### **IGNITION PROGRAM**

### Highlights

Standard® and Blue Streak® offer more than 800 Coils for 99% aftermarket-leading coverage

Every Ignition Coil is subjected to extensive testing and product validation

Popular Blue Streak® OE Durability
Improved Coils are available in
multi-packs for a complete coil service



What's in your box?



## Market Trends

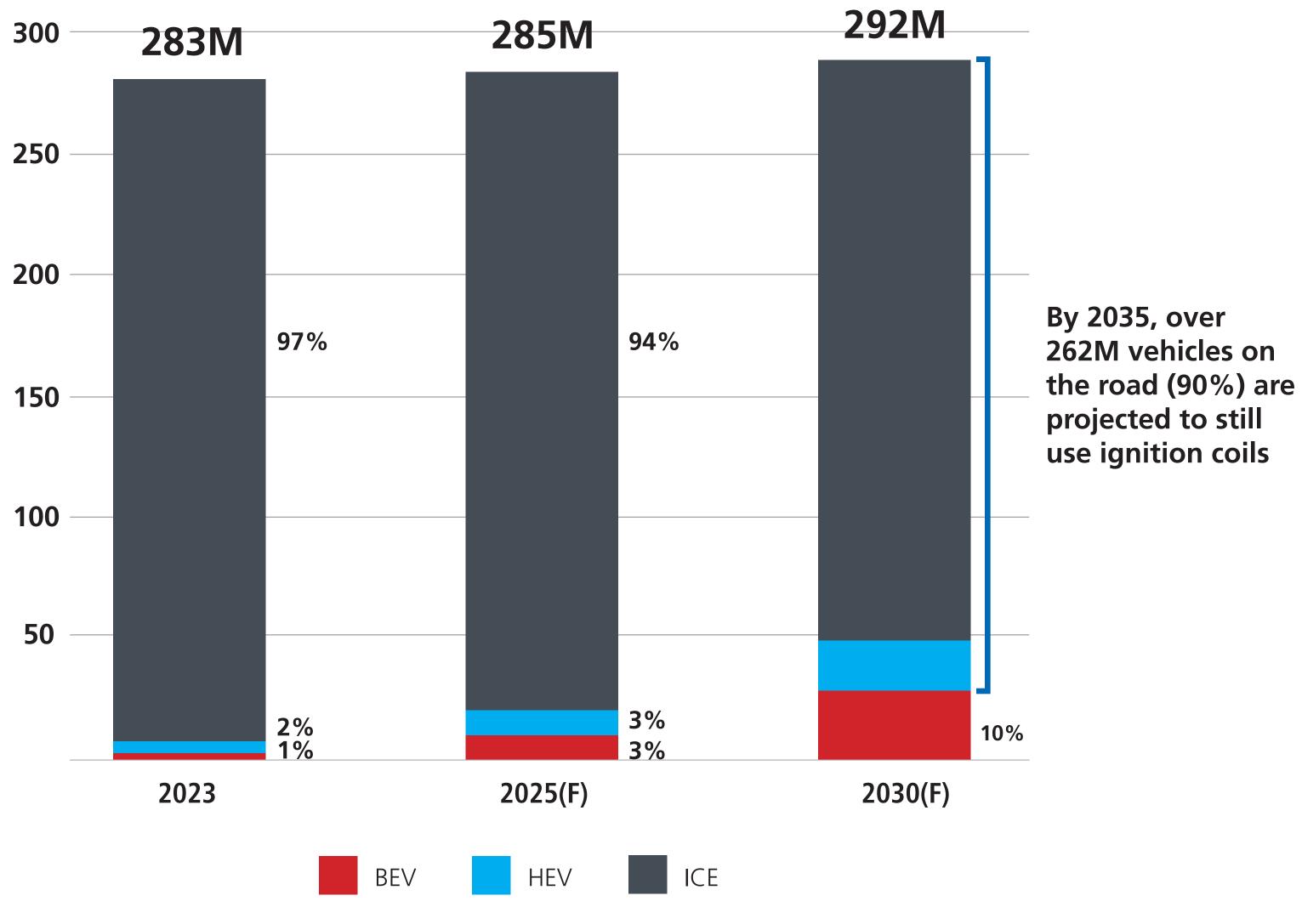
There are currently around 283 million vehicles on U.S. roads. In the coming years, U.S. new vehicle sales are forecasted to increase steadily.

