**Johnson Reading**

Due February 24, 2021

Answer the following questions on the Johnson’s Thesis pages 21-76. Please contact an older member if you need help answering the questions.

**Reading Questions:**

1. The first paragraph under section 3.3 describes in-depth of how the E-Tec injectors functions. Please phrase, in your own words, how the injectors work.
2. Describe what is happening in Figure 12 and how this could be problematic/beneficial in our engine.
3. Explain how the location and installment of our injector and sparkplug allow the engine to run in both homogeneous and stratified injection.
4. What is squish velocity? Around how high should the squish velocity for peak values?
5. What is the difference between geometric and trapped compression ratios?
6. What is BSFC, describe it in your own words. Things to include would be pertinent equations, units, and estimated values for our engine.
7. Take a close look at figures 29 and 30, how are they related and what we can gain from understanding them.