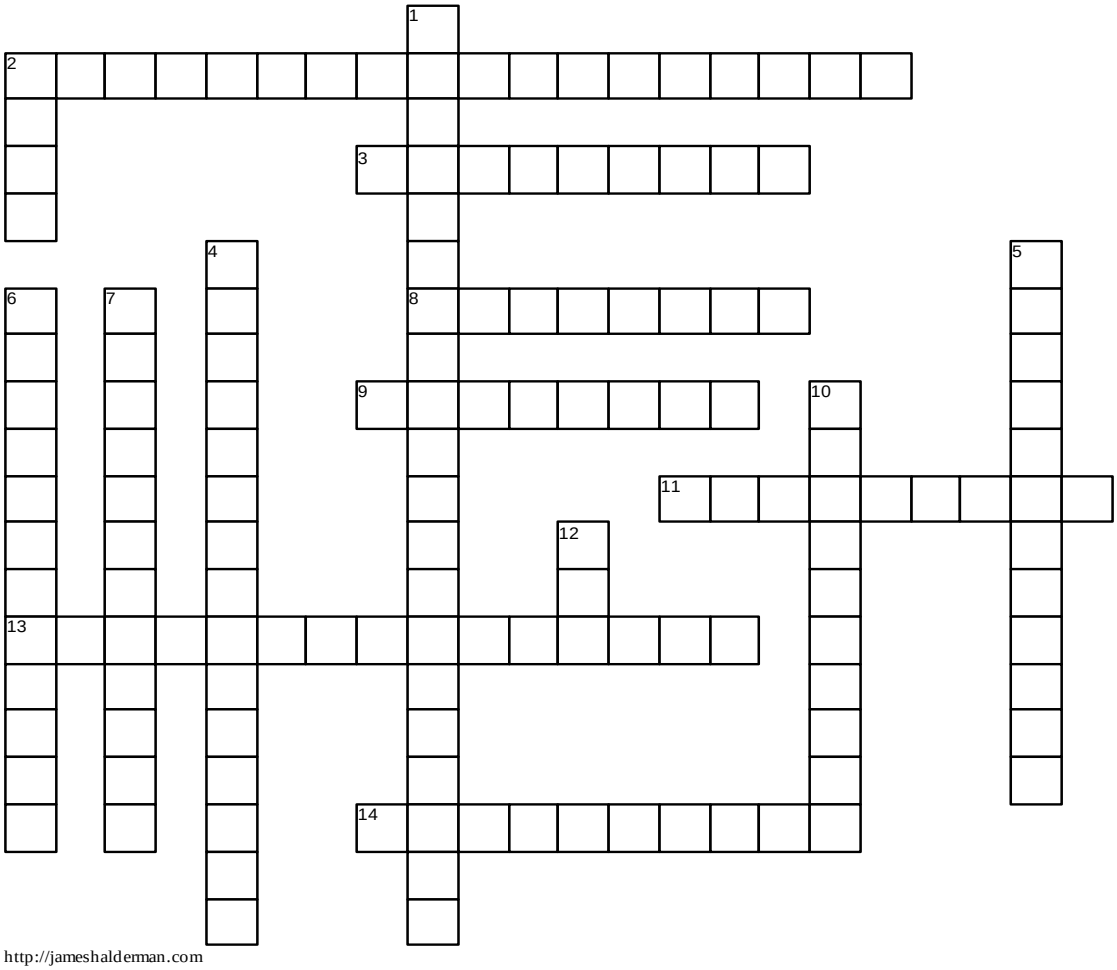
Cranking System

Chapter 17



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ACROSS

2 The ends of the copper armature windings are soldered to _____ _____.

3 A __ _____ uses permanent magnets that maintain constant field strength, the same as a shunt-type motor, so they have similar operating characteristics.

8 Inside the field coils is an _____ that is supported with either bushings or ball bearings at both ends, which permit it to rotate.

9 A small current switch operates a _____ or relay that controls the high current to the starter.

11 The soft-iron cores are called ____ _____.

13 Another name for the commutator-end housing is the _____-___ _____.

14 Another name for the pole shoes is _____ _____.

DOWN

1 One end of the field housing is called the _____-___ _____.

2 Current that works against battery voltage is called ____.

4 One end of the field housing is called the _____-___ _____.

5 The _____ _____ uses a small pinion gear that contacts the engine flywheel gear teeth and transmits starter motor power to rotate the engine.

6 _____ _____ hold the three components of the starter together.

7 A starter consists of the main structural support of a starter called the main _____ _____.

10 These magnets, when energized, create strong magnetic fields inside the starter housing and, therefore, are called _____ _____.

12 ___ 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.