

AUT 113 : BASIC ENGINE PERFORMANCE II

Transcript title

Basic Engine Performance II

Credits

1

Grading mode

Standard letter grades

Total contact hours

20

Other hours

20

Prerequisites

AUT 101, AUT 106, AUT 107, AUT 110 and AUT 115.

Course Description

Designed to continue the study and apply the theory presented in AUT 112 Basic Engine Performance I. Continues with the operation, diagnoses, and repair of the carburetion system as it was used in vehicles of the past.

Course learning outcomes

1. Describe the theory and operation of automotive carburetor fuel systems.
2. Diagnose and repair problems related to carburetor fuel systems.
3. Perform the disassembly, cleaning, and assembly of a carburetor.
4. Perform adjustments to carburetor fuel systems, including idle mixture, idle speed, metering jets, and choke settings.
5. Describe and practice safety procedures while working on gasoline engines.

Content outline

1. Fuel system gases and requirements of engine
2. Fuel system history (pogue carburetor)
3. Fuel system - tank, sender and fuel pump
4. Carburetor systems overview
5. Fuel gauge testing, engine vacuum test, fuel pump test
6. Carburetor fuel systems operation (float, main, idle, part-throttle), small gas engine carburetor
7. Carburetor systems
8. Carburetor fuel systems operation (accelerator, power, choke)
9. Carburetor rebuilding, idle adjustments
10. Carburetor systems, secondary circuit, manifolds, scope patterns, evolution of fuel system
11. Carburetor adjustments

Required materials

Requires special gear, see syllabus for details.