Combined with the average vehicle age of 12+ years, the car parc is expected to see growth for the foreseeable future

— and almost all of them will still be equipped with ignition coils. Ignition coils will remain a strong category for decades to come.

### **VEHICLES IN OPERATION**

Total U.S. Car Parc, Millions of Cars



S&P Global Mobility (LV Sales and Production Forecast July 2023), DOT, Strategy & analysis



### Sales Opportunity

Our engineers discovered that too much energy was passing through each section of the OE coil, creating excess heat and resulting in premature coil failure. They designed a Coil with an additional bobbin section, resulting in less heat and a longer service life. The updated Blue Streak® Coils outperform and outlast the OE design.

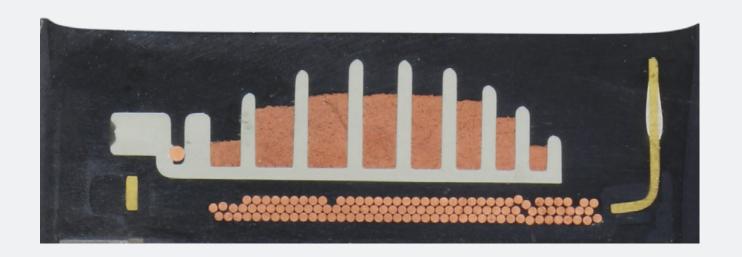
Blue Streak® multi-packs make it easier for technicians to solve a known problem once and for all.



### **Problem:**

Ignition coils on 2020-02 Nissan & Infiniti 3.5L V6s are susceptible to premature failure due to excessive heat

#### The OE Coil has 8 bobbin sections

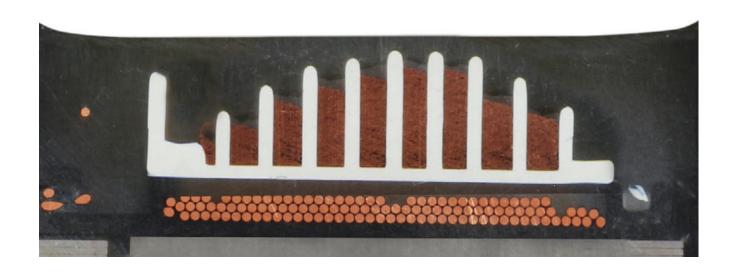


30kV needs to pass through only 8 sections, meaning nearly 4kV needs to pass through each section

### **Solution:**

Blue Streak® engineers designed a Coil that addresses OE weak points and includes additional bobbin sections, resulting in less heat produced and a longer service life

#### Blue Streak® UF349K6 has 9 bobbin sections

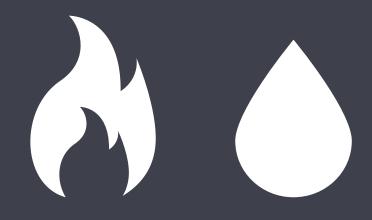


30kV passes through 9 sections, meaning only 3.3kV passes through each section, creating less heat



Made to stand the test of time®

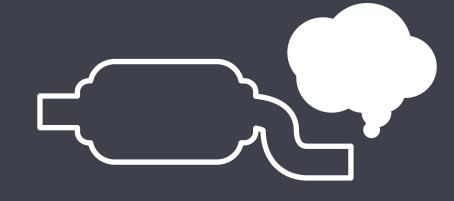
# Impact on Engine Systems



Exposure to heat, oil
intrusion and water intrusion
are three of the leading
causes of premature failure
in OE coils



Incorrect spark plug
gaps can cause coils to
work harder and fail
prematurely



An ignition-related misfire
can damage the catalytic
converter in a few miles or
several minutes of driving
if a vehicle doesn't register
the faulty coil and continues
to feed fuel to the cylinder

STANDARD Ignition Program StandardBrand.com

### What's New

Standard® is committed to regularly releasing new Coils to provide the coverage you need. With high OE failure rates, technicians continue to look for reliable aftermarket alternatives, even on latemodel vehicles. Standard® already offers over 800 Ignition Coils and is committed to regularly releasing new applications to give technicians the aftermarket solutions they are looking for.

