Cranking System
Chapter 52

ACROSS

3. Inside the field coils is an ________ that is supported with either bushings or ball bearings at both ends, which permit it to rotate.
5. A __________ uses permanent magnets that maintain constant field strength, the same as a shunt-type motor, so they have similar operating characteristics.
8. One end of the field housing is called the ______-_______.
9. Another name for the pole shoes is __________.
11. Another name for the commutator-end housing is the ______-_______.
12. Current that works against battery voltage is called ________.
14. A small current switch operates a ________ or relay that controls the high current to the starter.
15. One end of the field housing is called the ______-_______.

DOWN

1. The __________ uses a small pinion gear that contacts the engine flywheel gear teeth and transmits starter motor power to rotate the engine.
2. These magnets, when energized, create strong magnetic fields inside the starter housing and, therefore, are called _________.
4. ________ hold the three components of the starter together.
6. The ends of the copper armature windings are soldered to _____________.
7. A starter consists of the main structural support of a starter called the main _________.
10. The soft-iron cores are called _________.
13. ___ is a system that allows the driver to start the engine of the vehicle from inside the house or a building at a distance of about 200 ft.