

« JUST THE FACTS »

Variable Valve Timing (VVT) Solenoids and Sprockets

VVT Solenoid

Ford
VV1001



VVT Sprocket

Ford
VV5000



What do VVT Solenoids and Sprockets do?

The VVT Solenoid meters the oil flow to control the actuation of the VVT Sprocket. The VVT Sprocket mechanically shifts the position of the camshaft. The actuated position is varied based on the PCM commands to advance or retard the engine's valve timing.

Where are the VVT Solenoids and Sprockets located?

The VVT Solenoids are generally located on and/or around the cylinder head block. The VVT Sprockets are located on the camshaft(s).

Will a malfunctioning VVT Solenoid or Sprocket affect the vehicle operation and/or cause MIL light to stay on?

Yes. They both can affect the vehicle operating condition and cause the MIL light to come on. They both can cause multiple codes to set.

What are common causes of failure?

- Lack of regular scheduled engine oil and filter service
- Incorrect engine oil added to the crankcase
- Clogged internal OCV (oil control valve) filter

How do you determine if the VVT Solenoid and/or Sprocket is malfunctioning?

- MIL on
- Rough idle
- Poor performance
- Stalling/cutting out
- Engine noise

What makes BWD® VVT Solenoids and Sprockets the best?

VVT Solenoids

- Hardened steel componentry limits sticking during sludge buildup
- Premium O-rings and gaskets properly maintain oil pressure and prevent premature oil leaks
- Each VVT Solenoids undergoes stringent quality control measures and end-of-line testing

VVT Sprockets

- OE-Matching sprocket tooth profiles ensure quiet operation
- OE-style installation bolts included with sprockets for ease of installation
- Each VVT Sprocket undergoes stringent quality control measures and end-of-line testing



GM
VV1002



Nissan
VV5007



Honda
VV1045



GM
VV5017