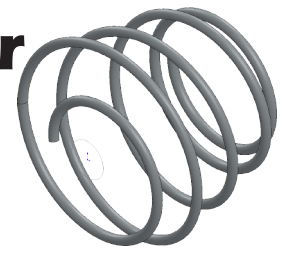


Spring for Battery Holder



A. Sketch for Helix.

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

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



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



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



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



Step 6. Dimension diameter .17, **Fig. 2**.

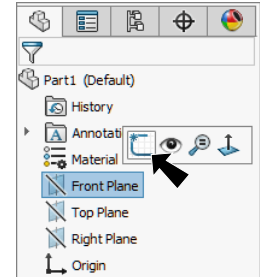


Fig. 1

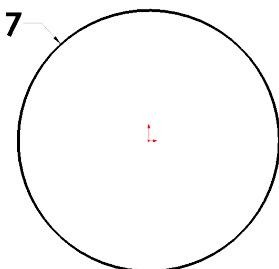


Fig. 2

B. Helix for Sweep Path.

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



Step 2. Click Insert Menu > Curve > Helix/Spiral.

Step 3. In the Helix/Spiral Property Manager set:
under Defined By: **Fig. 3**

select **Pitch and Revolution**
under Parameters
select **Variable Pitch**
under Region Parameters set:

use **Tab** key to move to next field

	P	Rev	Dia
1	.05	0	.17
2	.04	1	.42
3	.12	2	.38
4	.12	3	.35
5	.03	4	.3
6	.01	5	.25

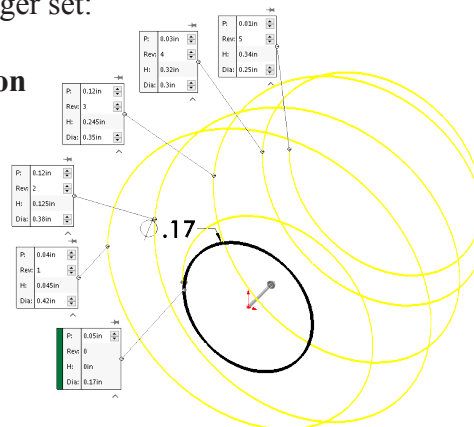


Fig. 4

use **Tab** key to move to next field

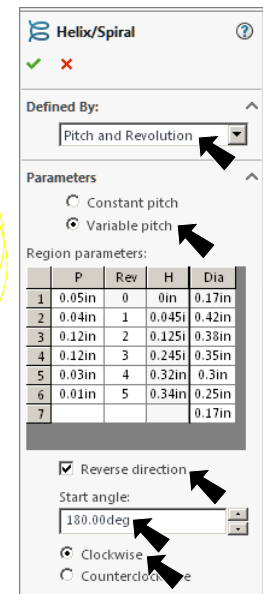


Fig. 3

check **Reverse direction**

Start angle 180

check **Clockwise**

click OK

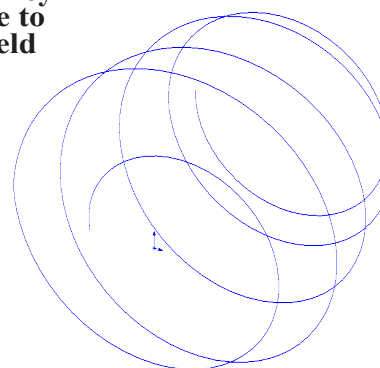


Fig. 5

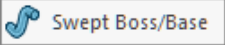
C. Save as "SPRING".

Step 1. Click File Menu > Save As.

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

D. Sweep.

Step 1. Click **Features**  on the Command Manager toolbar.

Step 2. Click **Swept Boss/Base**  on the Features toolbar.

Step 3. In the Swept Boss/Base Property Manager:

under Profile and Path, **Fig. 6**

select **Circular Profile**

Diameter  **.02**

Path  click helix

click OK .

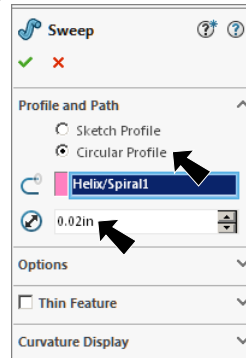


Fig. 6

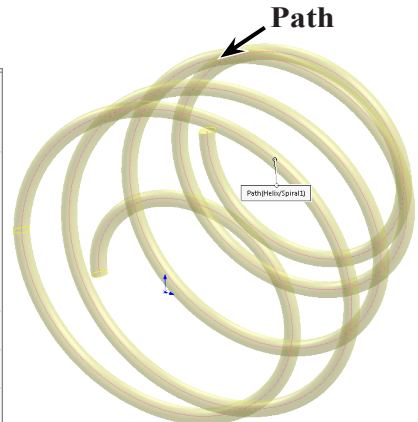





Fig. 7

Step 4. Save. Use **Ctrl-S**.

E. Sketch for Mates.

Step 1. **Hide Helix**. To hide, click **Helix/Spiral1** in Feature Manager and **Hide**  on the context toolbar, **Fig. 8**.

Step 2. Click **Front Plane**  in the Feature Manager and click **Sketch**  on the context toolbar, **Fig. 9**.

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

Step 4. Sketch circle at Origin , **Fig. 10**.

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

Step 6. Dimension **diameter .08**, **Fig. 10**.

Step 7. Click **Exit Sketch**  on the Sketch toolbar.

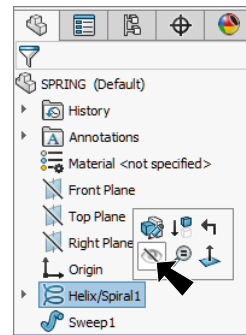


Fig. 8

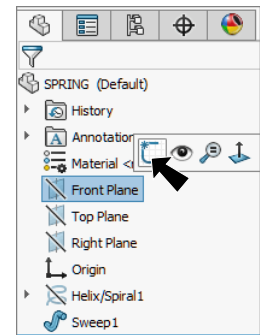


Fig. 9

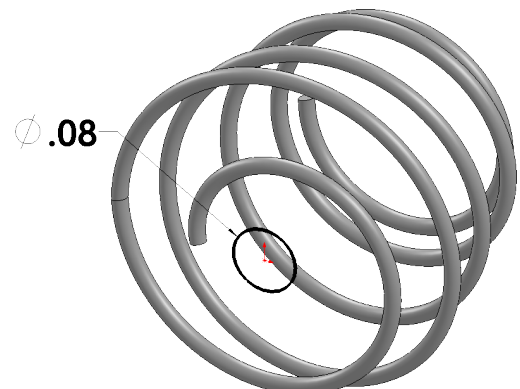





Fig. 10

F. Appearance.

Step 1. Click Spring to select the part, click

Appearance Callout  on the context toolbar and click **SPRING** , **Fig. 11**.

Step 2. In the Appearances Task pane, expand **Metal**, click **Chrome** and in the lower pane select **chromium plate**, **Fig. 12**. Click **OK**  in the Property Manager.

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

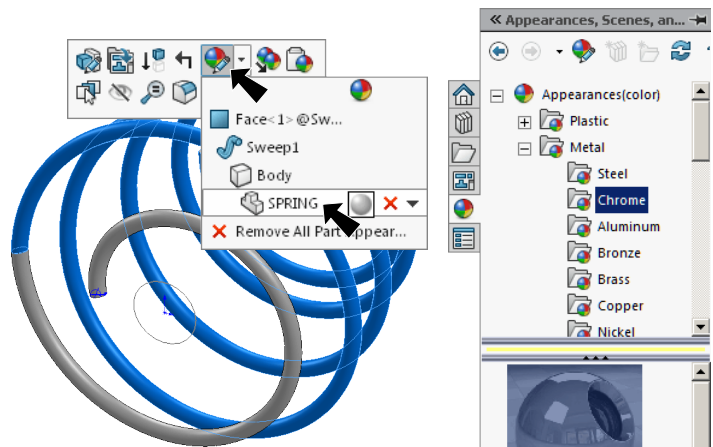


Fig. 11



Fig. 12

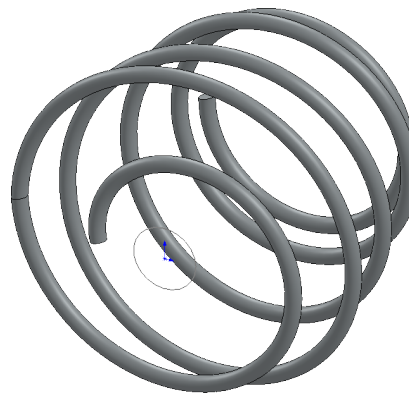


Fig. 13