

VARIABLE VALVE TIMING (VVT) SOLENOIDS AND SPROCKETS



Intermotor®
Genuine Import Parts

SMP
Standard Motor Products, Inc.

Blue Streak® joins the
Standard® VVT Lineup



BLUE STREAK® JOINS THE STANDARD® VVT LINEUP

Introducing Blue Streak® VVT Components

Blue Streak® variable valve timing solenoids and sprockets feature design improvements over the OE, delivering a line of high-quality, long-lasting VVT components manufactured for superior performance under real-world conditions.



Blue Streak® Limited Lifetime Warranty

We are so confident in the durability of our Blue Streak® VVT components, that we've backed every one with our Limited Lifetime Warranty.

Aftermarket-Leading VVT Coverage

Blue Streak®, Standard® and Intermotor® lines team up to offer more than 500 premium VVT components covering more than 95% of all domestic and import applications. That's top in the industry!



Intermotor®
Genuine Import Parts 

500+
SKUs

The most comprehensive VVT line in the aftermarket

**PREMIUM
QUALITY**

Many of our VVTs include value-adds such as gaskets for a trouble-free install

100%
TESTED

Our extreme testing regimen ensures precise performance and longevity

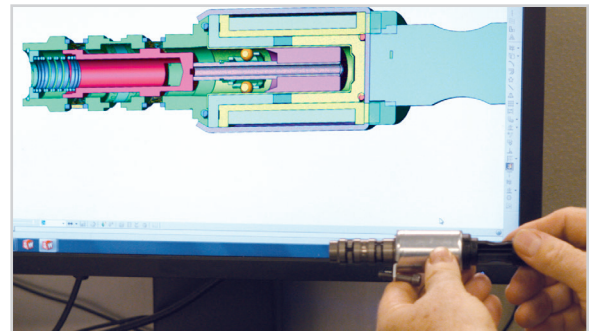
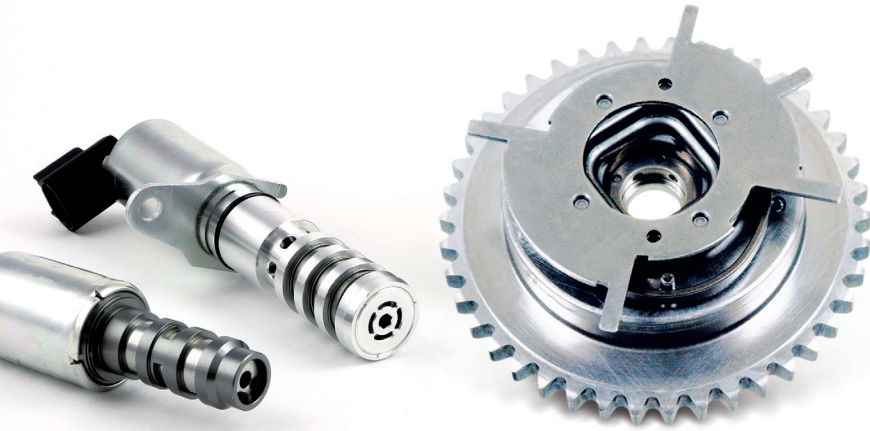
**HIGH
TECH**

VVT is an extremely high tech category so premium quality is essential

SMP® DELIVERS ADVANCED, BASIC MANUFACTURING

SMP® Poland: Engineering, Design, Basic Manufacturing and Testing

Our IATF 16949-certified facility spans 108,000 sq. ft. and employs more than 750 employees – including 60+ resident engineers. SMP® Poland introduces 110+ new products annually and serves as a basic engineering center for our most advanced Blue Streak® VVT components.

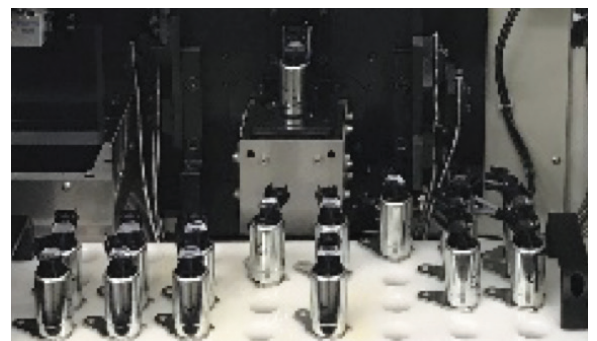
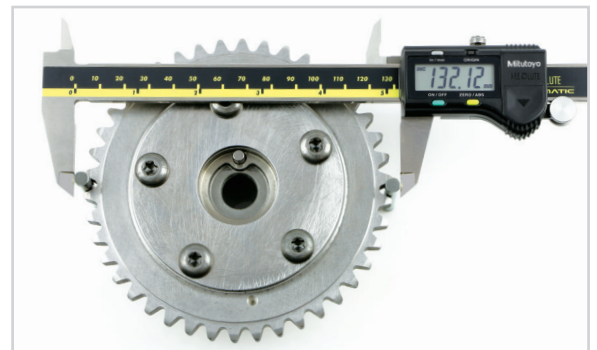


A Real Commitment to Design and Testing for Real-World Conditions

We supply professional techs with the premium quality that is critical for this high-tech category.

SMP-manufactured VVT solenoids & sprockets undergo extensive measurement and life testing plus a full spectrum of environmental analysis that includes thermal shock, thermal cycling, salt spray, vibration, storage tests, and more.

This unwavering commitment to quality ensures that every Standard® VVT component measures up to real-world conditions.





PRECISE ATTENTION TO THE DETAILS

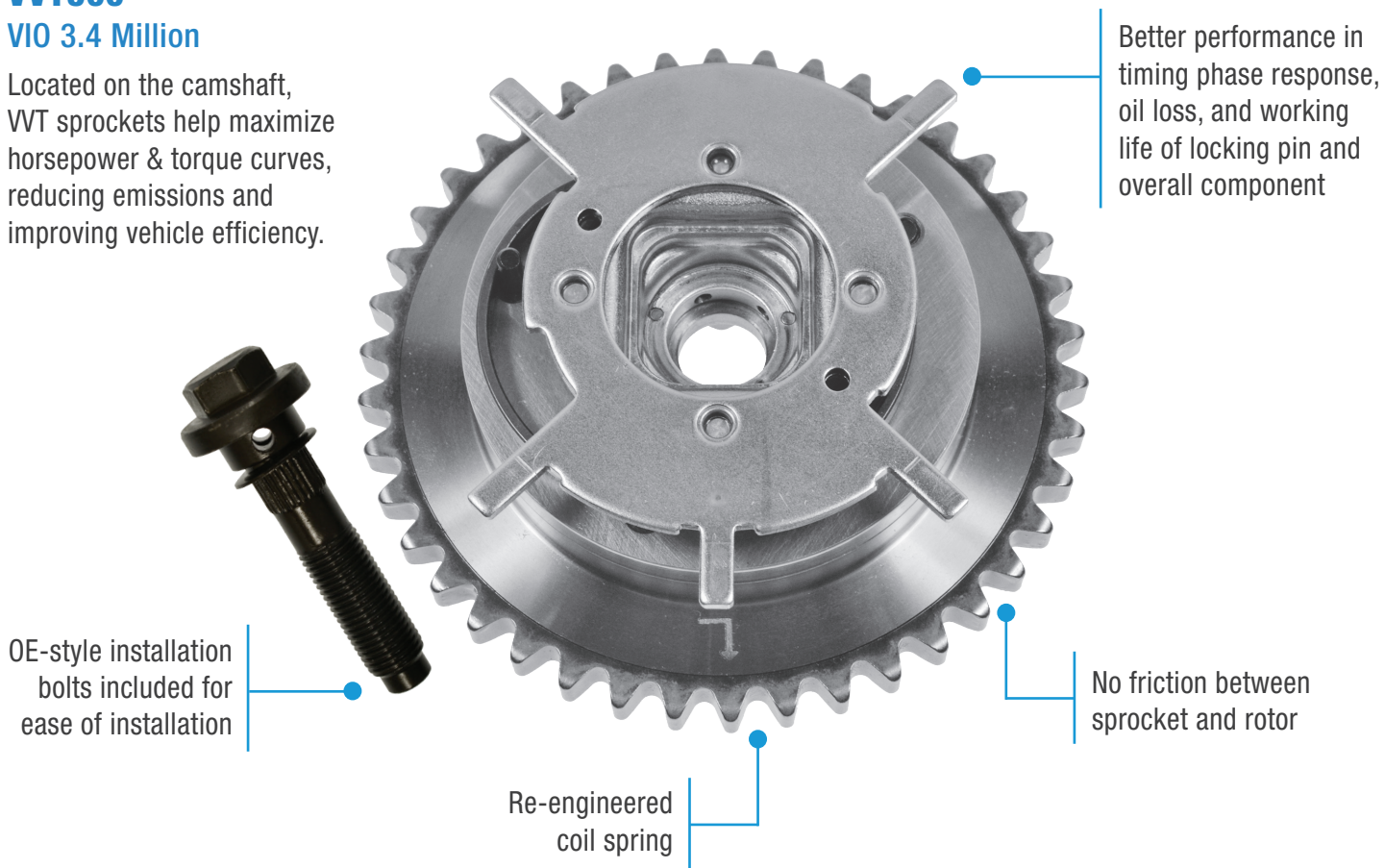
Blue Streak® Premium Quality VVT Sprockets (Cam Phasers)

