

South Central College

AGME 2852 Introduction to Diesel

Common Course Outline

Course Information

Description This course covers an introduction to the diesel system, components, operation and

servicing nozzles. The students will study construction and operation of nozzles, as well as test, clean, repair, adjust and diagnose multi-orifice and pintle nozzles.

Students will also test nozzles and injection timing on school engines

Total Credits 1

Total Hours 32

Types of Instruction

Instruction Type Credits/Hours

Lab

Pre/Corequisites

None

Course Outcomes

1. Identify safety precautions

Learning Objectives

Do not allow high-pressure fuel to come in contact with hands or arms, as it may puncture the skin and cause infection or blood poisoning.

Seek medical attention immediately if skin is punctured by high-pressure fluid.

2. Identify diesel system components and operation

Learning Objectives
Identify nozzle operation
Identify/service combustion chambers
Identify nozzle types
Identify nozzle sleeves

3. Disassemble/clean/reassemble and adjust nozzles

Learning Objectives
Identify nozzle repair tools
Identify nozzle tester operation
Identify nozzle service procedure
Disassemble/clean pintle nozzles

Reassemble/adjust pintle nozzles Disassemble/clean multi-orifice nozzles Reassemble/adjust multi-orifice nozzles

4. Time injection system

Learning Objectives
Identify nozzle removal
Diagnose nozzle problems
Identify injection pump
Remove nozzles and injection pump
Clean /test nozzles and static time engine
Start test engine

SCC Accessibility Statement

Disability Services provides accommodations and other supports to students with permanent and temporary disabilities that affect their SCC experience. Disabilities may include mental health (anxiety, depression, PTSD), ADHD, learning disabilities, chronic health conditions (migraine, fibromyalgia), sensory disabilities, and temporary disabilities (broken arm, surgery). Common accommodations are extended test time, private room for testing, audiobooks, and sign language interpreter.

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