For the most recent applications, check the online catalog at StandardBrand.com.



UF924
Buick Encore GX /
Chevrolet Trailblazer
(2023-20)
VIO: 292K





**UF923**Nissan Sentra
(2023-20)
VIO: 267K





UF925
Ford / Lincoln Trucks & SUVs
(2023-21)
VIO: 374K





### Top Movers: Ignition Coils

## IMPORT APPLICATIONS



UF667

BMW

Cars & SUVs

(2021-01)



UF596
Lexus / Toyota
Cars & SUVs
(2021-09)



UF549
Nissan / Infiniti
Cars, Trucks & SUVs
(2021-06)



UF349
Nissan / Infiniti
Cars, Trucks & SUVs
(2021-01)



UF575
Audi / Volkswagen
Cars & SUVs
(2019-04)

## DOMESTIC APPLICATIONS



FD503
Ford
Cars, Trucks, Vans & SUVs
(2019-97)



UF648
Chrysler / Dodge / Jeep / RAM
Cars, Trucks & SUVs
(2021-11)



UF504
Chrysler / Dodge / Jeep / RAM
Cars, Trucks & SUVs
(2022-05)



UF270
Chrysler / Dodge / Jeep / RAM
Trucks & SUVs
(2008-98)



FD508
Ford
Cars, Trucks & SUVs
(2009-04)





# Additional Coils and Related Parts

In addition to the traditional Coil-On-Plugs, Standard® offers an array of other high-quality Coils and components to help with ignition repairs. From unique coil designs to service kits, Standard® has you covered.



### **Coil Near Plugs (CNP)**

Reinforced bobbins prevent voltage flashover for extended service life

High-dielectric epoxy is injected into the case and pulled into vacuum to eliminate air pockets and prevent moisture intrusion or thermal breakdown



#### **Cassette Coils**

High heat-resistant housing compound and coil boot withstands heat stress for durability

100% pure copper windings in the primary and secondary bobbins improve durability and provide higher resistance to internal shorts and dielectric breakdown



### **Coil Packs**

Housing made from thermoplastic compounds to withstand heat stress

Full E-Lam core of silicon steel and solid brass high-voltage terminals protects against corrosion



### **Ignition Coil Connectors**

Utilizes high-grade materials to ensure peak conductivity and perfect connections



### **Coil-On-Boot Service Kits**

Multiple-piece design featuring a phenolic tube and silicone tip

**Includes spring and resistor** 

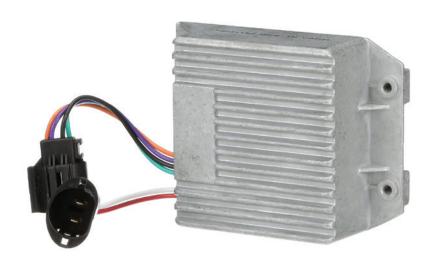


## Other Ignition Systems

In addition to newer-style Coils,
Standard® offers multiple ignition
components for classic vehicles. These
components help restore performance
on older, higher-mileage vehicles.

#### **Did You Know**

Older ignition systems are typically comprised of primary (module and coil) and secondary (cap, rotor, wires, plugs) components. If a primary component has failed, it is typically due to high resistance in the secondary components. Newer coil-on-plug assemblies include the primary and secondary in one piece.



### **Ignition Modules**

Standard® Ignition Modules use top-of-the-line technology to ensure perfect timing every time

Matches the OE part and ensures better connections, greater dependability, and longer life despite being subjected to intense vibrations and the tough operating environment of the engine

300+ SKUs



#### **Distributor Assemblies**

High-dielectric-strength cap ensures accurate energy transfer and spark timing, while stainless steel screws protect against corrosion

Improved gear design for enhanced performance in high-torque applications

Available for GM 4.3L V6 and 5.0/5.7L V8 applications



### **Spark Plug Wire Sets**

Designed, built, and tested to meet or exceed tough international IATF 16949 quality standards

Standard® Spark Plug Wire Sets feature matching boots, a wire core and jacket, and extras like clips, trays, looms and numbered leads

**Available for domestic and import vehicles** 



## Problem Solving Kits

Many of the most popular Blue Streak®
OE Durability Improved Coils are now
available in multi-packs. These are
available for both import and domestic
vehicles and help technicians replace all
coils at once for a complete repair.