Blue Streak® VVT sprockets meet tight dimensional tolerances to improve internal sealing, minimize oil drain back, reduce frequency of PCM correction and deliver optimal performance.

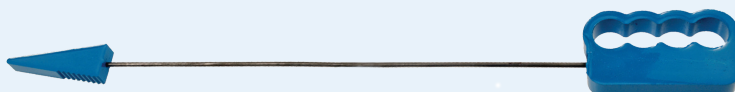
VVT500

VIO 3.4 Million

Located on the camshaft, VVT sprockets help maximize horsepower & torque curves, reducing emissions and improving vehicle efficiency.



Tech Tip: Standard's Innovative Cam Gear Wedge Tool



PC1160 (Q21002)

Our custom-designed tool locks the sprocket in place preventing the chain tensioner from collapsing during your VVT repairs. **Tip: Do not remove the wedge tool while the cam gear is out. If the tool comes out, the timing cover will need to be removed and the engine will need to be re-timed.**

BLUE STREAK® TAKES ON THE COMPETITION

Blue Streak® Design Improvements Over the Original

Our all-metal, integrated machined design eliminates paddle inserts while providing a larger contact area. This means improved overall wear as well as proper lubrication and gap. Less friction means our sprocket responds fast at lower pressure delivering optimal performance.

OE



Blue Streak®



Competitor D



Source: SMP Testing Lab, 2020

Original – Metal Paddles

- Inserted metal paddles produce iron shavings
- Paddles wear rapidly
- Impedes performance
- Shortens service life

Best – Integrated Design

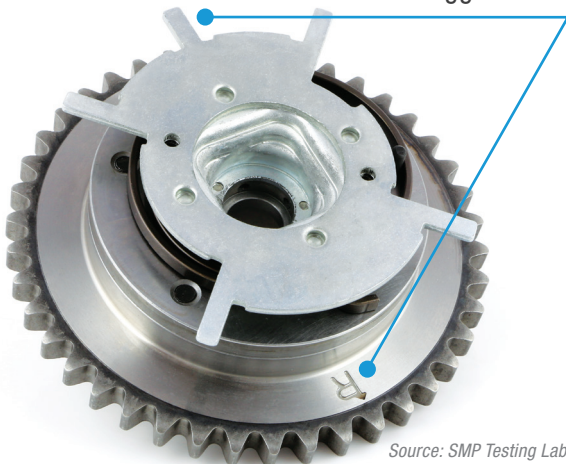
- Larger contact area
- No paddle to wear out
- Fast response times
- Improved performance
- Longer service life

Inferior – Plastic Paddles

- Chamfered slot and plastic paddle inserts
- Components wear easily
- May not hold up under normal operation

Trigger Wheel Angle Comparison

Angle between timing mark and trigger wheel



Source: SMP Testing Lab, 2020

Manufacturer	Angle	Difference
OE (Ford) 3R2Z6A257DA	2.16°	–
Blue Streak® VVT500	2.08°	0.08°
Competitor D “Improved”	1.97°	0.19°

The Blue Streak® trigger wheel angle closely matches the OE, ensuring proper alignment and operation. Competitor D’s “improved” sprocket is significantly smaller which may lead to improper alignment, signal deviation and faulty operation.

