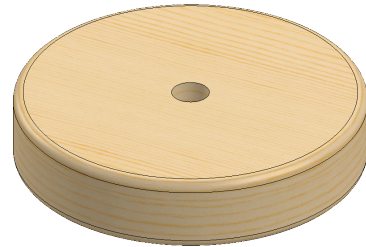





# Spinning Top Flywheel



## A. Sketch.

- Step 1. Click File Menu > New, click **Part** and OK.
- Step 2. Click **Top Plane**  in the Feature Manager and click **Sketch**  from the Content toolbar, **Fig. 1**.
- Step 3. Click **Circle**  (S) on the Sketch toolbar.

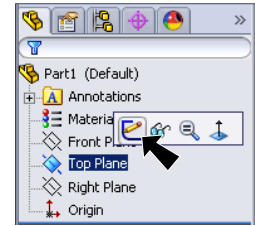


Fig. 1

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

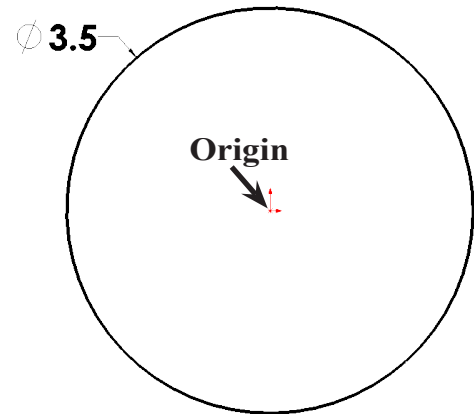



Fig. 2

- Step 5. Click **Smart Dimension**  (S) on the Sketch toolbar.
- Step 6. Dimension circle **diameter 3.5**, **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 Property Manager set: under Direction 1, **Fig. 3**

**Depth**  D1 **.75**

click OK , **Fig. 4**.

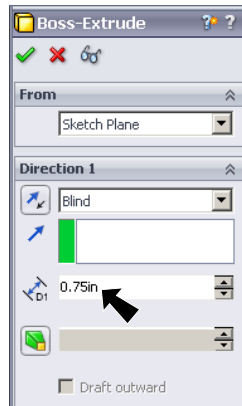



Fig. 3

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

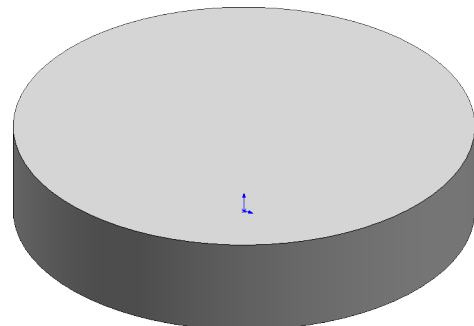



Fig. 4

## B. Save as "FLYWHEEL".

- Step 1. Click File Menu > Save As.
- Step 2. Key-in **FLYWHEEL** for the filename and press ENTER.

## C. Hole Wizard 1" Hole.

Step 1. Click **Bottom**  on the Standard Views toolbar. (Ctrl-6)

Step 2. Click **Hole Wizard**  on the Features toolbar.

Step 3. In the Property Manager, on the Type tab set:  
under Hole Type

click **Legacy Hole** , Fig. 5

under Type:

select **Simple**

under Section dimensions

**Diameter Value 1**

**Depth Value .75/2** half way thru .75 stock or **.375**

Click **Positions** tab  at top of the Property Manager.

Click bottom face and then click Origin  to place hole, Fig. 6.

Step 4. Click OK  in the Hole Wizard Property Manager.

Step 5. You can rotate slightly to confirm hole depth.

Step 6. Save. Use **Ctrl-S**.

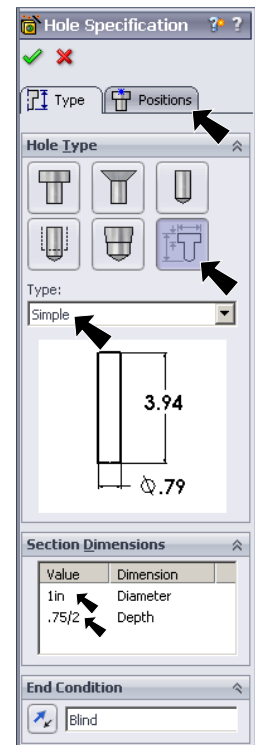


Fig. 5

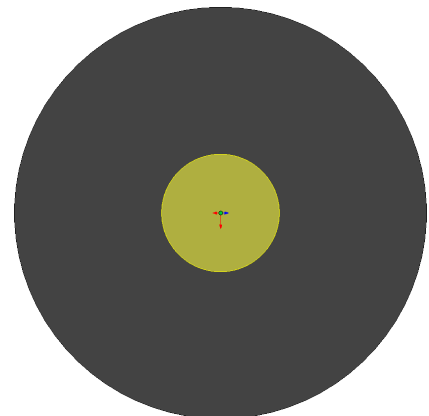


Fig. 6

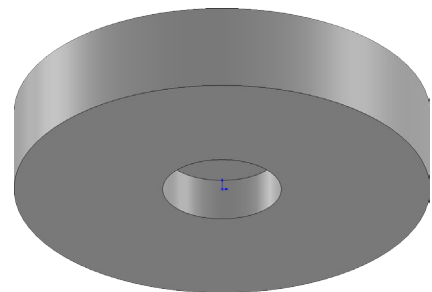


Fig. 7

## D. Hole Wizard 3/8" Hole.

Step 1. Click **Top**  on the Standard Views toolbar. (**Ctrl-5**)

Step 2. Click **Hole Wizard**  on the Features toolbar.

