A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 2
Lab Hours/Week: 1
OJT Hours/Week: *

Prerequisites:
This course requires the following prerequisite
MGEM 1624 - Intro to Powersports Electrical Systems (Number of Years Valid: 5)

Corequisites: None

MnTC Goals: None

This course is an introduction to the compact diesel engine. The learner will study various components of the diesel engine. The learner will test, adjust, and diagnose problems related to the service and maintenance of the compact diesel engine.

B. COURSE EFFECTIVE DATES: 01/12/2009 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Describe diesel engine theory.
2. Identify diesel engine components.
3. Identify fuel and oil requirements for diesel engines.
4. Describe current diesel engine emissions.
5. Identify diesel fuel delivery system.
6. Describe fuel system diagnostics.
7. Perform fuel system tests.
8. Describe diesel compression diagnostics.

D. LEARNING OUTCOMES (General)

1. The learner will identify compact diesel components and the theory of operation.
2. The learner will demonstrate maintenance procedures of compact diesels.
3. The learner will describe service and diagnostic test procedures for compact diesel engines.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted