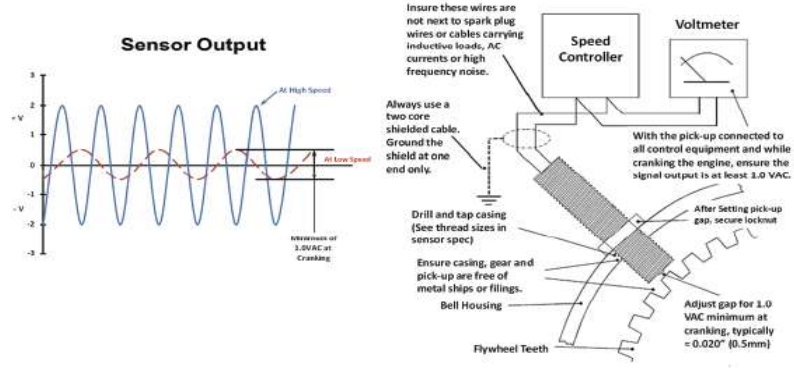
1. If no mounting location is available, drill and tap a hole in the flywheel housing. The threaded hole should centered over the flywheel ring teeth, and perpendicular to the center line of the crankshaft.

2. Insert the magnetic speed pickup into the hole and turn it until the magnetic speed pickup makes contact with the face of the gear.

3. Back out the magnetic pickup by turning it counter clockwise, about 3/4 turn. The gap between the pickup and the gear should be between 0.020"-0.035" [0.50 mm - 0.89 mm]. Digital speed controllers may require less gap (1/4 turn) to provide an optimal signal similar to the Sensor Output shown here.

4. Wire leads should be twisted for their entire length from the magnetic speed sensor to the control unit. Shielding is required if external interference is present or the leads are longer than 10 ft [3 m].



Formulas to convert RPM to Frequency or Frequency to RPM:

$$\text{Hertz}_{\text{mag pickup}} = \frac{\text{(RPM x \# of Teeth)}}{60_{\text{sec}}} \qquad \text{RPM} = \frac{(\text{Hertz}_{\text{mag pickup}} \times 60_{\text{sec}})}{\text{\# of Teeth}}$$