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Authorized Training Center

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## **Autodesk Products Tip & Tricks**

**Product:** Autodesk Inventor Suite

**Topic:** Point/Center Point – Utilize the Center Point style to expedite Hole placement.

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What is the difference between a point and a center point in the sketch environment?

Points are construction tools that help position sketched geometry. They are automatically placed at the endpoints of lines, splines and arcs and the centers of arcs and circles. When placed, points are displayed as small dots in the graphics window.

Center-points are used specifically to position Hole features that will be placed by a sketch when using the Hole Tool. The center-points are recognized automatically by the Hole Tool where as the standard points must be selected by the user. Center-points are displayed with small cross-hairs in the graphics window.

Points placed with the "Point, Center Point" tool on the standard 2D sketch panel bar are set to the centerpoint style by default. Point style can be changed using the "Center Point" toggle button on the Standard tool bar. See Figure 1 below.

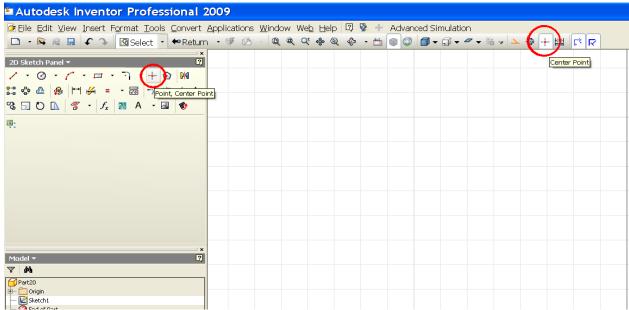


Figure 1 – Tool access in the 2D Sketch Environment



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#### To quickly place multiple Hole Features

Begin by placing a sketch on the desired starting plane. See Figure 2 below.

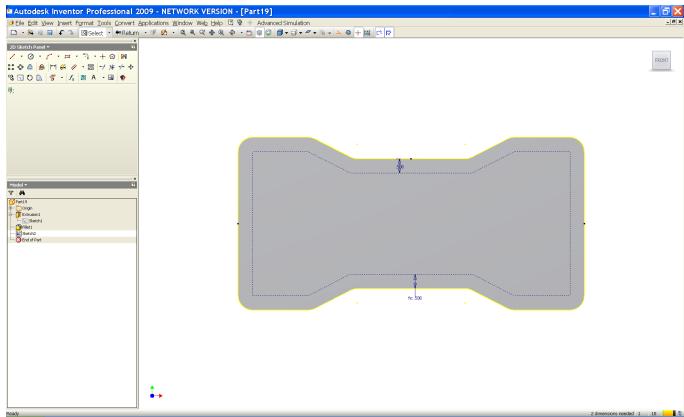


Figure 2 - Sketch on the desired sketch plane



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Next, convert the existing endpoints to center points by multi-selecting the desired endpoints and left-clicking the Center Point button on the standard tool bar. See Figure 3.

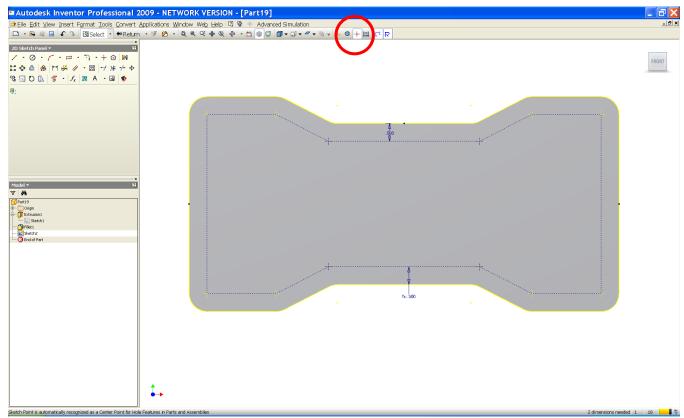


Figure 3 – Convert Endpoints to Center Points



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Then, place additional Center Points using the "Point, Center Point" tool on the panel bar and constraining to existing geometry. See Figure 4.

