

Stevens Institute of Technology
ME345 Modeling and Simulation – Prof. Frank Fisher

Toggle Press Tutorial
Last updated September 2008 – Allen Umali

Objective: Using SolidWorks, assemble the toggle press as shown. The assembly functions as a four bar mechanism, where the upper base part presses towards the lower base as the toggle handle is rotated downward.

Part List and Quantity: Extract the press parts from the togglepress1.zip folder. The assembly will require one of each piece and 3 pins.

Part	Quantity
handle.SLDPRT	1
link1.SLDPRT	1
link2.SLDPRT	1
lowerbase.SLDPRT	1
pin2.SLDPRT	3
upperbase.SLDPRT	1
Verticalsupport.SLDPRT	1

Directions: The base of the toggle press must be fixed to a reference (i.e. point/plane). This is to ensure that full assembly does not translate unnecessarily when the toggle handle is rotated. This will require a couple mates between the base piece and the coordinate planes and/or origin. Alternatively, the base part can be fixed in an arbitrary location. Mate all the other parts so that the final assembly functions as shown; where the output motion (upper base) is a response to the input motion (handle rotation).

