Automotive Technology 6th Edition Chapter 87 - Positive Crankcase Ventilation (PCV) and Secondary Air Injection (SAI) Systems Quiz 87B MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question. 1) The switching valves on the AIR pump have failed several times. Technician A says that a 1) \_\_\_\_\_ defective exhaust check valve could be the cause. Technician B says that a leaking exhaust system at the muffler could be the cause. Which technician is correct? A) Technician A only B) Technician B only C) Both technicians D) Neither technician 2) An electric SAI pump is controlled by \_\_\_\_\_. 2) \_\_\_\_\_ A) a vacuum switch B) the PCM C) exhaust pressure D) manifold vacuum 3) All engines are equipped with a PCV valve. A) True B) False 4) Two technicians are discussing exhaust check valves used in SAI systems. Technician A says that 4) they are used to prevent the output from the SAI pump from entering the intake manifold. Technician B says the check valves are used to keep the exhaust from entering the AIR pump. Which technician is correct? A) Technician A only B) Technician B only C) Both technicians D) Neither technician 5) A P0410 DTC indicates a problem with \_\_\_\_\_. 5) \_\_\_\_\_ A) the SAI solenoid B) MAF airflow C) the idle control system D) none of these 6) What term is used to describe combustion gasses leaking past cylinder rings? 6) \_\_\_\_\_

A) Blow by

C) Sludge

B) Manifold pressure

D) Crankcase build-up

7) Technician A says that if a PCV valve rattles, then it is okay and does not need to be replaced.	7)
Technician B says that if a PCV valve does not rattle, it should be replaced. Which technician is	
correct?	
A) Technician A only	
B) Technician B only	
C) Both technicians	
D) Neither technician	
8) The SAI system is used to reduce which exhaust emission?	8)
A) HC	
B) CO	
C) NOx	
D) Both HC and CO	
9) In what year did PCV system monitoring become mandatory?	9)
A) 2004	
B) 1996	
C) 1988	
D) 2000	
(0) How much of the air needed by the engine flows through the PCV system when the engine is at	10)
idle speed?	
A) 1 to 3%	
B) 5 to 10%	
C) 10 to 20%	
D) Up to 30%	

## Answer Key

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- 1) A
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- 2) B
  - Page Ref: 1007
- 3) B
  - Page Ref: 1004
- 4) B
  - Page Ref: 1006
- 5) A
- Page Ref: 1006
- 6) A
  - Page Ref: 1003
- 7) B
  - Page Ref: 1005
- 8) D
  - Page Ref: 1006
- 9) A
  - Page Ref: 1005
- 10) D
  - Page Ref: 1004