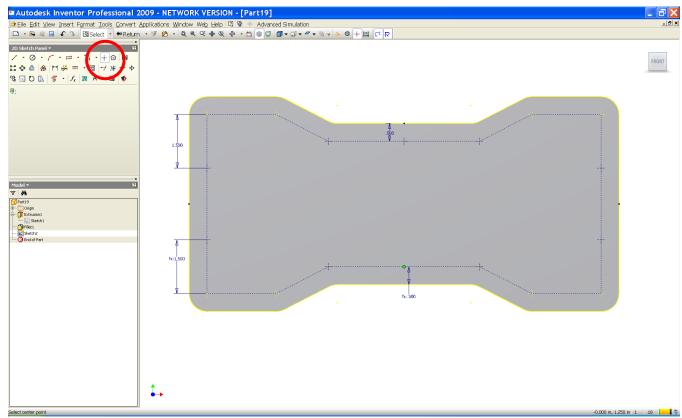


Figure 4 - Place additional Center Points.



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Exit the sketch and select the Hole Tool. Notice that the Hole tool recognizes that there is an unconsumed sketch and automatically selects the center-points to place the holes. See Figure 5.

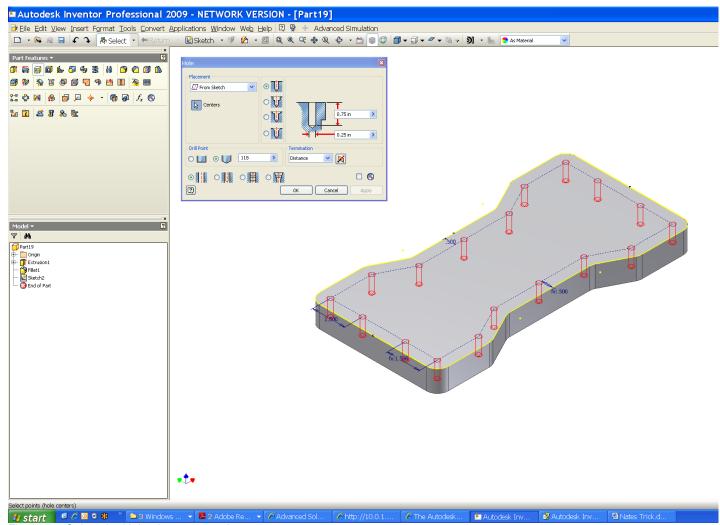


Figure 5 - Select the Hole placement tool.

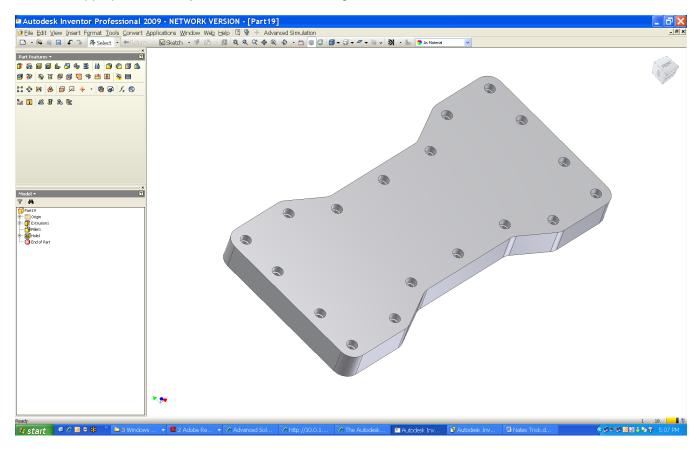


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Select the appropriate Hole style, then click OK. See Figure 6.



Thank you for visiting our website and accessing our tips and tricks. I hope this will help streamline your design-process and impress your peers at the same time.