THE NEW BENCHMARK FOR VVT SOLENOIDS

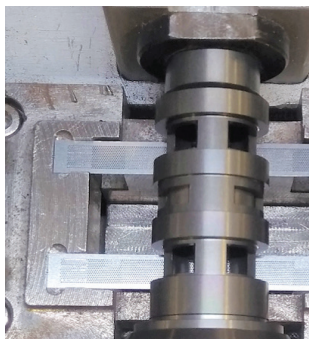
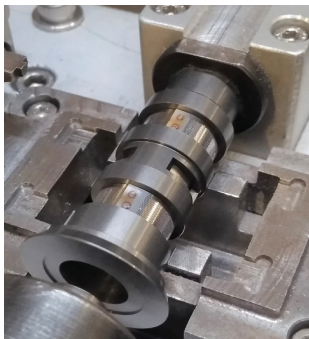
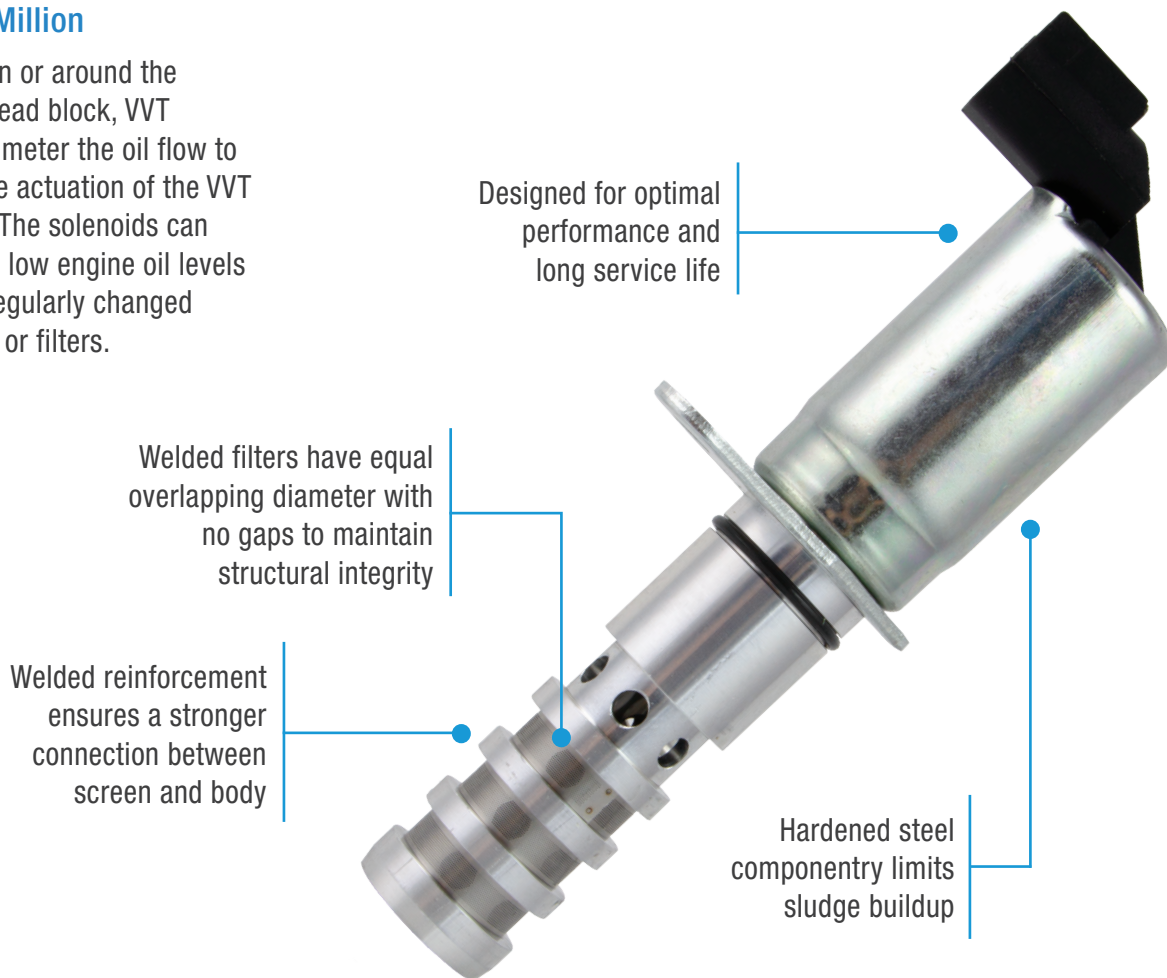
Blue Streak® Premium Quality VVT Solenoids

As a high-quality replacement, Blue Streak® VVT solenoids feature hard anodized components to ensure proper performance, precise operation, and long service life.

