

# Automotive Electrical and Engine Performance - 9th edition

## Ch11: CAN and Network Communications

### Lesson Plan



#### **CHAPTER SUMMARY:**

1. Network Fundamentals, Module Communications Configuration, and GM Communication Protocols
2. Ford Network Communication Protocols, Chrysler Communication Protocols, and Control Area Network
3. Honda/Toyota Communications, European BUS Communications, and Network Communications Diagnosis
4. OBD-II Data Link Connector



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#### **OBJECTIVES:**

1. Discuss how networks connect to the data link connector and to other modules.
2. Describe the types of networks and serial communications used on vehicles.
3. Describe General Motors communications protocols.
4. Describe Ford communications protocols.
5. Describe Chrysler communications protocols.
6. Describe the features of a controller area network.
7. Describe the network communications of common Asian vehicle brands.
8. Describe European BUS communications.
9. Explain how to diagnose module communication faults.
10. Discuss the OBD-II data link connector.



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#### **RESOURCES:** (All resources may be found at [jameshalderman.com](http://jameshalderman.com))

1. Task Sheet: Module Communication
2. Crossword Puzzle and Word Search
3. Videos: (A6) Electrical/Electronic Systems Videos
4. Animations: (A6) Electrical/Electronic Systems Animations



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#### **ACTIVITIES:**

1. Task Sheet: Module Communication
2. Chapter PowerPoint
3. Crossword Puzzle and Word Search



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#### **ASSIGNMENTS:**

1. Chapter crossword and word search puzzles from the website.
2. Complete end of chapter quiz from the textbook.
3. Complete multiple choice and short answer quizzes downloaded from the website.



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#### **CLASS DISCUSSION:**

1. Review and group discussion chapter Frequently Asked Questions and Tech Tips sections.
2. Ten (10) question end of Chapter Quiz.
3. Five (5) end of chapter Review Question for class discussion.



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#### **NOTES AND EVALUATION:**