EMISSION CONTROL PROGRAM

NAPA® Echlin® offers more than 1,250
EVAP components for import and
domestic applications

Echlin® also offers over 600 crankcase and 980 exhaust gas recirculation (EGR) emission components

Echlin® Emission Control components are precision engineered and tested for maximum durability and OE-matching performance

What's in your box?™ Here's what's in ours.



Growing Market

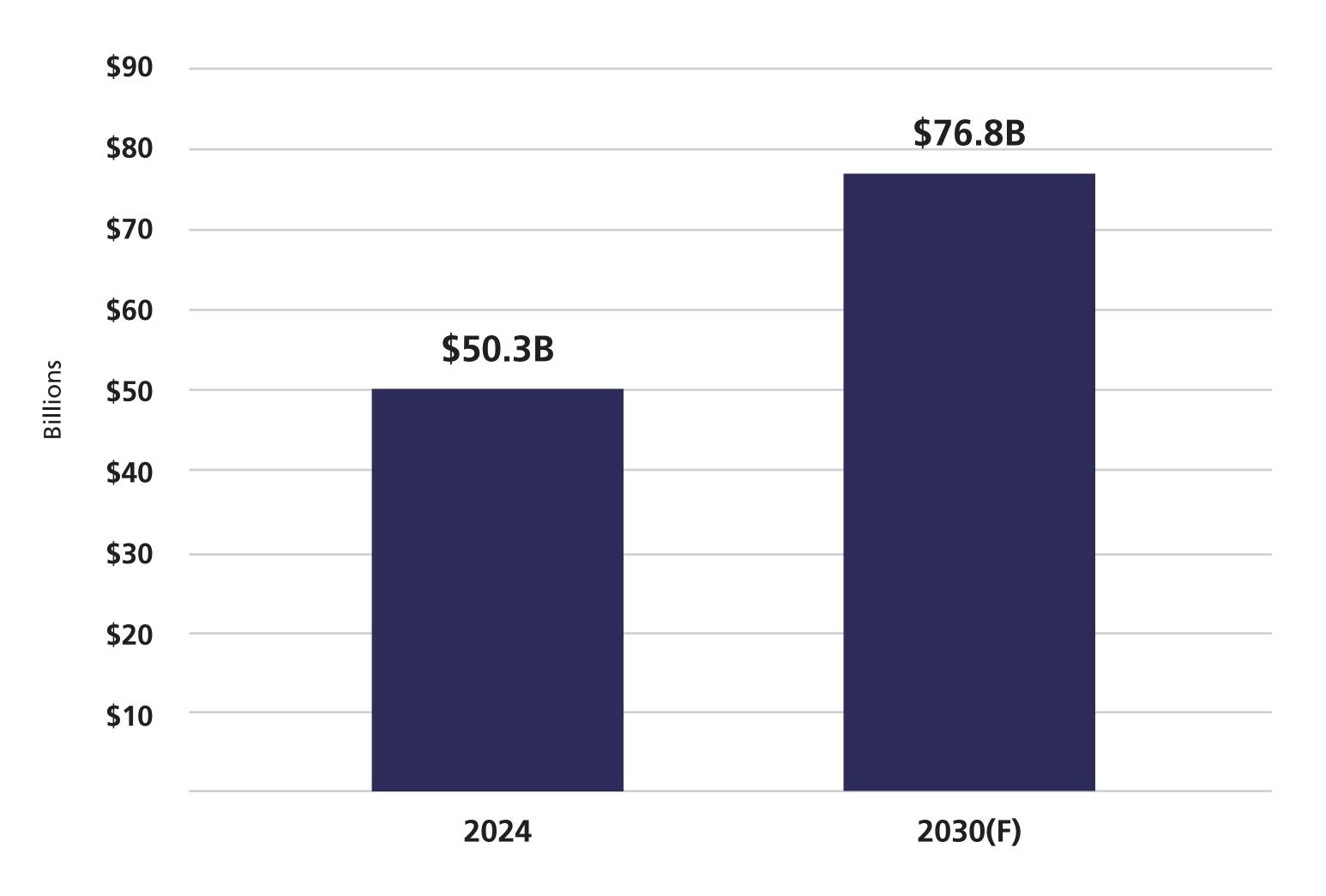
Vehicles on the road today are equipped with multiple emission systems that will require both service and maintenance over their lifetimes. To meet ever-tightening emission Echlins, vehicle manufacturers have gone to great lengths to make internal combustion engines cleaner and more efficient than ever before. These complex systems and additional components will create more and more service opportunities in coming years.

Key Growth Categories:

- EGR Valves
- PCV Valves

- Air Pumps
- Fuel Vapor Canisters

Automotive Emissions Market

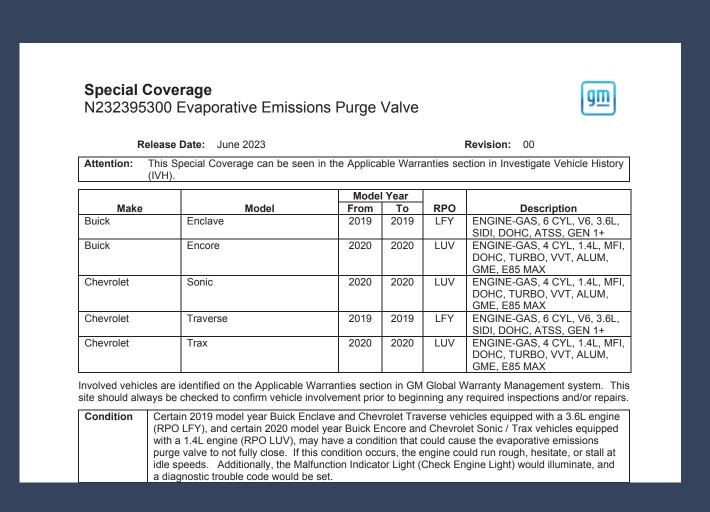


Source: Verified Market Reports, 2024



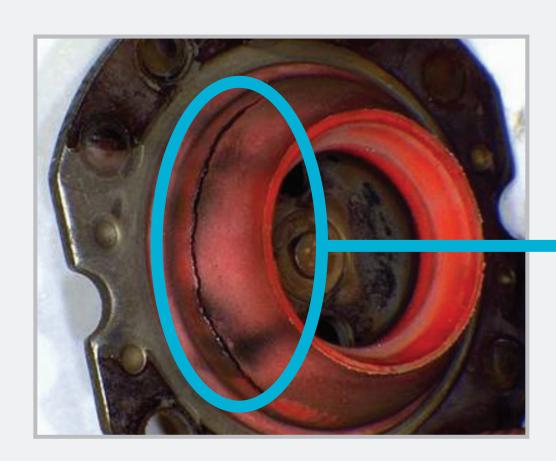
Opportunities

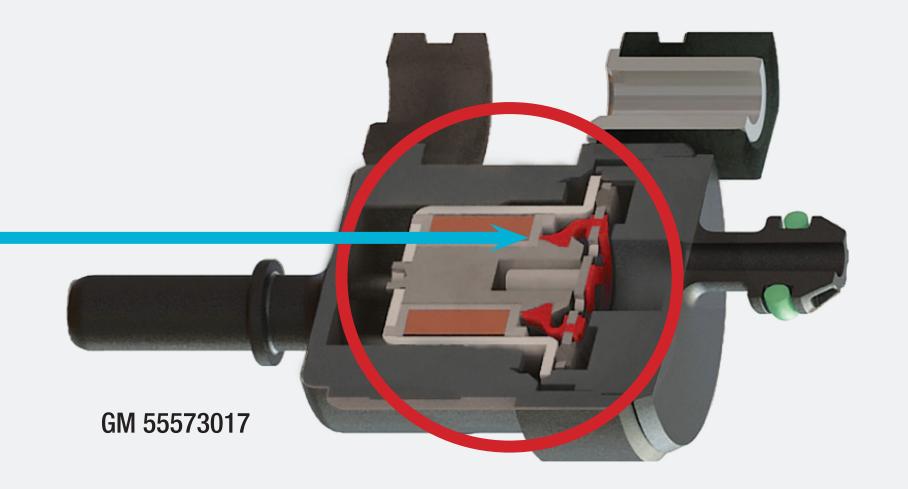
The purge valves in many popular GM 4- and 6-cylinder vehicles are known for high failure rates. We engineered a more robust component, addressing the weak points in the OE design while maintaining the correct operating specifications of the original.



GM Service Bulletin N23295300

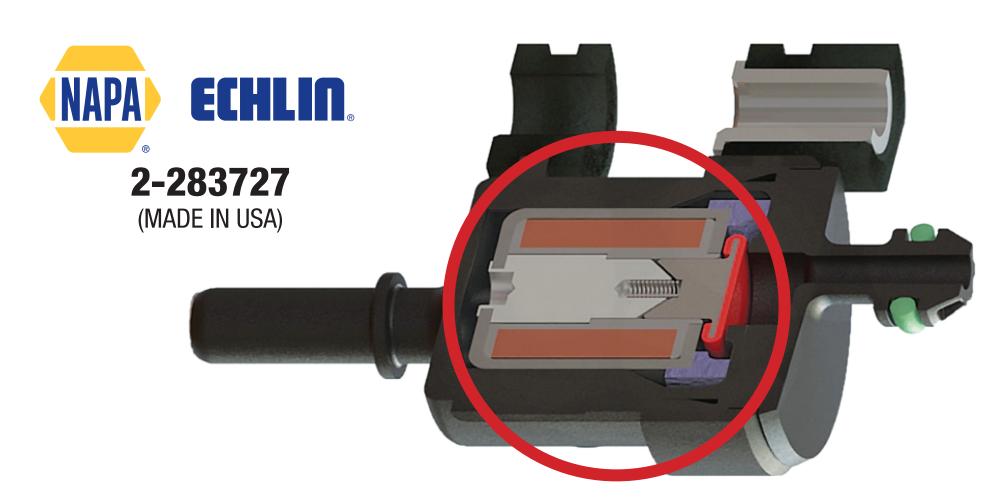
OE Problem: The plunger assembly cracks, causing a system leak





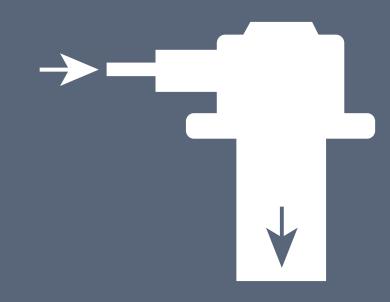
Echlin® Solution: Updated plunger design improves durability

- A cylindrical design was incorporated and a bobbin was added to help maintain correct alignment
- By keeping the plunger in alignment, wear on the seal is reduced, resulting in a longer-lasting component





Impact on Engine Systems



An EGR valve that is stuck open allows exhaust gases into the intake passage, resulting in low vacuum and a rough running condition



A stuck closed vent valve

(normally open to the
atmosphere) will make the
fuel tank difficult to refill
due to vapors being forced
out of the filler neck,
instead of going through
the canister as intended



