

Animation Worksheet: Vane Phaser

Name: _____ **Date:** _____

1. A vane phaser is a component used in Variable Valve Timing (VVT) systems to adjust the _____ of the camshaft.
2. The primary components of the vane phaser include the _____, or vane, which is attached to the camshaft.
3. The vane moves inside a component called the _____, which is filled with engine oil.
4. To prevent leaks and maintain pressure, the paddle cavity is _____ to hold oil.
5. The _____, or phaser housing, rotates with engine timing and directs torque to the camshaft.
6. The flow of oil to the phaser is controlled by the _____ (OCV).
7. The OCV is an electronic valve managed by the vehicle's _____ (ECU).
8. To _____ the timing, the ECU commands the solenoid to direct oil through the advance passage.
9. When oil pressure pushes the paddle in the advance direction, the valves open _____, increasing valve overlap.
10. To _____ the cam timing, the ECU commands the OCV to direct oil flow into the retard passage.