

**Automotive Technology 7<sup>th</sup> Edition**  
**Chapter 29: Variable Valve Timing and Displacement Systems**  
**Matching Quiz**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Matching: Choose the item in column 2 that best matches each item in column 1.**

- |   |   |           |
|---|---|-----------|
| 1. Variable Valve Timing (VVT)                              | A. A type of camshaft actuator that changes the timing by rotating the camshaft relative to its drive gear using vanes.               | 1. _____  |
| 2. Oil Control Valve (OCV)                                  | B. Allows the valves to be operated at different points in the combustion cycle to improve performance.                               | 2. _____  |
| 3. Spline Phaser  | C. A diagnostic trouble code (DTC) that may be set if there is a problem with the bank 1 intake cam position.                         | 3. _____  |
| 4. Vane Phaser  | D. An engine system that uses electric and hydraulic actuators to change the timing of the camshaft(s) in relation to the crankshaft. | 4. _____  |
| 5. Variable Valve Timing and Lift Electronic Control (VTEC) | E. A type of camshaft actuator that changes the timing by rotating the camshaft relative to its drive gear using splines.             | 5. _____  |
| 6. Camshaft Position (CMP) Sensor                           | F. The most likely fault if engine oil is not changed regularly in an engine with VVT.  | 6. _____  |
| 7. P0011 or P0012   | G. This component is controlled by a pulse-width-modulated (PWM) signal.  | 7. _____  |
| 8. Engine Oil Maintenance                                   | H. This system can switch rocker arms from low-speed to high-speed camshaft profiles very quickly.                                    | 8. _____  |
| 9. Pulse-Width-Modulated (PWM) Signal                       | I. One of the factors determining the optimal position of the camshafts for maximum power and lowest emissions.                       | 9. _____  |
| 10. 50 milliseconds   | J. The speed at which rocker arms can be switched in a Honda VTEC system.   | 10. _____ |

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**Answer Key**

**Answer Key:**

1. D
2. G
3. E
4. A
5. H
6. I
7. C
8. F
9. B
10. J