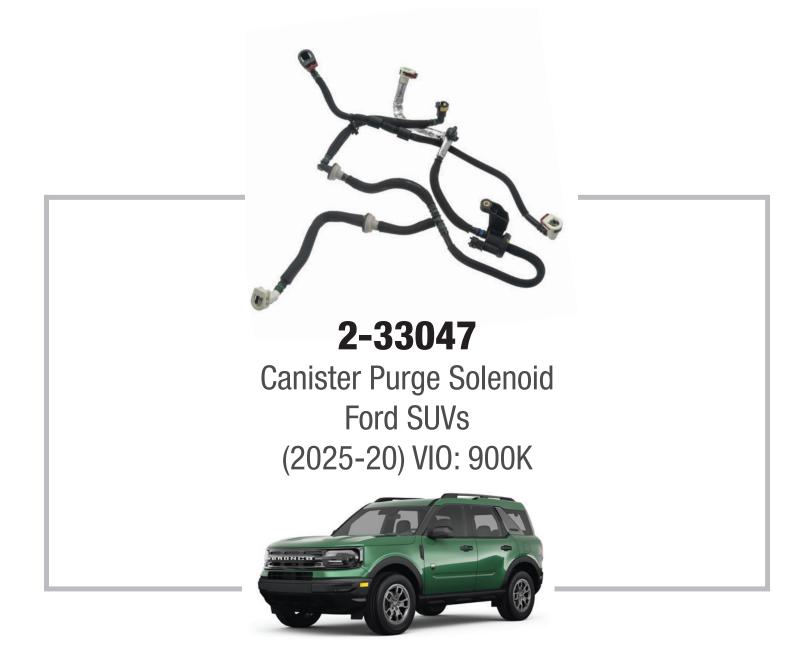
A stuck open purge valve
(normally closed) will allow
excessive vapors to flow
into the engine, creating a
"flooded" situation and the
vehicle being hard to start

Emission Control Program NAPAEchlin.com

EVAP Components

Echlin's industry-leading, 1,250+ SKU EVAP emission catalog covers millions of repair opportunities for vehicles on the road today. Installing high-quality EVAP components is extremely important. Low-quality parts may leak and fail inspection or not integrate with the existing system properly. All Echlin® EVAP components are extensively tested so technicians can be confident they are installing the highest-quality parts.

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









EVAP Components NAPAEchlin.com

Crankcase Emission Components

Echlin's already 600+ part crankcase emission catalog grows each year to provide technicians with a range of high-quality repair solutions. Key features of our Crankcase Breather Hoses and PCV Valves include OE-matched fittings and high-quality seals for a quick repair and long-term reliability.

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



Engine Oil Separator Ford SUVs (2024-20) VIO: 900K





2-9788
PCV Valve
Fiat / Jeep / RAM SUVs & Vans
(2023-18) VIO: 1.2M





SEP698
Engine Oil Separator
GM Trucks
(2023-17) VIO: 1M





2-603Vacuum Hose Ford / Lincoln Trucks, SUVs & Vans

(2023-14) VIO: 1.4M



EGR Components

EGR systems are constantly evolving to help reduce vehicle emissions. Echlin's 980 EGR components provide repair solutions today and into the future. From EGR valves and coolers to gaskets and solenoids, Echlin® has what you need for your customers' vehicles.

