red wire, what does the signal show?

- A the green lamp illuminated normally
- B the red lamp illuminated normally
- C the red and green lamps both illuminated normally
- D the red and green lamps both illuminated dimly

**Space for working**