A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 1
Lab Hours/Week: 4
OJT Hours/Week: *

Prerequisites:
DIES 1632 - DC Electricity (Number of Years Valid: 5) AND DIES 1635 - Hydraulic Fundamentals (Number of Years Valid: 5) AND DIES 1636 - Power Trains I (Number of Years Valid: 5)

Corequisites: None

MnTC Goals: None

This course includes the study of electronic components and controls used in the diesel equipment industry. The student gains understanding of the function, operation, and diagnostics of various electrical and electronic components.

B. COURSE EFFECTIVE DATES: 08/25/2014 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Understand electrical theory.
2. Demonstrate ability to assemble wiring harness.
3. Display ability to safely use special tooling.
4. Demonstrate ability to keep work area safe.
5. Display knowledge of electrical components.
6. Demonstrate ability to test electrical components.
7. Study industry terminology.
8. Perform maintenance on electrical systems.

D. LEARNING OUTCOMES (General)

1. The learner will demonstrate ability to identify key electrical components.
2. The learner will apply electrical theory to understand the operation of electrical components and systems.
3. The learner will demonstrate ability to perform electrical testing and servicing.
4. The learner will demonstrate ability to repair and test electrical components.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted