### STANDARD® AND FOUR SEASONS® HYBRID AND EV COMPONENTS

## Highlights

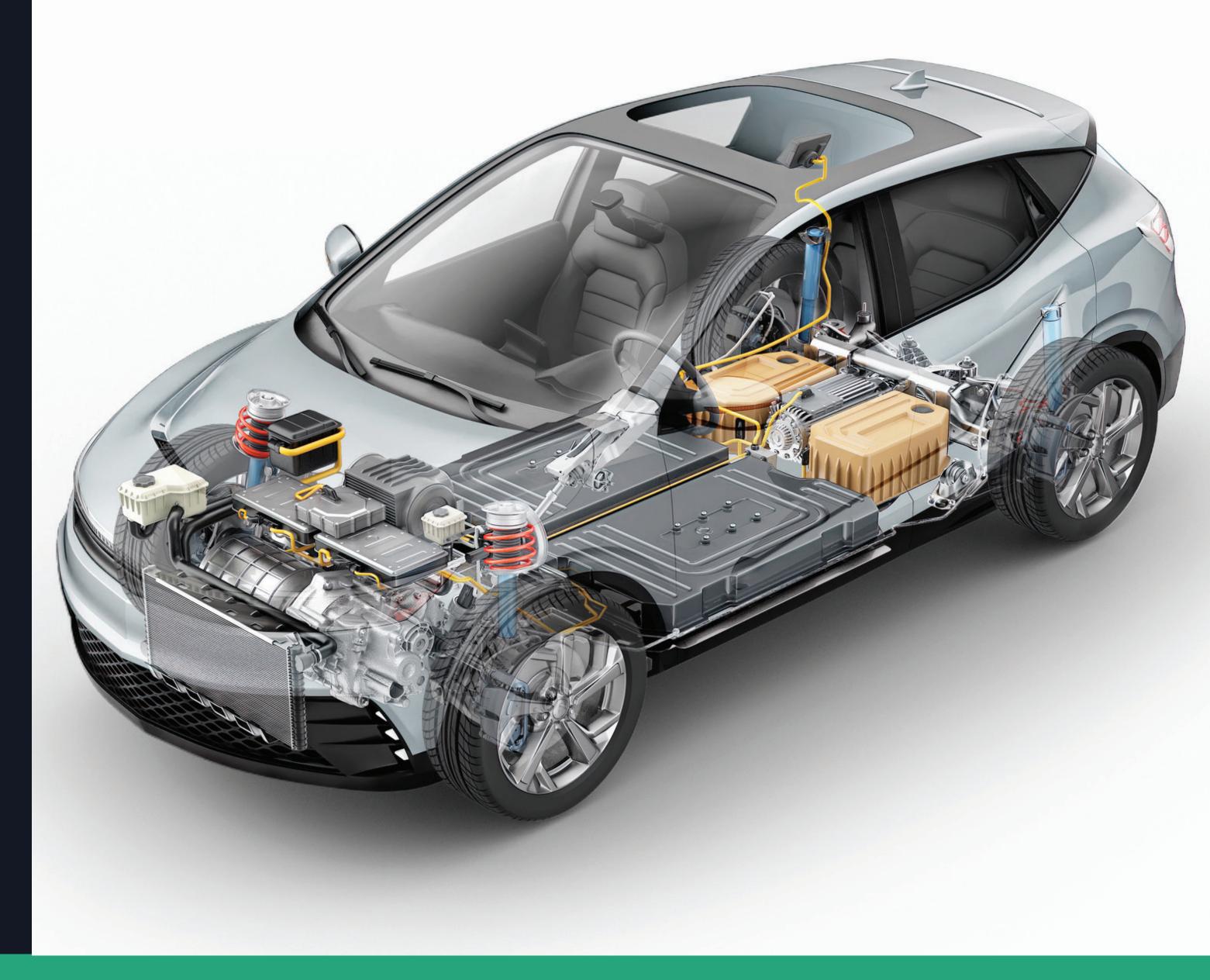
Over 4,600 parts for hybrid vehicles are available from Standard® and Four Seasons®

More than 2,500 parts for electric vehicles are offered by Standard® and Four Seasons®

Many of the same parts that fail on Internal Combustion Engine (ICE) vehicles also fail on hybrids and EVs



What's in your box?™



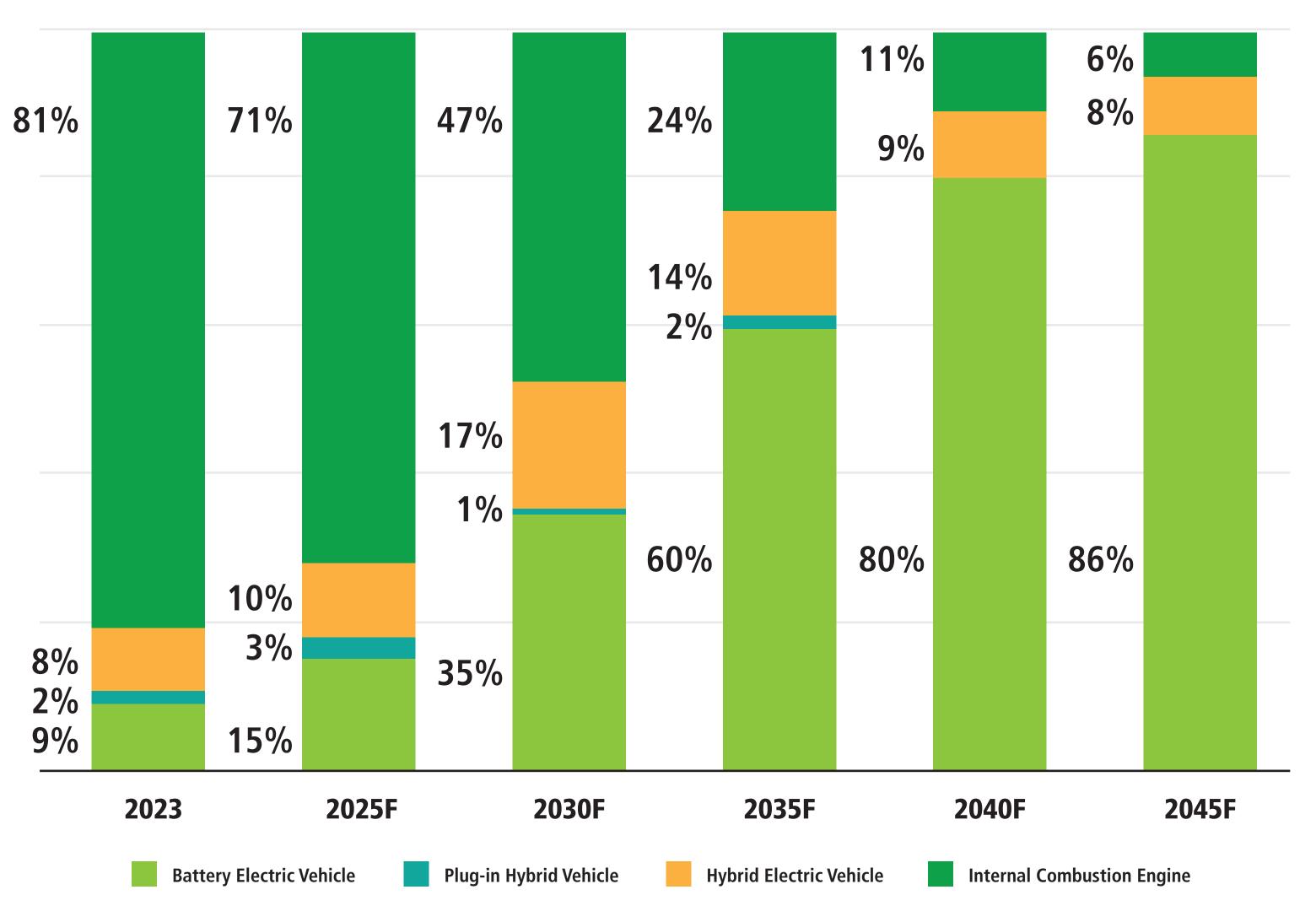


# Growing Market

Today, around 91% of all new vehicles sold still have an ICE powertrain (including hybrids and plug-in hybrids), but that share is projected to decrease quickly in the coming years. By 2030, more than half of all vehicles sold will have some type of electric powertrain, with 35% being full electric.

Full-electric vehicles are projected to represent 60% of all new vehicle sales by 2035 and hybrids will account for another 16%. Standard® has evolved with vehicle technology for over 100 years and we are prepared for the shift in powertrains.

### **U.S. New Vehicle Sales by Powertrain**



Source: 2023 Joint EV Trends and Outlook Forecast; Autocare Association & AASA

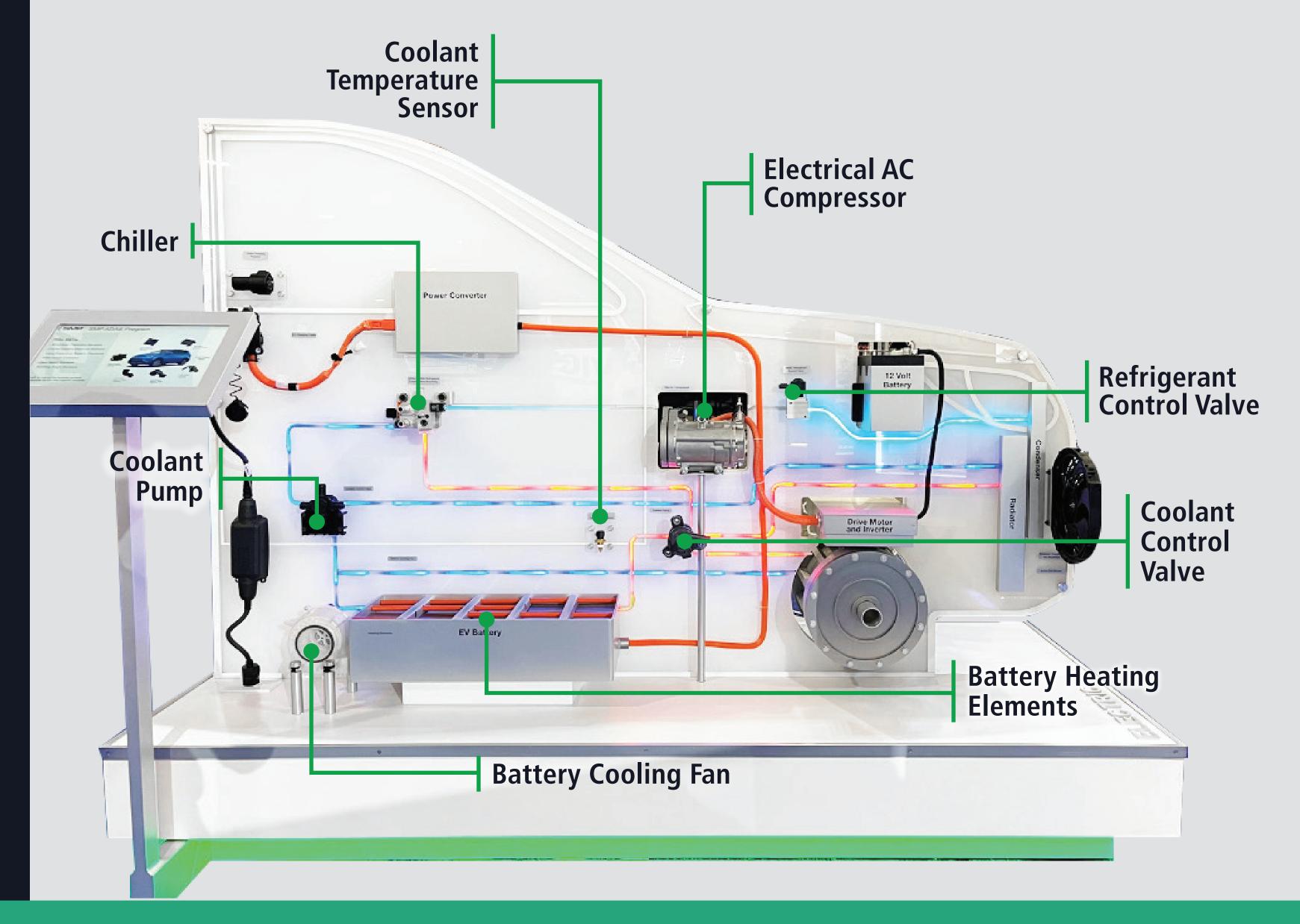


Hybrid & EV Components StandardBrand.com

## New Opportunities

Hybrid and electric vehicles represent new and different service opportunities. AC compressors are becoming larger and electrical rather than belt driven, electric vacuum pumps are required for adequate braking assistance and multiple new components are used for heating and cooling the large drive batteries. Standard® and Four Seasons® are leading the way with aftermarket solutions for these new and growing categories.

### Standard® and Four Seasons® Electric Vehicle Display







# Hybrid Sales Opportunity

With two different systems powering each vehicle, hybrids have more components compared to gas or diesel vehicles. Many hybrids are also more than 10 years old. More parts and an aging population means that hybrid service opportunities will grow in the coming years.

### **Did You Know**

Hybrids like the Toyota Prius and Ford Interceptor Utility are becoming increasing popular for fleets.



**ABS Speed Sensors** 

**EVAP** 

**Variable Valve Timing** 

**ADAS** 

**Fuel Injection** 

**Ignition Coils** 

Battery Cooling
Charging Cables

**Blower Motor Resistors** 

**Electronic Throttle Bodies** 

Switches

**Climate Control** 

Cam & Crank Sensors

**TPMS** 

...and more





### Powertrain-Neutral Parts

Standard® and Four Seasons® have more than 50,000 parts that are powertrain neutral. That means the parts are the same whether the powertrain is gas, diesel, hybrid or electric.

Hybrids and EVs use the very same ADAS components, A/C compressors and thousands of other switches, sensors, actuators and connectors.

50,000+

**POWERTRAIN-NEUTRAL PARTS** 







### What's New

### Four Seasons® Electric Cooling Pumps

Hybrid and electric vehicles utilize electric coolant pumps to keep the battery and the drive motor operating at the optimum temperature. Four Seasons® has introduced coverage for 6.1 million hybrid and electric vehicles and is regularly adding new high-quality pumps.

For the very latest applications, please visit 4S.com.



89065
Tesla Model S (2016-12)
Nissan Leaf (2017-11)
VIO: 160K





89069 Chevrolet Volt (2019-16) VIO: 67K





89072 Toyota Prius (2022-16) VIO: 552K





Hybrid & EV Components
4s.com

### What's New

### Standard® Hybrid and Electric Vehicle Components

As hybrid and electric vehicles grow in popularity, many of the components used on them are model specific and do not fit other vehicles. Standard® has the resources and manufacturing expertise to introduce these components quickly so that you have a quality aftermarket solution, without having to go to the dealer.

For the most current applications, be sure to check out our catalog at StandardBrand.com.



# APS692 Accelerator Pedal Sensor Ford Mustang Mach-E (2023-21) VIO: 62K





EVB006
Door Handle Repair Kit
Tesla Model S
(2021-12)
VIO: 178K





PPS163
Park Assist Sensor
Toyota Prius
(2022-16)
VIO: 443K





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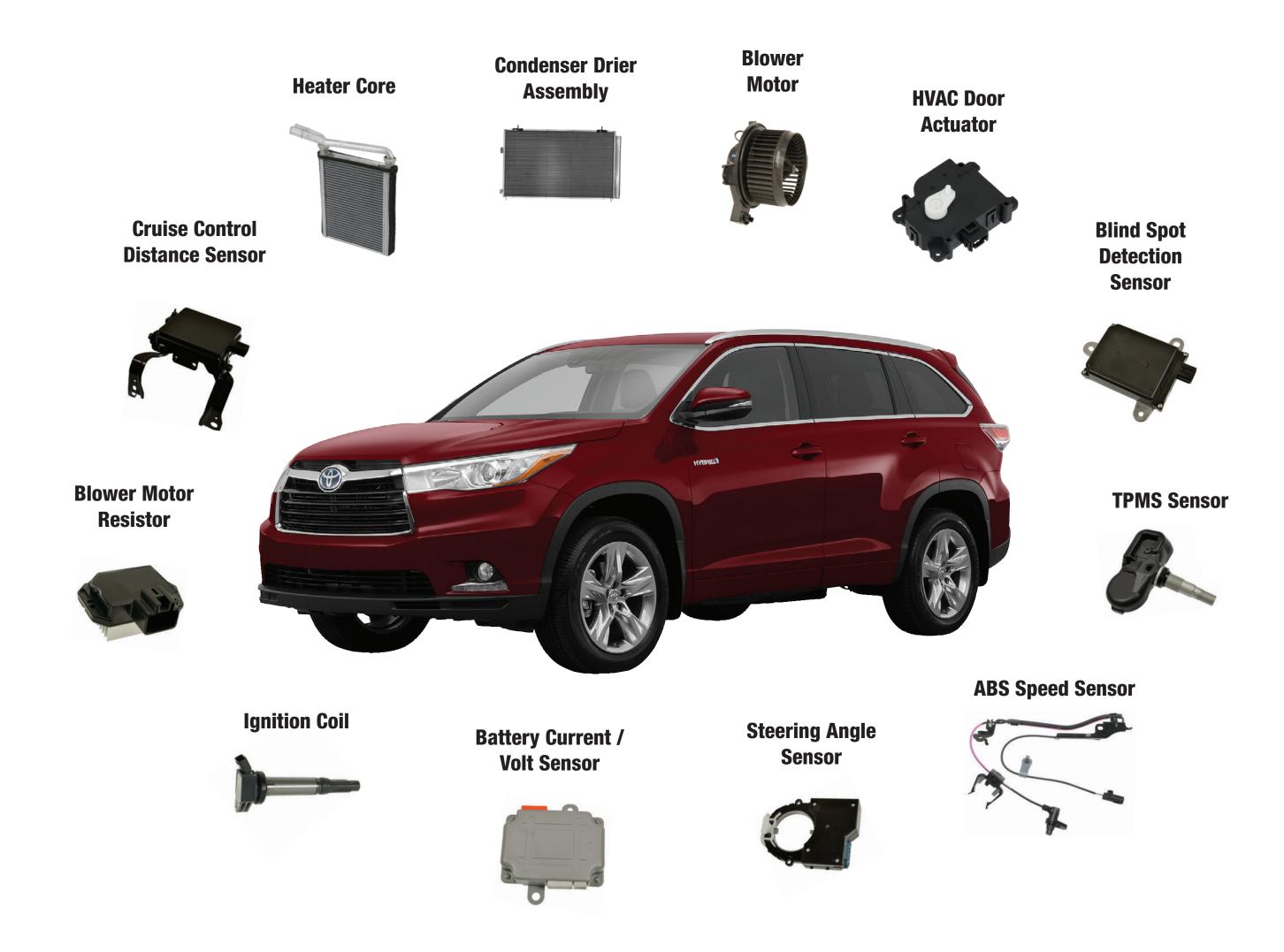
# Hybrid Vehicle Coverage

With an aging population and almost 7 million vehicles on the road, service opportunities for hybrids are on the rise. Standard® and Four Seasons® have thousands of replacement parts for import and domestic hybrid vehicles.

**Hybrid Coverage** 

4,000+ PARTS 150
MODELS

### Standard® and Four Seasons® have 140+ parts for the 2014 Toyota Highlander Hybrid







# Electric Vehicle Coverage

Electric cars are still cars, and many of the same parts that fail on gaspowered cars fail on electric cars.

Standard® offers more than 2,500 parts for electric vehicles and our coverage is continuing to expand.

**EV Coverage** 

2,500+ PARTS 50
MODELS

### Standard® and Four Seasons® have 40+ parts for the 2019 Chevrolet Bolt EV





## Tesla Coverage

Teslas remain the most popular electric vehicles on the road.

Standard® and Four Seasons® have multiple components for a variety of systems specifically for Teslas.

### Standard® and Four Seasons® Tesla Coverage







# Charging Cables & Adapters

Quick, reliable charging is critical for the daily use of electric vehicles. Standard® offers both universal and vehicle-specific charging cables as well as an adapter that allows Tesla owners to charge their vehicle at any charging station.

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

#### **Did You Know**

Charging EVs and PHEVs generates a lot of heat in the battery. The battery cooling system must be operating properly for the vehicle to charge.



# Universal Charging Cable Import & Domestic Cars & SUVs VIO: Universal





EVB004
Charging Cable
Toyota Cars & SUVs
(2022-10)
VIO: 822K





EVB001
Charging Adapter
Tesla Cars & SUVs
(2023-08)
VIO: 1.6M





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# Four Seasons® Battery Cooling Fans

Batteries in hybrid and electric vehicles require constant cooling. This helps both battery life and the range of the vehicle. Four Seasons® offers multiple Battery Cooling Fans for popular import and domestic hybrid vehicles. For a complete list of applications, visit 4s.com.

#### **Did You Know**

An excessive amount of debris or animal hair can get ingested into battery cooling fans. Ensure the inlet to the fans is clean to prevent overheating.



#### 76810

Toyota & Lexus Hybrid Cars (2017-10)

VIO: 851K



### 76807

**Toyota Hybrid Cars** 

(2009-04)

VIO: 432K



### 76809

**Toyota & Lexus Hybrid Cars** 

(2020-18)

VIO: 362K



#### 76803

**Honda Hybrid Cars** 

(2016-05)

VIO: 184K



#### 76802

**GM Hybrid Cars** 

(2018-11)

VIO: 160K



### 76800

**Ford & Lincoln Hybrid Cars** 

(2018-13)

VIO: 159K



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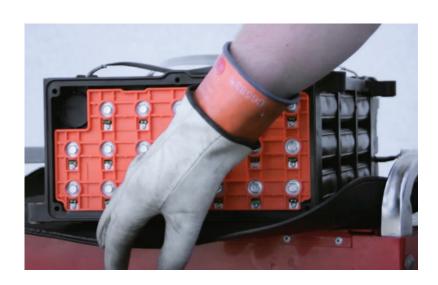
# Standard® Quality

Hybrid, EV, gasoline or diesel, our parts are engineered, manufactured and tested to function correctly in all driving conditions.

**Hybrid & EV Components** 









### **Research and Development**

We have 13 R&D Centers around the world including New York, South Carolina, Poland and Germany. We are committed to developing the best-performing aftermarket parts available

### **Precision Manufacturing**

From start to finish, we are an expert manufacturer, validating all components including raw materials.

Our manufacturing facilities are IATF 16949,

ISO 9001 and ISO 14001 certified

### **Testing and Performance Analysis**

Thermal shock, vibration, salt spray and more, Standard® parts are subjected to a series of tests and undergo a detailed validation process

#### **On-Vehicle Validation**

Hybrids and EVs have complex electronic systems. Our parts are tested on vehicles to make sure they function correctly and integrate with all electronic systems



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# Standard® Pro Training Tech Tip

As experienced ASE-certified automotive technicians themselves, Standard® Pro Trainers are experts in Hybrid & EV systems.

Here's what they say to look out for when servicing a hybrid or electric vehicle.



Safety is the first priority
when working on hybrids
or EVs — Make sure you
have an understanding
of how the electric drive
system works, and wear
the appropriate
protective equipment



above 80%, verify that
the vehicle isn't in "Green
Energy Mode" — This mode
leaves extra capacity in the
battery in case the vehicle is
driven extensively downhill,
and for regenerative braking



When testing a Honda HEV,
view the "Battery Pack
Capacity" data PID — If it
doesn't read over 55 Amp/
Hours, it is getting to the
end of its useable life



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# 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.





#### **Available Classes**

**Electric Vehicle Safety Concerns** 

**EV** and Hybrid Service Tips

**Late Model Hybrid Systems** 

**Chevrolet Volt Overview** 

**Toyota Hybrid Tips** 

**Honda Hybrid Tips** 

**Hybrid Battery Diagnosis** 

**Electric Vehicle HVAC Components** and Operation



#### **Available Classes**

**Vehicle Electrification / Hybrid Tips** 

**Powertrain Electronics** 

**Modern AC Diagnosis and Repair** 





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