



South Central College

AGME 1801 Outdoor Power Equipment

Common Course Outline

Course Information

Description This course covers operational theory and service competencies necessary to service small for-stroke cycle engines, two-stroke cycle engines, lawn/garden equipment, and chain saws. Fuel systems, electrical systems, tune up, drive train adjustment and attachments are emphasized.

Total Credits 3

Total Hours 64

Types of Instruction

Instruction Type

Credits/Hours

On-Campus Lab

Classroom Presentation

Pre/Corequisites

Enrolled in Ag Service Technician Program

Course Outcomes

1. Identify four stroke cycle operating principles.

Learning Objectives

Explain the position of the internal parts during each stroke for each type of engine.
Disassemble and reassembly of small four stroke engine.

2. Use service and parts manuals.

Learning Objectives

Use parts manual for obtaining new parts.
Complete shop repair order.
Use service manual for specification.

3. Identify two stroke cycle engine principles.

Learning Objectives

Explain the position of the internal parts during each stroke for each type of engine.
Disassemble and reassembly of two stroke engine.

4. Describe small engine parts evaluation.

Learning Objectives

Measure parts for replacement or reuse.
Evaluate the crankshaft.
Evaluate the valves.
Evaluate the piston and cylinder.
Analyze the camshaft assembly.

5. Diagnose electrical and ignition problems.**Learning Objectives**

Evaluate system operation.
Identify types of ignition systems.
Evaluate, adjust, repair, or replace ignition parts.
Identify tools and parts used in repairing the ignition.
Evaluate the generator control circuit.

6. Diagnose fuel system problem.**Learning Objectives**

Identify the types of fuel systems.
Identify parts of the fuel system.
Remove and install a carburetor.
Service and adjust a carburetor.
Identify tools and material needed to service a carburetor.

7. Describe garden tractor and mower drive train types.**Learning Objectives**

Check belt drives.
Examine gear drive units.
Examine hydraulic drive units.

8. Utilize shop safety.**Learning Objectives**

Wear safety glasses.
Perform CPSC tests and safety adjustment for mower units.
Perform mower and outdoor power unit safety tests per manufacture.
Maintain safety shields and guides.
Identify safety practices followed in operating equipment.
Store oil, gasoline, and other solvents.

9. Perform small engine tune up.**Learning Objectives**

Servicing air cleanness and cooling systems.
Checking and replacing lubricant.
Check for seal leakage on fly wheel and PTO sides.
Inspection, cleaning, and replacement or adjustment of breaker points and condenser, time engines, set air gap, and check spark.
Adjust control linkage and/or cable.

SCC Accessibility Statement

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