# Practice Exercise – Rotary Piston Assembly

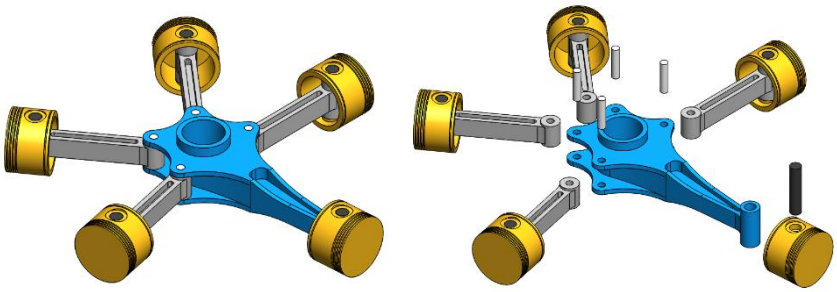
***Section 5 – Assembly Design, Suggested Outline: Beginner to Certification***

Summary:

In this exercise, you'll create a Rotary Piston Assembly that includes 4 piston subassemblies. Once all the components are constrained together, you'll create an exploded view of the main assembly, which separates out the subassemblies and individual components from one another in space.

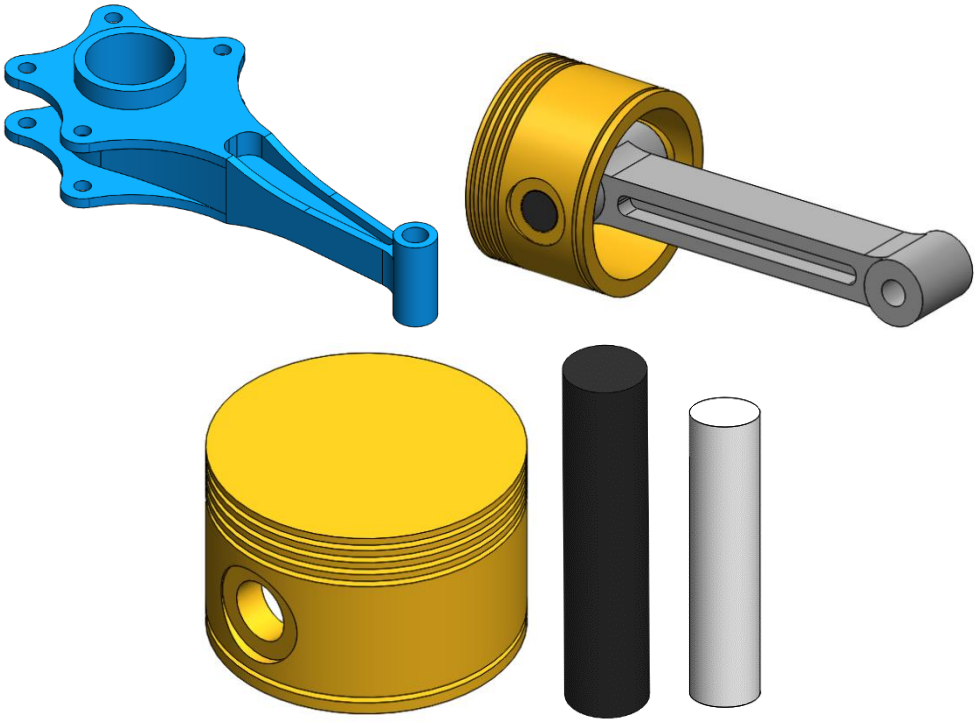
Reference Lessons:

- Mating the Wheel
- Mating the Pin
- Exploded View
- Working with Sub-Assemblies

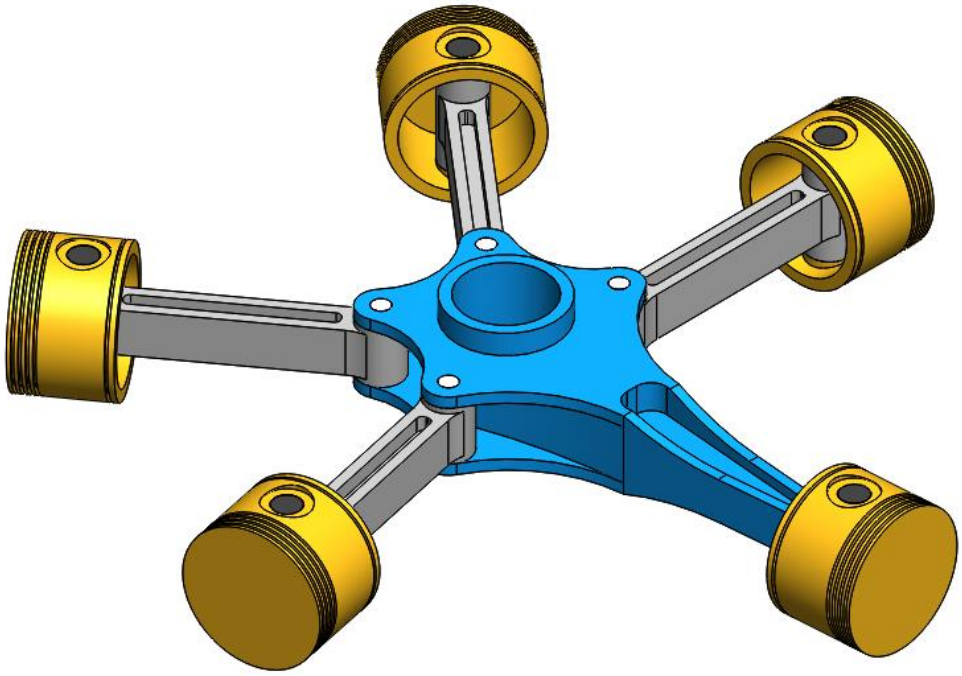


Instructions:

1. Download and unzip the part files found here.
2. Open a new assembly file in SOLIDWORKS and place the following components in the assembly:
    a. Central Mount
    b. Piston Subassembly – Qty. 4
    c. Piston Head
    d. Pin – Large
    e. Pin – Small – Qty. 4



3. Mate the components so that they're assembled as shown in the image below:



4. Create a new exploded view of the components in the assembly as shown in the image below (the components in the subassemblies should remain together):