

Automotive

Section II (continued)

Question 19 (7 marks)

- (a) Why is it recommended that the earth lead be removed first and replaced last when disconnecting or connecting an automotive battery? 1

It is recommended that earth be removed and replaced first so the power does not arc. Batteries are explosive because the chemicals ~~inside~~ produce explosive gases.

- (b) What does CCA refer to in an automotive battery? 1

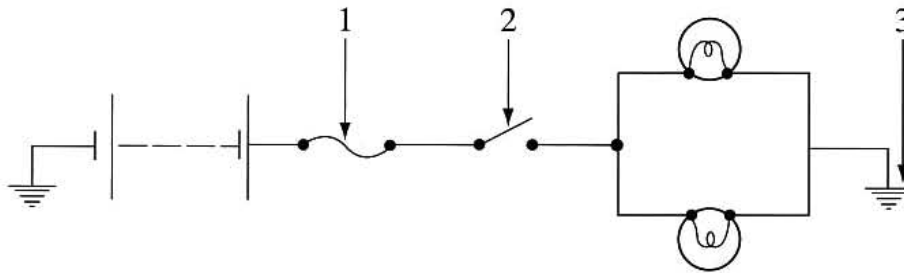
Cold Cranking Amps.

Question 19 continues on page 14

Question 19 (continued)

(c) This diagram shows some components in an electrical circuit.

3

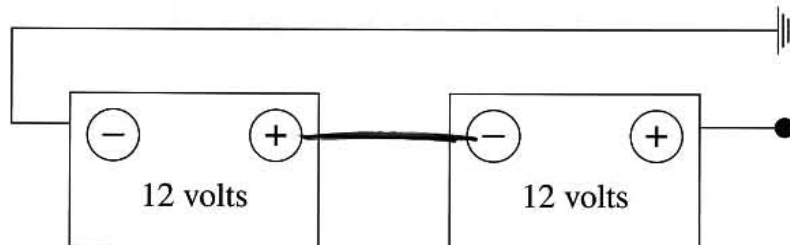


Complete the table naming and describing the function of each numbered component.

Component	Name	Function
1	fuse	protects if current under is greater than
2	switch	turn circuit on or off
3	earth	complete the circuit

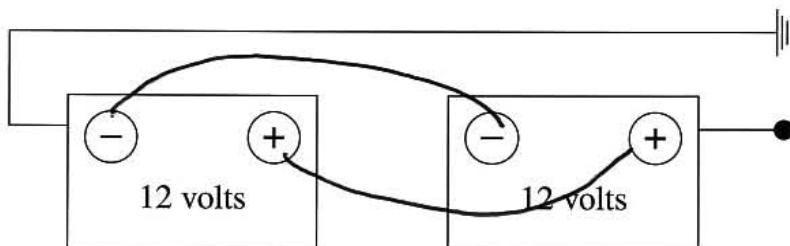
(d) In the diagram below, draw lines to show how to connect the terminals to increase battery output voltage to 24 volts.

1



(e) In the diagram below, draw lines to show how to connect the terminals to maintain battery output voltage at 12 volts.

1



End of Question 19