





# Chapter 3

## Penny Hockey Dowel Pin



### A. Dowel Pin.

Step 1. Click File Menu > New, click **Part** and OK.

Step 2. Click **Right Plane**  in the Feature Manager and click **Sketch**  on the context toolbar, **Fig. 1**.

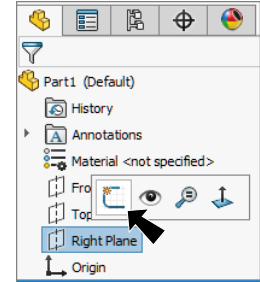


Fig. 1

Step 3. Click **Circle**  (S) on the Sketch toolbar.

Step 4. Sketch a circle starting at the Origin , **Fig. 2**.

Step 5. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 6. Dimension circle **diameter 3/8**, **Fig. 2**. The dimension will convert to decimal .375.

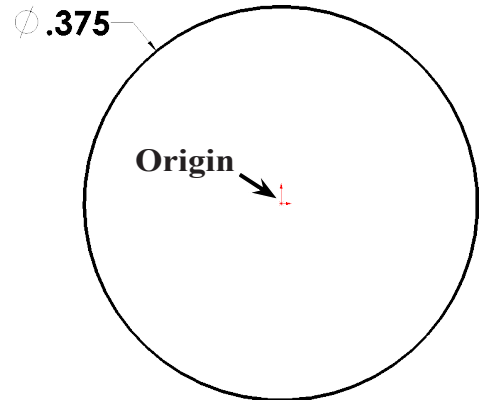


Fig. 2

Step 7. Click **Features**  on the Command Manager toolbar.

Step 8. Click **Extruded Boss/Base**  on the Features toolbar.

Step 9. In the Boss-Extrude Property Manager set:  
under Direction 1, **Fig. 3**

**Depth**  **1.2**  
click OK .

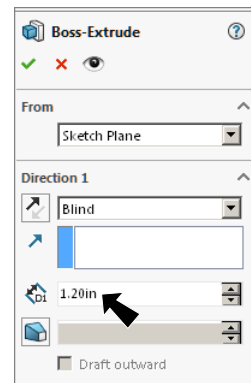


Fig. 3

Step 10. Click **Zoom to Fit**  (F) on the View toolbar.

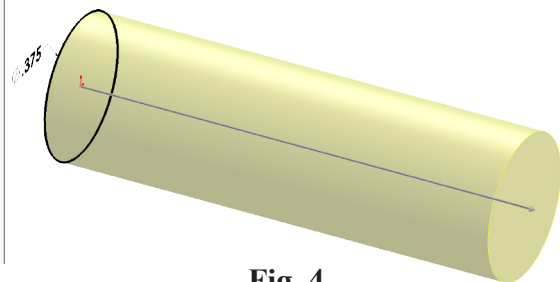


Fig. 4

### B. Save as "DOWEL PIN".



Step 1. Click File Menu > Save As.

Step 2. Key-in **DOWEL PIN** for the filename and press ENTER.

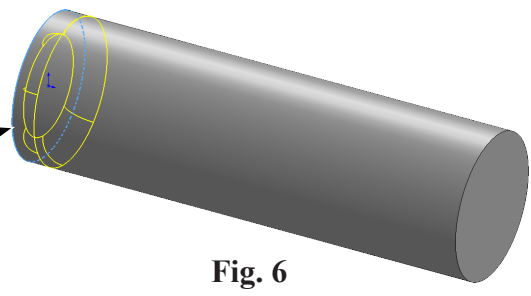
### C. Fillet.

Step 1. Click **Fillet**  on the Features toolbar.

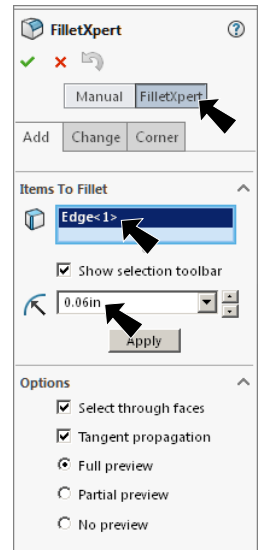
Step 2. In the Fillet Property Manager set:  
select **FilletXpert**, **Fig. 5**

**Radius**  **.06**  
click **left edge**, **Fig. 6**  
click **OK** .

**Left edge** 




**Fig. 6**



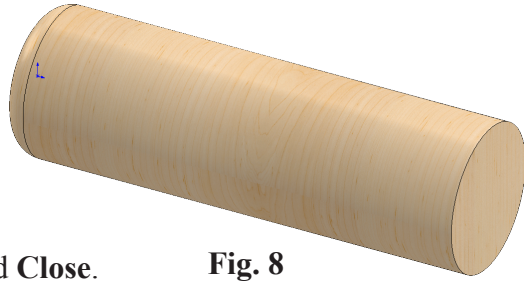
**Fig. 5**

Step 3. Save. Use **Ctrl-S**.

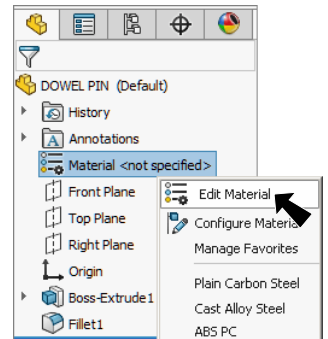
### D. Material Maple.

Step 1. **Right click Material**  in the Feature Manager and click **Edit Material**, **Fig. 7**.

Step 2. Expand **Woods** in the material tree and click **Maple**. Click **Apply** and **Close**.





**Fig. 8**



**Fig. 7**

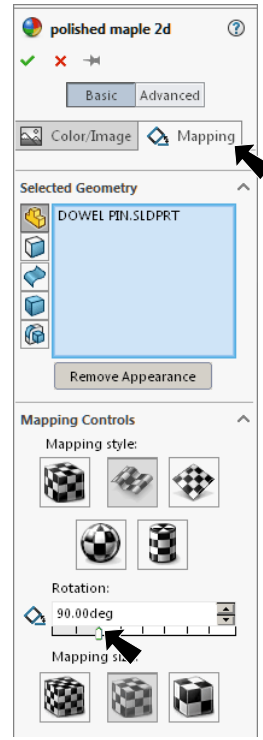
### E. Rotate Mapping.

Step 1. Click PhotoView 360 Menu > Edit Appearance.

Step 2. In the Property Manager:  
click **Mapping tab** , **Fig. 9**  
under Mapping controls  
**Rotation 90**  
click **OK** .



**Fig. 10**



**Fig. 9**