



Reavis High School

Curriculum Snapshot/Cover Page for Power I



Unit 1: Safety

10
Days

This unit focuses on industry safety standards. It covers OSHA and industry practices for eye safety, hand safety and proper ventilation. Proper vocabulary and service procedures will be discussed.



Unit 2: Tool identification & Usage

5
Days

This unit focuses on tools and proper usage. Tool vocabulary and mechanical definitions will also be covered. Proper vocabulary and service procedures will be discussed.



Unit 3: Technical Reading and Writing

7
Days

This unit will focus on proper documentation of service work and inventory. Reference materials such as service and parts manuals will be covered. Proper vocabulary and service procedures will be discussed.



Unit 4: Engine Theory

10
Days

This unit will focus on the combustion theory of the 2 & 4 cycle engine, the combustion process of the 2 & 4 cycle engine and performance calculations will be covered. Proper vocabulary and service procedures will be discussed.



Unit 5: Engine components

10
Days

This unit focuses on the parts of the engine, covering parts from the piston to the flywheel. This unit also focuses on sight recognition of parts and defining parts by the job they do in the engine.



Unit 6: Engine Disassembly

20
Days

This unit will focus on the complete disassembly of a 4 cycle engine. Proper part storage and organization is stressed, as well as tool usage and cleaning techniques.



Unit 7: Engine Assembly

20
Days

This unit focuses on engine reassembly. The use of proper torque specifications is stressed. Engine break in will also be covered. Proper documentation of service work will be discussed.



Unit 8: Fuel & Emissions

10
Days

This unit focuses on fuels and emission controls used on 4-cycle engines. Alternative fuels and EPA emission restrictions will also be addressed. Proper documentation of service work and compliance with emission laws will also be discussed.



Unit 9: Carburetion systems

15
Days

This unit focuses on the theory of carburetion. The parts of the carburetor and fuel delivery systems will also be discussed. Proper service techniques will be stressed.



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Unit 10: Ignition

15
Days

This unit focuses on the ignition system. The parts of the system and the theory behind their function. Proper vocabulary and service procedures will be discussed.



Unit 11: Lubrication

15
Days

This unit focuses on the lubrication system of the engine. The function of oil and the systems in the engine that carry and deliver oil to the engine. Proper vocabulary and service procedures will be discussed.



Unit 12: Cooling

15
Days

This unit focuses on the cooling system of the engine. The function of cooling and the systems in the engine that carry and deliver cooling to the engine. Proper vocabulary and service procedures will be discussed.



Unit 13: Career

10 # of
Days

This unit will focus on career opportunities in the field of small engine mechanics. The education and certification process to obtain a career as a small engine mechanic. The different types of outdoor power equipment mechanics careers will be discussed.