Alexandria Technical and Community College

DIES 2390: Caterpillar 3126B/C7/C15 Electronic Diesel Eng Fund & Elec Troubleshooting

A. COURSE DESCRIPTION

   Credits: 3
   Lecture Hours/Week: 2
   Lab Hours/Week: 2
   OJT Hours/Week: *.*
   Prerequisites: None
   Corequisites: None
   MnTC Goals: None

   The learner will study Caterpillar 3126B/C7/C15 specific electronic diesel engine designs. Specific study will include HEUI and EUI fuel systems, component disassembly and proper reassembly procedures, and correct adjustments to fuel system and electronic components. The learner will use current industry training equipment such as Caterpillar Service Information System (SIS) and Caterpillar Electronic Technician (ET) to troubleshoot and repair Caterpillar electronic diesel engines.

B. COURSE EFFECTIVE DATES: 01/11/2010 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

   1. Demonstrate proper safety and personal safety practices.
   2. Identify Caterpillar repair practices using Caterpillar Service Information System.
   3. Demonstrate applications of Caterpillar Electronic Technician.
   4. Identify major Caterpillar EUI fuel system and engine components.
   5. Identify major Caterpillar HEUI fuel system and engine components.
   6. Demonstrate correct Caterpillar engine disassembly and reassembly procedures.
   7. Demonstrate correct industry troubleshooting procedures.

D. LEARNING OUTCOMES (General)

   1. The learner will demonstrate an understanding of obtaining current industry information and proper repair procedures using Caterpillar Service Information System (SIS).
   2. The learner will demonstrate an understanding of the function/operation/ and correct repair and adjustment procedures on current Caterpillar 3126B/C7 and C15 electronic diesel engines.
   3. The learner will demonstrate an understanding of Caterpillar Electronic Technician (ET) to properly communicate and troubleshoot Caterpillar electronic diesel engines.
   4. The learner will demonstrate an understanding of basic diesel engine electronic fundamentals and apply the previous objectives to correctly troubleshoot and repair a Caterpillar electronic diesel engine.

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

   None

F. LEARNER OUTCOMES ASSESSMENT

   As noted on course syllabus
G. SPECIAL INFORMATION

None noted