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







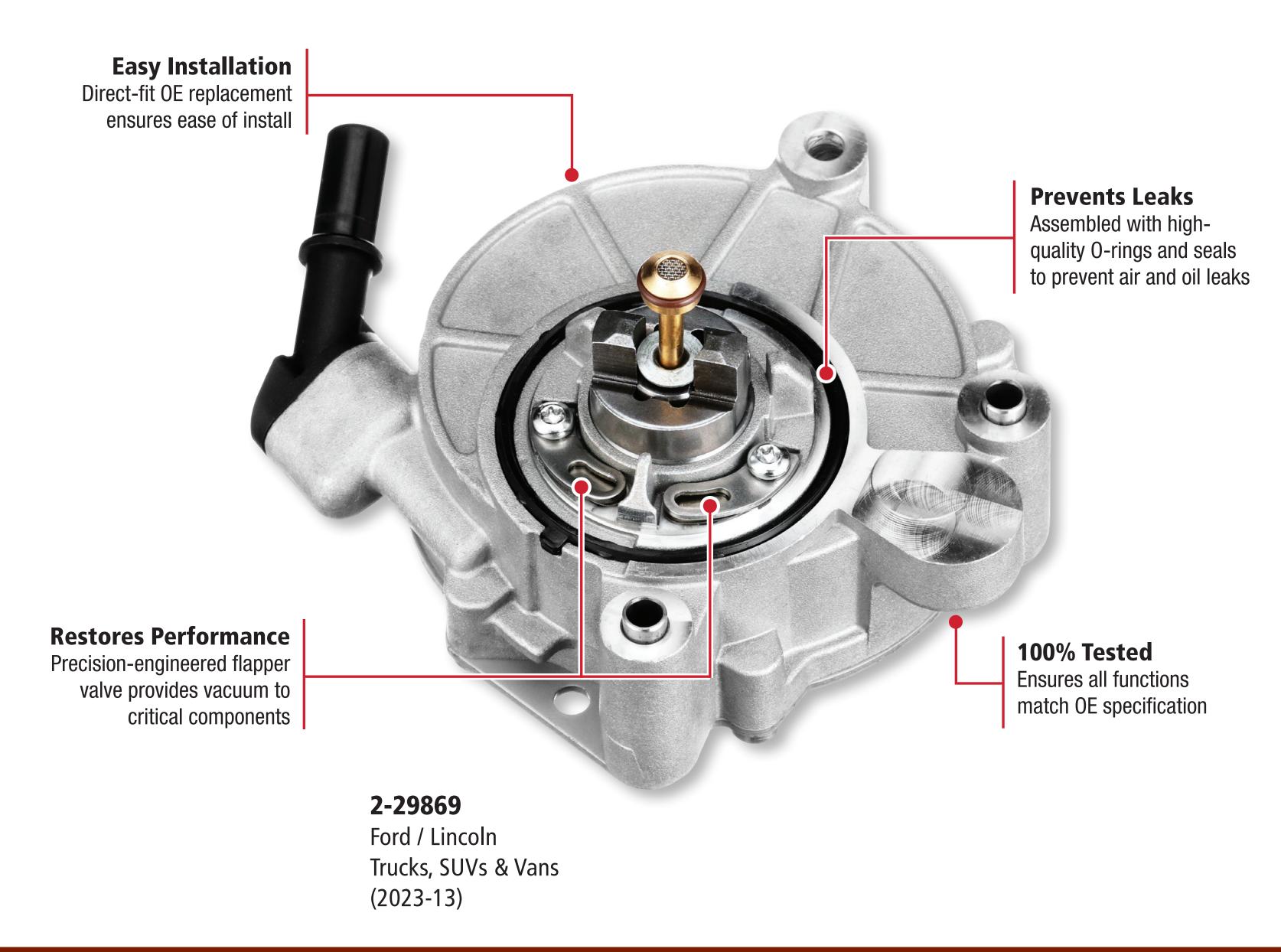


EGR Components

NAPAEchlin.com

Vacuum Pumps

Vacuum pumps provide multiple key components with the vacuum they require to operate correctly. Power brake system boosters are a critical component that requires a vacuum pump to provide adequate braking force. Vacuum pumps are also required for emission solenoids and turbocharger wastegate actuators.



NAPAEchlin.com

(NAPA) ECHLIN. Vacuum Pumps

EVAP Components

Evaporative Emission Control Systems, also referred to as 'EVAP,' are responsible for preventing fuel vapors from escaping into the atmosphere from a vehicle's fuel system.

Echlin's EVAP components are designed to seamlessly integrate with the vehicle's computer and existing emission system, ensuring this vital system operates as intended.



Canister Purge Valves

Manufactured using high-temperature-resistant synthetic materials to maximize service life while minimizing the effect of underhood temperatures

120+ SKUs / 84M VIO



Canister Vent Solenoids

Our proprietary molding technology provides superior resistance to harsh environmental conditions and drastically reduces the possibility of leaks

145+ SKUs / 151M VIO



Canister Vent Valves

Extensive testing ensures performance and reliability in extreme environments

25 SKUs / 20M VIO



Canister Purge Solenoids

Designed to match OE specifications and seamlessly integrate with the vehicle's EVAP system

300+ SKUs / 202M VIO



EVAP Components

NAPAEchlin.com

EVAP Components

Echlin® utilizes the highest-quality material and manufacturing processes to ensure that all EVAP components meet OE specifications and operation requirements.

Our engineers design every part so they can easily be installed and trusted by technicians to function exactly as the OE manufacturer intended.



Fuel Vapor Canisters

Manufactured with the highest-grade materials for prolonged life and superior performance

600+ SKUs / 247M VIO



Fuel Vapor Leak Detection Pumps

Direct-fit OE replacements accurately detect evaporative leaks with the utilization of engine vacuum

70+ SKUs / 48M VIO



ESIM (Evaporative System Integrity Module)

Designed and tested to accurately detect pressure change and provide corresponding voltage information to the vehicle's PCM

5 SKUs / 23M VIO

*ESIMs are a type of leak detection pump designed by Chrysler. These components use two weights, a diaphragm, and a switch to detect pressure differences across a variety of conditions.

EVAP Components

NAPAEchlin.com

Top Movers: EVAP Components

IMPORT APPLICATIONS



2-282647
Canister Vent Solenoid
Nissan / Infiniti
Cars, Trucks, SUVs & Vans
(2024-03)



2-283735
Canister Purge Solenoid
Toyota / Lexus / Scion / Mazda
Cars, Trucks & SUVs
(2022-06)



2-284043
Canister Purge Solenoid
Toyota / Lexus
Cars, Trucks & SUVs
(2023-14)



2-71067
Fuel Vapor Leak Detection Pump
Toyota / Suzuki
Cars, Trucks & SUVs
(2014-04)



2-283753
Canister Purge Solenoid
Honda / Acura
Cars, Trucks & SUVs
(2017-06)

DOMESTIC APPLICATIONS



2-283727
Canister Purge Solenoid
GM
Cars, Trucks & SUVs
(2020-09)



2-282571

Canister Purge Solenoid

GM

Cars, Trucks, SUVs & Vans

(2020-03)



2-283993
Canister Purge Solenoid
Ford / Lincoln
Cars, Trucks, SUVs & Vans
(2021-11)



2-282570

Canister Purge Solenoid

GM

Cars, Trucks, SUVs & Vans

(2014-04)



2-284016
Canister Purge Valve
GM
Cars & SUVs
(2021-11)

EVAP Components NAPAEchlin.com

Precision Engineering

Evaporative System Integrity Modules (ESIM), also known as Evaporative System Integrity Monitors, are a key EVAP component on many late-model Chrysler, Dodge, Jeep, RAM and Fiat vehicles. Unlike previous leak detection systems, ESIMs do not contain a solenoid. Instead, ESIMs use two weights, a diaphragm and a switch to detect pressure differences across a variety of conditions.