VVT102

VIO 2.5 Million

Located on or around the cylinder head block, VVT solenoids meter the oil flow to control the actuation of the VVT sprocket. The solenoids can fail due to low engine oil levels and/or irregularly changed engine oil or filters.



Commitment to Continuous Improvement

Our dedication to continuous improvement practices in design, engineering and manufacturing allows us to make enhancements to the OE design, while maintaining complete control over each Blue Streak® VVT component.

THE BLUE STREAK® VVT ADVANTAGE



Blue Streak® Engineers Have Improved on the Original

Our improved screen stamp and welded reinforcement are the result of the Blue Streak® commitment to high-quality design and rigorous testing.

OE



OE and Blue Streak® feature a reinforced plunger and spring

Uses Plastic

OE uses plastic which often fails to hold the screen to the body

Blue Streak®



Reinforced

Blue Streak® has improved screen stamp plus welded reinforcement

Competitor D



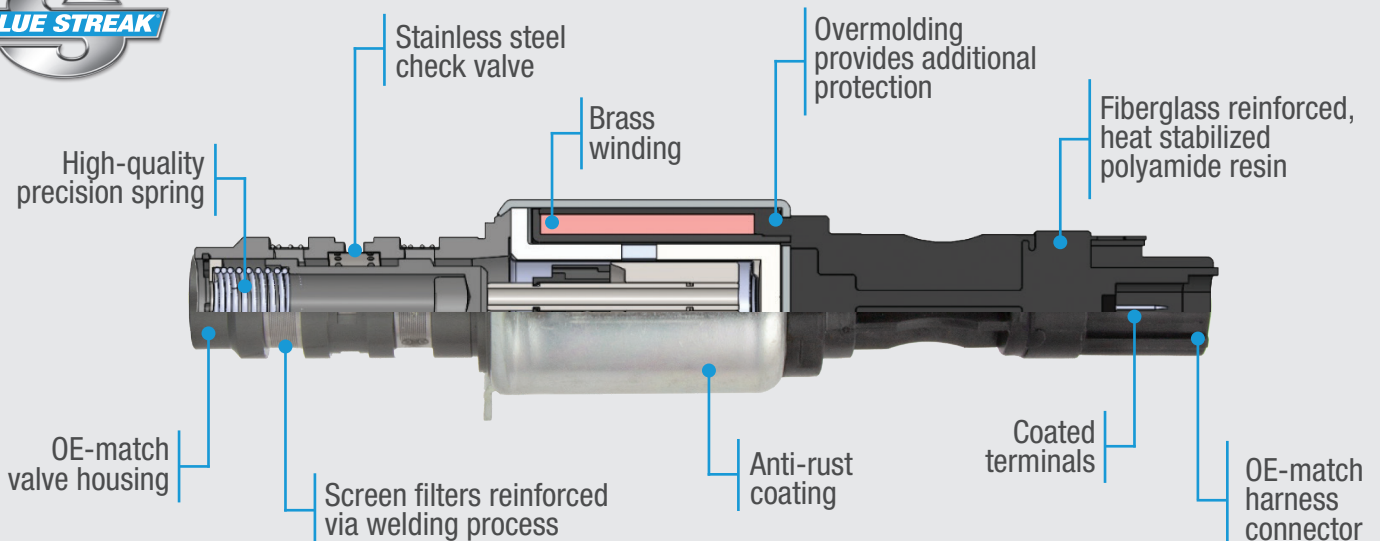
Competitor design has no reinforcement



Doesn't Match

Competitor has shorter solenoid length & minimal screen reinforcement

Source: SMP Testing Lab, 2020



EVER-EXPANDING VVT COVERAGE

The Best Keeps Getting Better

The Blue Streak®, Standard®, and Intermotor® lines continue to expand coverage for this important category. Here's a small sample of our VVT solenoid and sprocket coverage.



VVT101
Ford / Lincoln Cars
& Trucks (2014-04)



VVT102
GM (2012-02)



VVT144
Honda (2009-02)



VVT190
OGM/GMC (2017-04)



VVT198
GM (2017-06)



VVT199
GM (2017-06)



VVT258
Chrysler/Dodge, Jeep,
Dodge Trucks (2020-09)



VVT500
Ford/Lincoln Cars
& Trucks (2014-04)



VVT529
Toyota (2008-98)



StandardBlueStreak.com



StandardBrand.com



IntermotorImport.com



SMPCorp.com