Electrical/Electronics Systems

Course Information Electrical/Electronics Systems studies the principles of electricity

through operations and testing procedures and provides an

introduction to electronics. Diagnostics and repair of starting and charging electrical systems are covered, in addition to practical applications of the principles of electricity. Electronic management

programs are referenced and studied.

Developers: Diesel Technology State Curriculum Committee

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Credit Hours: 5

Course Competencies:

Students will be able to:

- 1. Apply Ohm's Law
- 2. Identify general electrical systems components
- 3. Analyze basic electrical systems
- 4. Interpret electrical schematics and circuits
- 5. Identify battery construction and operating principles
- 6. Identify starting systems components
- 7. Analyze starting systems components
- 8. Repair starting systems
- 9. Identify charging systems components
- 10. Analyze charging systems
- 11. Repair charging systems
- 12. Inspect lighting systems
- 13. Repair lighting systems
- 14. Identify electronic components
- 15. Identify fault warnings
- 16. Demonstrate proper use of electrical/electronic service tools
- 17. Identify data link systems