Echlin® Evaporative System Integrity Module





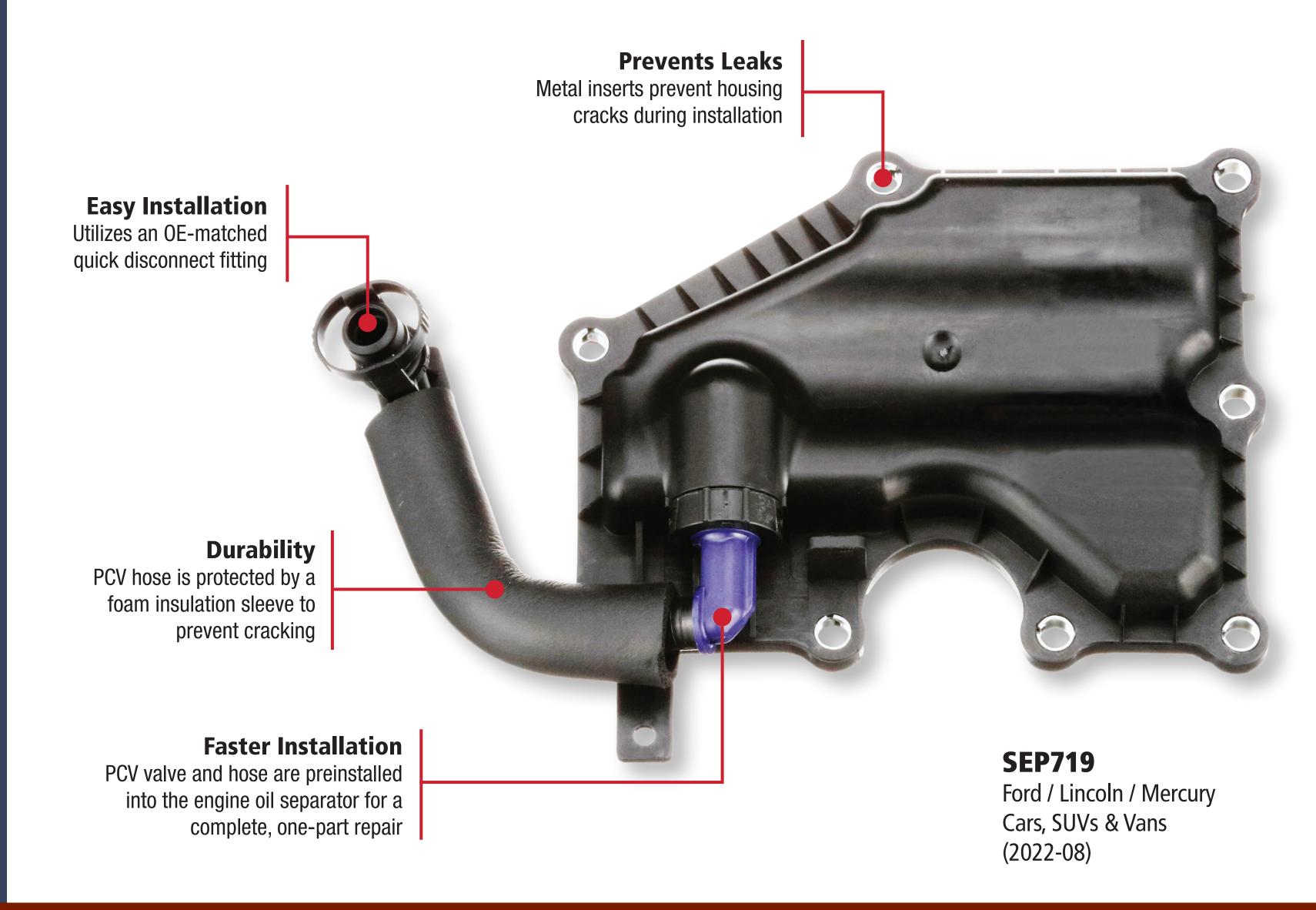
EVAP Components

NAPAEchlin.com

Precision Engineering

Engine oil separators stop oil from recirculating into the cylinders, preventing carbon buildup. Excessive carbon on valves and pistons can cause driveability issues and may lead to major repairs. Echlin® Engine Oil Separators are engineered and tested to keep engines operating efficiently.

Echlin® Engine Oil Separator





EVAP Components NAPAEchlin.com

Crankcase Emission Components

Echlin's 600+ Crankcase Emission
Components are designed, manufactured,
and tested to ensure that the vehicle
maintains long-term reliability,
performance, and fuel economy.

Did You Know

Many forced-induction vehicles rely on the PCV valve to protect internal engine components. Under heavy load, a failed PCV valve will allow positive pressure into the crankcase, possibly damaging the vital seals inside of it.



