Lab Assignment – 2B Due Wednesday July 8

- Login to your SolidProfessor account and follow the SolidProfessor Lab-2B assignment (the tutorials videos should take no more than about 35 min to watch). Please, do not forget to complete the <u>short on-line review quiz</u> at the end of the SolidProfessor assignment. The review test is due by Wednesday July 8
- 1) Follow the *Guided Exercise & Video Basic Moving Assembly* tutorial and perform the steps outlined. I have uploaded the PDF file with an additional marking on page 2, which might help with orienting the base part correctly.

After you have completed the tutorial, delete or suppress the final mate (between Top Plane of Link component with Top Plane of assembly) and use SOLIDWORKS "Pack and Go" feature [click on *File* → "*Pack and Go*"] to save your assembly as a zip file. Rename the zip file: "*LastName_BasicAssembly*" and upload it to CCLE. [25 pts.] — No screenshots required —

2) Open the SolidProfessor Guided Exercise "*Brace Assembly*" and download all of the parts.

Before you begin the tutorial, open the "Brace" part and emboss¹ your name on the outside of the "Brace" part - similar as shown in Fig. 1. [10 pts.].

After you have modified the "Brace" part save it, start a new assembly, and continue with the tutorial.

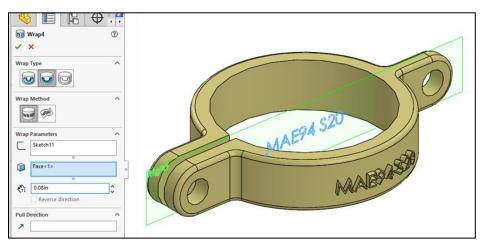


Figure 1: Screenshot of the Brace part with "wrapped" text and the "Wrap-Feature Manager Window" (left).

¹ To create the text, open the Brace part and use "Sketch" to write the text on the "Right" datum plane. Next, use the "WRAP" feature (see Fig. 1) command to emboss the text on the outer round surface of the Brace part

If in Step 12 of the tutorial the icon for "Make Subassembly Flexible" does not show up in the Feature Manager Window, simply follow the instructions outlined in Fig. 2

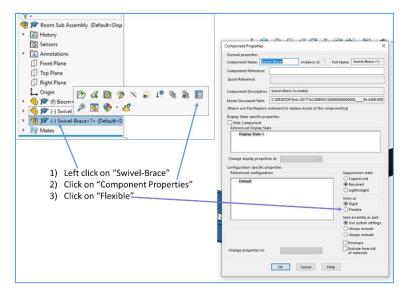


Figure 2: Steps to making a subassembly flexible.

Complete the *Guided Exercise* tutorial. Before submitting the assembly, please make sure that the Swivel-Brace subassembly is "flexible. Use "<u>Pack and Go</u>" to save your assembly as a zip file, rename it "<u>LastName_Brace Assembly</u>" and upload it to CCLE. [25 pts.]

- No screenshots required —
- 3) Follow the *Guided Exercise & Video Scissor Jack Assembly* tutorial and perform the steps outlined. I have uploaded the PDF file with an additional marking on pages 4, 10, and 14 that might be of help.

After you have finished the Guided Exercise, undo the last step and remove the Distance mate of 500 mm between the Top Plane of the assembly and the top face of the Bracket: the objective is to unlock the scissor jack so that it can freely move up or down.

Once you have removed the Distance mate use the SOLIDWORKS "<u>Pack and Go</u>" feature and save your assembly as a zip file. Rename the zip file:

"LastName_ScissorJackAssembly" and upload it to CCLE. [40 pts.]

— No screenshots required —

Optional but recommended:

- Practice Exercise Rotating Slider Mechanism
- Practice Exercise Radial Piston Assembly

Deliverables:

• Upload all three assembly zip files to CCLE.