Step 3. In the Property Manager, on the Type tab set:

under Hole Type

click **Hole** , **Fig. 8**

under Standard:

select **ANSI Inch**

under Type:

select **Fractional Drill Sizes**

under Size:

select **3/8**

under End Condition

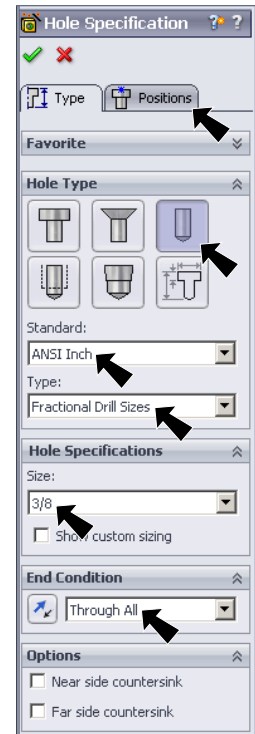
End Condition **Through All**

Click **Positions tab**  **Positions** at top of the Property Manager.

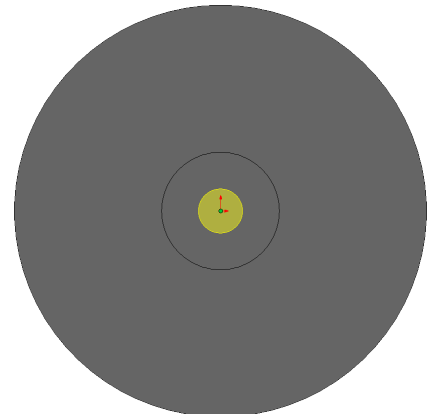
Click bottom face and then click **Origin**  to place hole, **Fig. 9**.

Step 4. Click **OK**  in the Hole Wizard Property Manager.

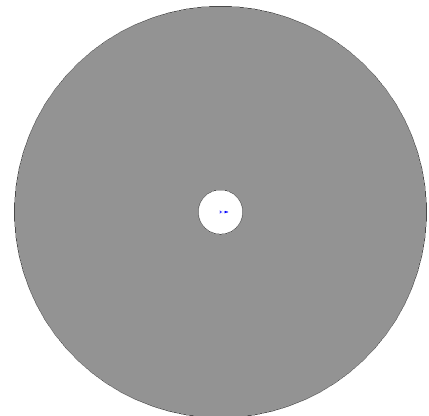
Step 5. Save. Use **Ctrl-S**.



**Fig. 8**



**Fig. 9**



**Fig. 10**

## E. Fillets.

Step 1. Click **Trimetric**  on the Standard Views toolbar.


Step 2. Click **Fillet**  on the Features toolbar.

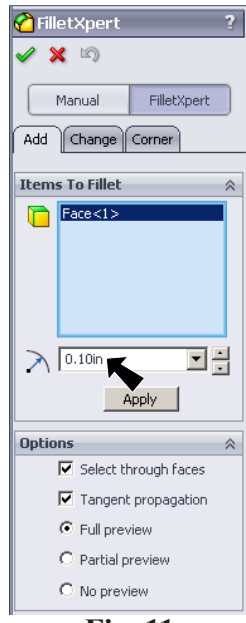
Step 3. In the Fillet Property Manager:  
select **FilletXpert**, **Fig. 11**

**Radius**  .1

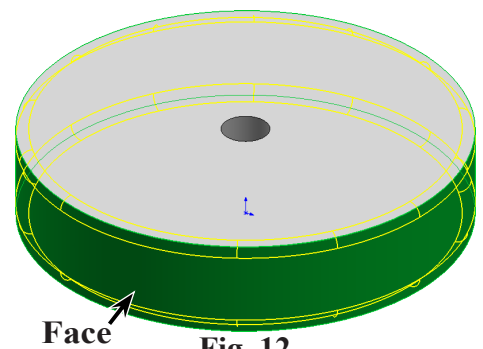
select **Full preview**

click **cylindrical face**, **Fig. 12**

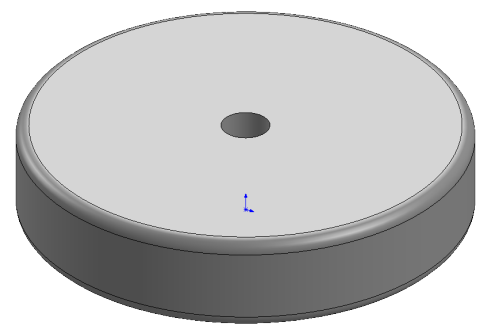
click **OK** .



**Fig. 11**



**Fig. 12**



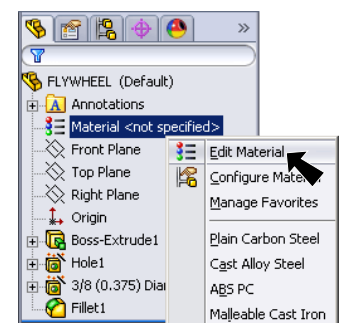
**Fig. 13**

## F. Material Pine.

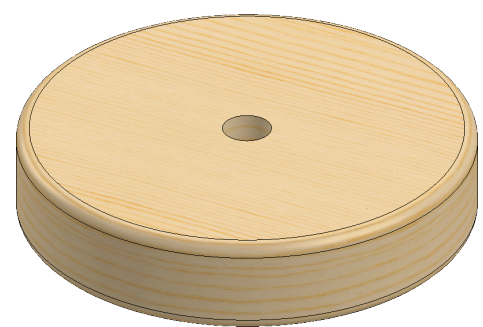
Step 1. **Right click** **Material**  in the Feature Manager and click **Edit Material**, **Fig. 14**.

Step 2. **Expand Woods** (click the +) in the material tree and click **Pine**. Click **Apply** and **Close**, **Fig. 15**.

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



**Fig. 14**



**Fig. 15**