



1. Is the motion of the Power Dive simple harmonic motion?
2. Are the oscillations of the Power Dive isochronous?
3. Is the Power Dive an example of uniform circular motion?
4. When the cabin of the Power Dive reaches the top of its motion, draw a force diagram (free body diagram) for the cabin when:
 - (a) $v = 0$
 - (b) $v \neq 0$
5. Draw a force diagram for the cabin at the bottom of its motion when:
 - (a) $v = 0$
 - (b) $v \neq 0$