**Chapter 4 & 5 Test Compression Systems & Fuel Systems** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Section A: Compression System Terms:

Provide the definition for each-

1. Adiabatic process-
2. Detonation-
3. Maverick air-
4. Chromium plating-
5. Ring expander-
6. Yield point-

Section B: Fuel System Terms:

1. Fossil fuel-
2. Combustion-
3. Stoichiometric ratio-
4. Catalyst-
5. Volatility-
6. Vaporization-

Section C: Short answer:

1. What must happen in order for a small gasoline engine to prepare for a charge?
2. During detonation severe engine damage can occur as result of what two fluctuations?
3. Stainless steel is composed of what two alloys?
4. Pistons are most often made from die or cast?
5. What is thermal growth?
6. There are three main types of piston rings. What are the three different types?
7. What is the yield point of a material?
8. What the two main elements make up gasoline?
9. Explain how and why elevation can effect an engine’s performance?
10. What are the three undesirable compounds generated in exhaust gases from small engines?
11. List three gasoline additives and there purpose?

Part D: Diagrams

1. Draw a picture of a gasoline molecule?
2. Show the combustion chemical formula during the intake stroke and the product of the exhaust stroke?

Section E-Essay Section- Select **one** question to answer.

1. Explain the principles involved in the operation of a carburetor.
2. Explain the Bernoulli’s principle.

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