



**DRIVEN BY POSSIBILITY™**



**TIMING SYSTEMS:**

# **VARIABLE VALVE TIMING SOLENOIDS AND SPROCKETS**

**COMPLETE SOURCE FOR OE QUALITY OR BETTER**

**TIMING IS CRITICAL FOR OPTIMAL ENGINE PERFORMANCE.**

A properly functioning Variable Valve Timing (VVT) system is critical for optimal engine performance at various engine speeds and operating conditions. A clogged, malfunctioning or failed variable valve timing solenoid or sprocket will significantly impair engine performance and compromise the entire VVT system. Gates' line of Variable Valve Timing Solenoids and Sprockets offers the perfect solution. These parts are manufactured to OE quality standards or better, ensuring an exact fit, easy installation, and long-lasting performance. With Gates, you can trust that your VVT system will be effectively restored to peak operation, delivering exceptional reliability and durability.

# VARIABLE VALVE TIMING SOLENOIDS AND SPROCKETS



## RESTORE YOUR ENGINE'S OPTIMAL PERFORMANCE

Most modern vehicles rely on advanced Variable Valve Timing (VVT) systems to optimize engine performance, enhance fuel efficiency, and reduce emissions. At the heart of this system, the VVT Solenoid plays a critical role, precisely controlling the flow of pressurized oil to the camshaft actuator to adjust timing. When a VVT Solenoid or sprocket becomes clogged, malfunctions, or fails, the entire system suffers. Symptoms can include reduced engine performance, poor fuel economy, increased emissions, and a check engine light. Restore your engine's performance and efficiency with Gates' premium line of VVT Solenoids and Sprockets. **Manufactured with high-quality materials for unmatched durability, our parts ensure reliable performance and a perfect fit-all at a competitive price. Gates delivers the trusted solution to keep your engine running at its best.**

## OE IMPROVED DESIGN, EXCEPTIONAL COMPONENTS AND SUPERIOR CONSTRUCTION

Aluminum valve bodies and spool valves are surface-treated for increased wear resistance.

Housings and mounting brackets are plated for corrosion resistance.

Oil flow, pressure rates, electrical resistance and leakage are tested on every unit to ensure maximum performance.



OE quality electrical connectors ensure a hassle-free installation and secure electrical connection.

Magnet coil and connector are integrated into a one-piece design that prevents separation from vibrations.

## HOUSING AND COIL

OE



Coil exposed; risk of damage from engine vibration or colliding parts

GATES



Housing fully covers coil, resulting in greater protection

## FILTER DESIGN

OE



Filter secured with loose clip; risks falling off

GATES



Filter secured with laser weld ensuring a strong connection

**For more information on these products, please contact your Gates Representative.**