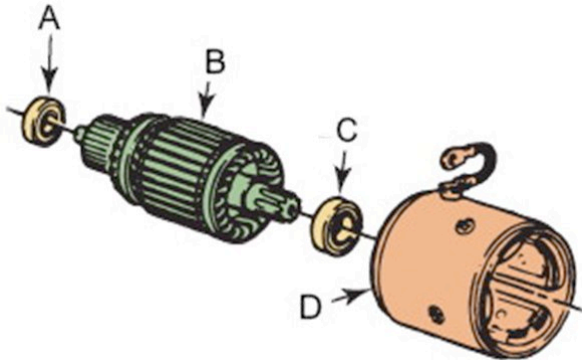


Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Which of these components is the armature?

1) _____



- A) A
- B) B
- C) C
- D) D

2) After installing the starter, the technician should perform which of the following?

2) _____

- A) Attach the negative battery cable
- B) Check the starter for proper operation
- C) Perform a starter voltage drop test before starting the engine
- D) Both A and B

3) A V-6 is being tested for starter amperage draw. The initial surge current was about 210 amperes and about 160 amperes during cranking. Technician A says that the starter is defective and should be replaced because the current flow exceeds 200 amperes. Technician B says that this is normal current draw for a starter motor on a V-6 engine. Who is right?

3) _____

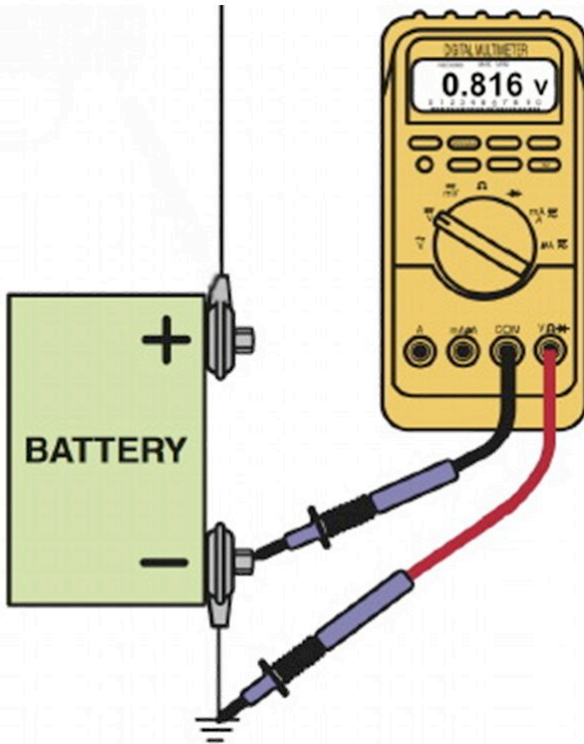
- A) Technician A only
- B) Technician B only
- C) Both technicians
- D) Neither technician

4) Which of these can cause a starter grinding noise?

4) _____

- A) An over-tightened flywheel
- B) Neutral safety switch
- C) Defective starter drive
- D) Seized engine

5) This voltage reading was obtained while cranking the engine. The indicated reading (0.816 V) is _____ 5) _____



- A) too high
- B) too low
- C) an inconclusive measurement
- D) incorrectly done

6) A voltage drop test on the starter control circuit is used to test which of these starter component(s)? 6) _____

- A) Wiring and connections
- B) Field coils
- C) Commutator
- D) Starter solenoid and field coil

7) What is the first step to follow when removing a starter? 7) _____

- A) Hoist the vehicle.
- B) Disconnect the battery positive cable.
- C) Disconnect the battery negative cable.
- D) Remove the battery cable from the starter.

8) If the starter "whines" when engaged, which of these is a possible cause? 8) _____

- A) Worn or defective starter drive
- B) Defective solenoid
- C) Open pull-in winding
- D) Worn leather armature brake

9) What component or circuit can keep the engine from cranking?

9) _____

- A) Antitheft
- B) Solenoid
- C) Ignition switch
- D) All of the above

10) A vehicle does not crank fast enough to start. Technician A says that the battery could be discharged or defective. Technician B says that the negative cable could be loose at the battery.

10) _____

Who is right?

- A) Technician A only
- B) Technician B only
- C) Both technicians
- D) Neither technician