A total of 30 Blue Streak® Coil Multi-Pack Kits are currently available with more to come.





FD503K8
Ford
Cars, Trucks & SUVs
(2019-97)





UF487K6
Toyota / Lexus
Cars, Trucks & SUVs
(2022-05)





UF270K8
Chrysler / Dodge / Jeep
Trucks & SUVs
(2008-99)



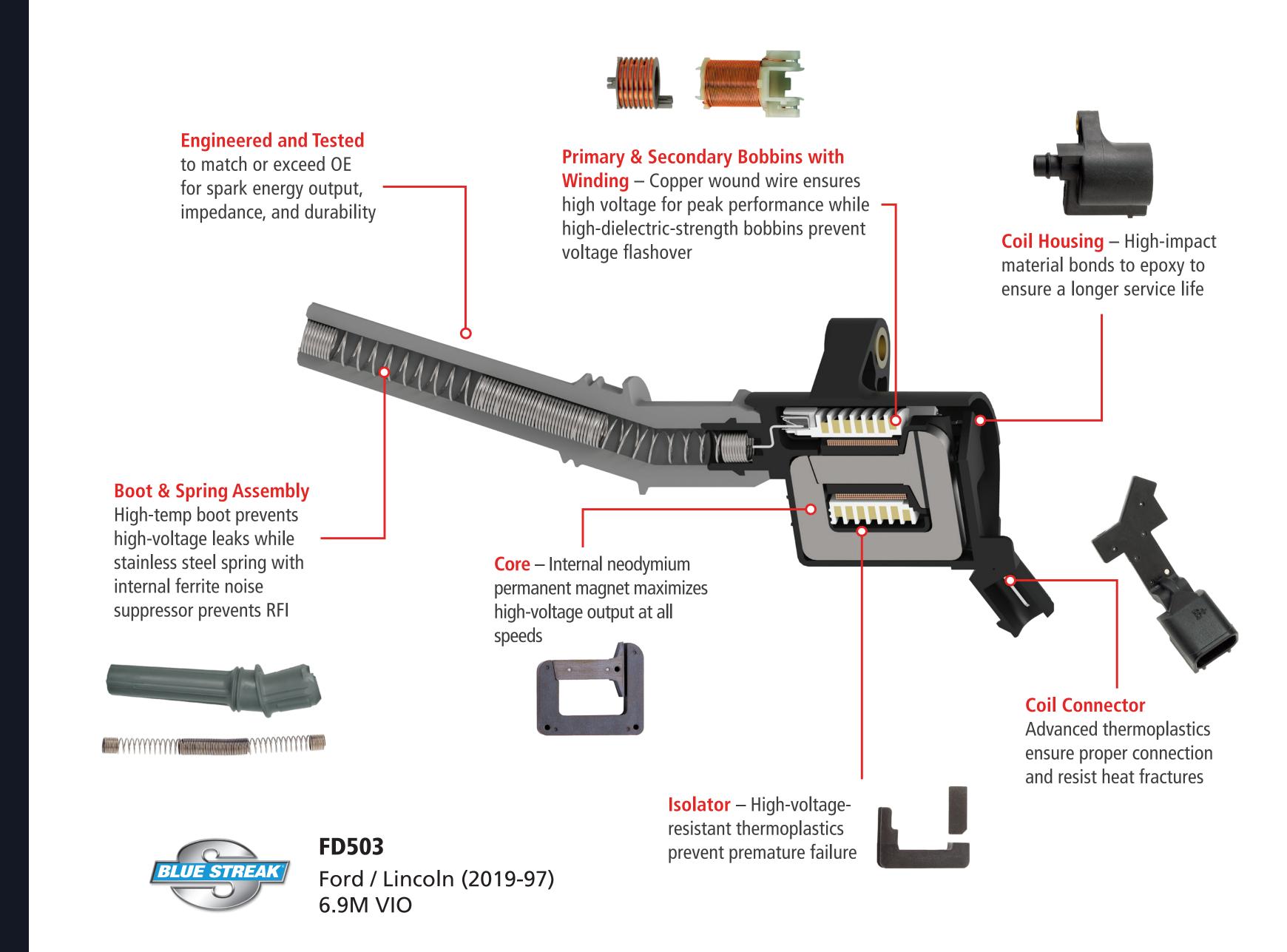


Multi-packs StandardBrand.com

## Engineering Improvements

Premium parts start with premium components. Each Standard® and Blue Streak® Ignition Coil is engineered with features to ensure that our Coils will perform under the most extreme conditions.

Heat is a leading cause of coil failure. The Blue Streak® FD503 features multiple design improvements to improve insulation and reduce operating temperatures. This means better-performing and longer-lasting lgnition Coils.







Ignition Coils StandardBrand.com

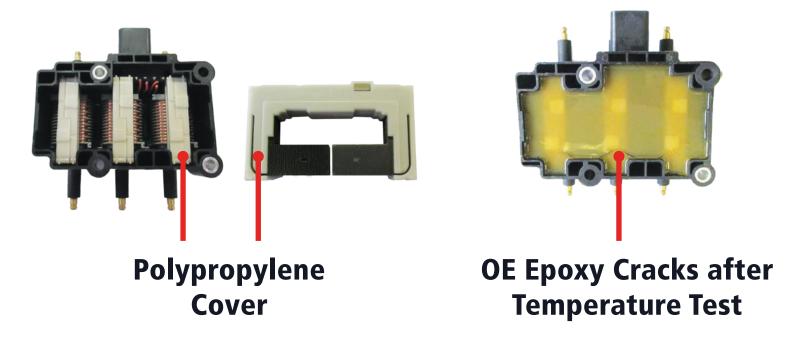
