Automotive Electrical and Engine Performance 9th Edition
Chapter 14 – Starting System Diagnosis and Service
Multiple Choice Questions Quiz A

1. What is the primary purpose of a voltage drop test in the cranking circuit?

a) To test the battery's charge capacity

b) To determine resistance in the circuit under load

c) To identify issues with the starter motor's mechanical parts

d) To measure the voltage of the battery

2. Which of the following is a symptom of high resistance in the cranking circuit?

a) Continuous cranking with high starter amperage draw

b) Rapid cranking of the starter motor

c) Slow engine cranking or solenoid clicking

d) No noticeable effect on cranking

3. When performing control circuit testing, where should the technician first check for voltage if the starter is inoperative?

a) The ignition switch in the run position

b) The battery's negative terminal

c) The "S" terminal of the starter solenoid

d) The positive terminal of the battery

4. What is an appropriate maximum allowable voltage drop in an automotive cranking circuit on the power side during a voltage drop test?

a) 1 volt

b) 0.2 volts

c) 0.5 volts

d) 0.8 volts

5. What tool is typically used to perform a starter amperage draw test?

a) Multimeter with amperage setting

b) Voltmeter

c) Ammeter probe

d) Ohmmeter

6. Which issue is likely if a vehicle's dome light remains bright during an attempted start but the engine does not crank?

a) Open in the control circuit

b) Shorted starter motor

c) Loose battery connections

d) Discharged battery

7. If the starter amperage draw exceeds normal levels, which of the following could be a likely cause?

a) A low-resistance control circuit

b) High internal resistance in battery cables

c) Thick engine oil or binding of the starter armature

d) Dirty battery terminals

8. When diagnosing a no-crank condition, which step should be performed first?

a) Disconnect the fuel injectors

b) Inspect the starter solenoid

c) Verify the customer's complaint and concern

d) Test the ignition circuit

9. Which component in the control circuit prevents starter motor operation when there is a fault in the theft deterrent system?

a) Neutral safety switch

b) Starter enable relay

c) Ignition switch

d) Battery's positive cable

10. After removing the starter, what should the technician inspect before reinstallation?

a) The battery voltage and charge

b) The flywheel for ring gear damage and cleanliness of mounting surfaces

c) The alternator output

d) The dome light's brightness

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Answer Key Quiz A

Correct Answers:

1. b

2. c

3. c

4. b

5. c

6. a

7. c

8. c

9. b

10. b