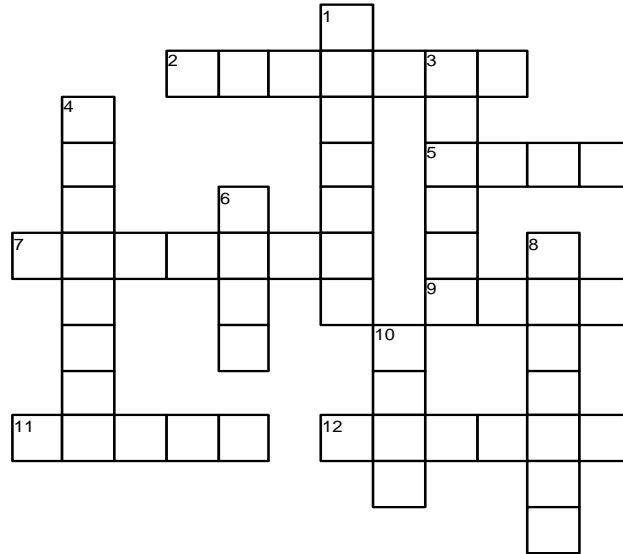


## Automotive Electrical and Engine Performance 9th Edition

### Chapter 14 - Starting System Diagnosis and Service



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#### ACROSS

- 2 \_\_\_\_\_ drop: A reduction in voltage across a component or wire in a circuit, indicating resistance that may impair the performance of the starter system.
- 5 An \_\_\_\_ or high resistance anywhere in the control circuit can cause the starter motor to not engage.
- 7 Some \_\_\_\_\_ manuals specify normal starter amperage for starter motors being tested on the vehicle; however, most \_\_\_\_\_ manuals only give the specifications for bench testing a starter without a load applied.
- 9 A starter amperage \_\_\_\_\_ test determines if the starter motor is the cause of a no or slow cranking concern.
- 11 \_\_\_\_\_ testing: A method of testing a starter motor or other components outside the vehicle to ensure they function properly before installation.
- 12 A voltage drop test is used to find out if the battery \_\_\_\_\_ and connections are okay.

#### DOWN

- 1 A \_\_\_\_\_ should be tested to see if the reason for slow or no cranking is due to a fault with the starter motor or another problem.
- 3 Any high resistance in either the power side or \_\_\_\_\_ side of the starter circuit causes the starter to rotate slowly or not at all.
- 4 Before performing a starter \_\_\_\_\_ test, be certain that the battery is sufficiently charged (75% or more) and capable of supplying adequate starting current.
- 6 A \_\_\_\_\_-voltage drop (high resistance) in the cranking circuit wiring can cause slow engine cranking with less than normal starter amperage drain as a result.
- 8 Perform a \_\_\_\_\_ load or conductance test on the battery to be sure that the battery is capable of supplying the necessary current for the starter.
- 10 Be sure to install all factory \_\_\_\_\_ shields to help ensure problem-free starter operation under all weather and driving conditions.