

ENGINE MANAGEMENT

MOTAQUIP TEC TALK

Motaquip VVT Solenoids (Variable Valve Timing Solenoids) are made using high quality components which are designed to avoid common failures and extend service life.

VVT Solenoids can fail due to a variety of reasons, given their mechanical, hydraulic, and electronic nature. Here are some common causes of failure:



Engine Oil Issues: Contaminated, degraded, poor quality, or incorrect engine oil can lead to slow operation or seizure of the valve. This is often due to missed or inadequate servicing.



Electrical Problems: Damage to the electrical circuits, wiring, or connectors can impair the valve's functionality.



Wear and Tear: Over time, natural wear to the valve's internal gears and seals can cause it to malfunction.

These factors highlight the importance of regular maintenance and servicing to ensure the proper functioning of the VVT Solenoid.

Symptoms of a Faulty Camshaft Adjustment Control Valve



Check Engine Light

Modern vehicles often detect faults and illuminate the check engine light. A common error code is P0011.



Rough Idle

The valve helps maintain a smooth idle. If it gets stuck in a retarded position, the RPM may drop too low, causing the engine to stall.



Rough Acceleration and Misfires

The valve ensures smooth engine performance across the RPM range. If it is stuck, acceleration may feel rough, and misfires can occur.



Increased Fuel Consumption

A malfunctioning valve can lead to reduced fuel efficiency, resulting in lower miles per gallon (MPG).



Poor Performance

The valve adjusts to optimize performance based on driving conditions. Without proper function, overall performance may decline.



Control Valve **LVEP172**

STEPS TO DIAGNOSE A FAULTY VVT SOLENOID

- **Check for Error Codes** - Use an OBD2 diagnostic scanner to check for codes in the ECU
- **Visual Inspection** - Inspect the VVT solenoid and surrounding area for any signs of oil leaks, damage, or wiring problems
- Test the Solenoid with a **Multimeter**
- Motaquip Currently has **15 references in range** covering a wide range of applications with the range being extended as demand is identified.



If you have any technical questions please email:
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