## **Engineering Improvements**

In addition to an inability to manage high temperatures, moisture intrusion is another common reason that OE coils fail. Our engineers identify OE weak points and design Coils that last.

### **Engineering a Longer-Lasting Coil**

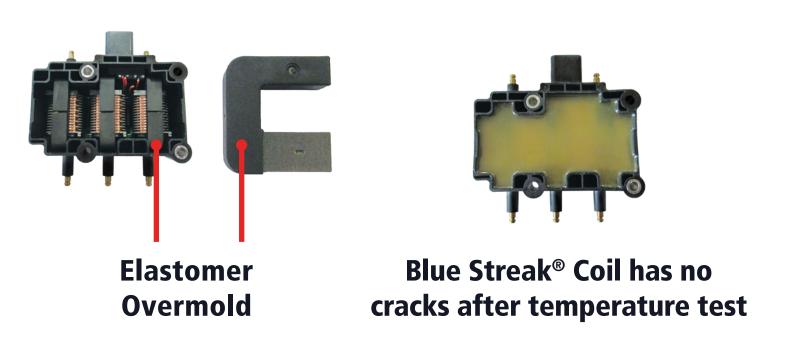
### **OE Problem:**

Higher temperatures cause the epoxy to crack, allowing moisture in and causing the OE coil to fail



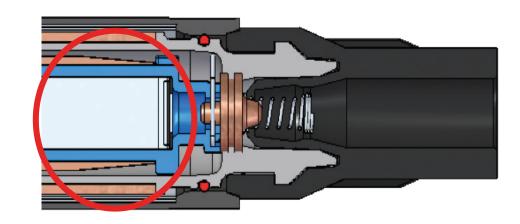
### Solution:

Blue Streak's epoxy stays intact, keeping moisture out and allowing the Coil to perform as designed



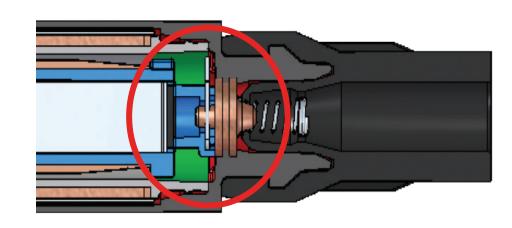
### **OE Problem:**

Moisture intrusion causes the OE coil to prematurely fail when the O-ring breaks down





We engineered an improved, one-piece design that eliminates the need for an O-ring and removes the chance of moisture intrusion







Ignition Coils StandardBrand.com

### Manufacturing

Standard® engineers and manufactures high-quality Ignition Coils and components at our state-of-the-art facility in Bialystok, Poland.

