Automotive Technology 6th Edition Chapter 54 - Charging System Chapter 54
Name
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.
1) What are the component parts of a typical alternator?
2) What is the purpose of an OAP or OAD?
3) How is AC voltage inside the alternator changed to DC voltage at the output terminal?
4) How can a small electronic voltage regulator control the output of a typical 100-ampere alternator?
5) How is the computer is used to control an alternator?

Answer Key

Testname: SHORT 54

1) The components of a typical alternator include the drive-end housing, the slip-ring housing, rotor, rectifier diodes, and a stator.

Page Ref: 622-626

- 2) The purpose of an overrunning alternator pulley (OAP) or an overrunning alternator dampener (OAD) is to reduce noise and vibration in the accessory drive belt system.

 Page Ref: 622
- 3) The rectifier diodes change AC from the stator windings to DC at the output terminal of the alternator. Page Ref: 626
- 4) The regulator controls the current flow through the field (rotor). Zero field current equals no generator output and maximum field current (about 5 amperes) results in maximum generator output.

 Page Ref: 628
- 5) The computer controls the output of the generator by controlling the current flow through the field (rotor). Page Ref: 630