Anoka Technical College

AUTO 2166: Starting and Charging Systems

A. COURSE DESCRIPTION

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

   Prerequisites:
   This course requires all three of these prerequisites
   AUTO 1000 - Orientation and Safety
   AUTO 1010 - General Automotive Service
   AUTO 1167 - Vehicle Electronics

   Corequisites: AUTO 2005 and AUTO 2005

   MnTC Goals: None

   The description, operation, diagnosis, and service procedures related to automotive batteries will be
   addressed. The description, operation, diagnosis, and various service procedures related to automotive
   cranking motors and charging systems will be covered. Also included are descriptions of the various
   circuits used to control starter motor operation and charging system voltage regulation. Understanding and
   interpreting electrical system service information and schematics will also be addressed. (Prerequisites:
   AUTO 1000, AUTO 1010, and AUTO 1167)(1 credit lecture/1 credit lab)

B. COURSE EFFECTIVE DATES: 05/27/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

   1. Automotive batteries
   2. Automotive starting systems
   3. Automotive charging systems

D. LEARNING OUTCOMES (General)

   1. Explain the purpose, operation, and rating systems of automotive batteries.
   2. Inspect and test battery for internal and external defects.
   3. Describe the purpose, operation, and testing processes of the automotive starting system.
   4. Evaluate and diagnose starting system components and related circuitry issues.
   5. Explain the purpose, operation, and testing processes of the automotive charging system.
   6. Inspect and diagnose charging system components and related circuitry problems.

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

   None

F. LEARNER OUTCOMES ASSESSMENT

   As noted on course syllabus

G. SPECIAL INFORMATION

   None noted