Highlights of the IATF 16949 and ISO 9001-certified facility include lean manufacturing methods and vertically integrated manufacturing processes that include multi-spindle winding, injection molding, potting, curing, and welding.



Ignition Components StandardBrand.com

## Testing and Validation

To ensure quality, all products manufactured at the SMP Poland facility undergo a full spectrum of measurement and life testing in addition to a full range of environmental analysis that includes thermal shock, thermal cycling, salt spray, vibration, and storage tests.

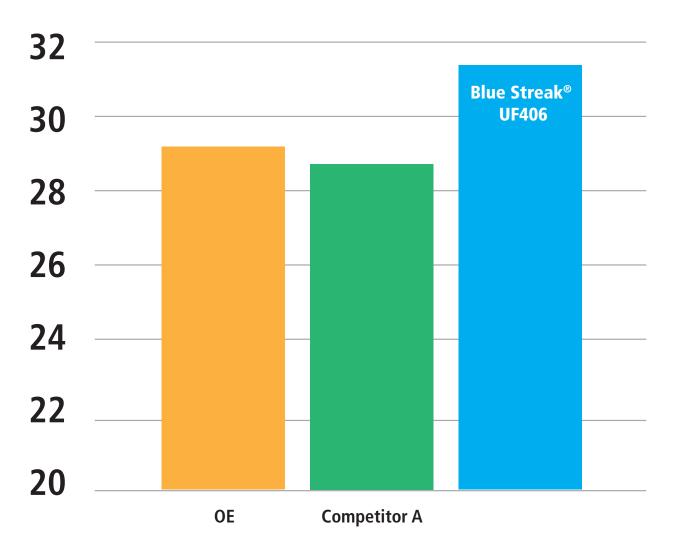
The result is a line of premium ignition components that perform flawlessly and stand up to real-life conditions.

### **Salt Spray Test**



Blue Streak® UF549 has an upgraded brass bushing which outperformed the OE and competitors in a 200-hour salt spray test.

### Spark Energy [mJ]



Blue Streak® UF406 has 7% higher spark energy than OE.



Blue Streak® OE Durability Improved Ignition Coils are tested and validated to be the highest-quality Coils available on the market.

STANDARD Ignition Components StandardBrand.com

# Standard® Pro Training Tech Tip

As experienced ASE-certified automotive technicians themselves, Standard® Pro Trainers are experts in Ignition System technology.

Here's what they say to look out for during an ignition coil install.



When replacing a faulty ignition coil, make sure that the driver in the PCM has not been damaged by a shorted coil — This is especially prevalent in Ford 2-wire coils



If an intake plenum needs
to be removed to access
an ignition coil, do your
customer a favor and
replace all the ignition
coils on that bank at the
same time



When replacing an ignition coil, replace all the secondary ignition components (plugs, boots, wires) as well



Ignition Components StandardBrand.com

# Standard® Professional Training

Award-Winning In-Person, Live Virtual, and Online Learning

Standard® Pro Training delivers accredited classes that educate technicians in the latest automotive repair technologies, and techs can earn CEU credits.

An extension of Standard® training, our extensive YouTube video library has over 600 technical and installation videos.







**Diagnosing Ignition Problems** 

**Automotive Ignition Fundamentals** 

**Misfire Diagnostics 101** 

**Misfire Diagnostics 102** 

**Misfire Troubleshooting Tips** 

**Essential Driveability Diagnostic Skills** 

**Diagnosing Low Power** 



**Available Classes** 

**Misfire Diagnosis** 

**Lab Scope Power User** 

**Ignition System and Cam/Crank Synchronization** 

**Powertrain Electronics** 

**Advanced Drivability Diagnostics** 

**Unleash the Power of Your Scan Tool** 



For information on replacing ignition coils, search "Coil" on the **StandardBrand** YouTube channel