PCV Valves

Reroutes crankcase gases to the intake where they are burned in the combustion process

360+ SKUs / 197M VIO



Engine Crankcase Breather Hoses

Constructed using temperatureresistant materials and OE-style fittings to ensure easy install and proper function

135+ SKUs / 118M VIO



PCV Grommets

Manufactured using high-quality synthetic materials to resist breakdown from heat and promote a long-lasting seal around the PCV valve

20+ SKUs / 11M VIO



Engine Oil Separators

Designed to reduce carbon buildup and maintain engine efficiency by separating oil from recirculating crankcase gases

NAPAEchlin.com

55+ SKUs / 33M VIO



Crankcase Ventilation Filters

Engineered and tested to match OE filtration specifications

15+ SKUs / 8M VIO



Top Movers: Crankcase Emission Components

IMPORT APPLICATIONS



2-9651
PCV Valve
Hyundai / Kia
Cars & SUVs
(2023-07)



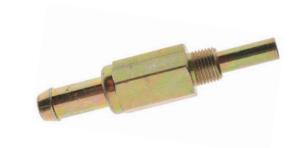
2-9541
PCV Valve
Nissan
Cars, Trucks, SUVs & Vans
(2020-02)



2-9709
PCV Valve
Honda / Acura
Cars & SUVs
(2019-13)



2-9520
PCV Valve
Honda / Acura
Cars, Trucks & SUVs
(2019-03)



2-9496
PCV Valve
Multiple Applications
(2019-80)

DOMESTIC APPLICATIONS



2-9210
PCV Valve
GM
Cars, Trucks, SUVs & Vans
(1999-70)



2-9627
PCV Valve
Chrysler / Dodge / Jeep / RAM
Cars, SUVs & Vans
(2020-07)



2-9397
PCV Valve
Ford / Lincoln
Trucks, SUVs & Vans
(2004-97)



2-9220
PCV Valve
GM
Cars, Trucks, SUVs & Vans
(2012-70)



2-9688
PCV Valve Elbow
GM
Cars & SUVs
(2023-04)

EGR Program

Echlin's nearly 1,000 part EGR catalog offers a wide selection of high-quality replacement parts ranging from EGR Valves to hoses and switches, as well as repair kits and Pressure Feedback Sensors.

Echlin® EGR components are subject to stringent testing and validation processes which ensure long-term durability, reliability and service life.



EGR Valves

Built from industrial-grade materials for durability and calibrated to ensure precise operation

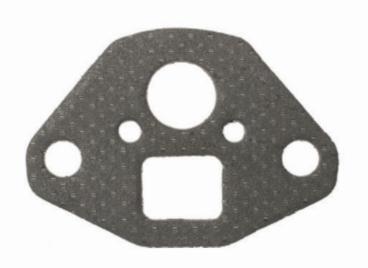
600+ SKUs / 92M VIO



EGR Control Solenoids

Made with the finest components including multiple precious metal contacts and polymer thick film resistors

70+ SKUs / 30M VIO



EGR Valve Mounting Gasket

Designed and manufactured using application-specific, heavy-duty materials to seal against extreme EGR temperatures

185+ SKUs / 88M VIO

Echlin's offering of EGR Emission Products also includes:

EGR Delay Valves

EGR Pressure Feedback Hoses

EGR Repair Kits

EGR Time Delay Control Switches

EGR Tubes

EGR Valve Control Solenoid Filters

...and much more

EGR Components

NAPAEchlin.com

Top Movers: EGR Components

IMPORT APPLICATIONS



2-26684

EGR Valve

Mazda / Ford

Cars, SUVs & Vans

(2023-03)



2-26653
EGR Valve
Mazda / Ford / Mercury
Cars & SUVs
(2006-01)



2-2520
EGR Valve Mounting Gasket
Multiple Applications
(2019-72)



2-26793

EGR Valve

Honda / Acura

Cars, Trucks & SUVs

(2020-08)



2-26333
EGR Valve
Honda / Acura
Cars, Trucks & SUVs
(2010-97)

DOMESTIC APPLICATIONS



2-26809
EGR Valve
Chrysler / Dodge / Jeep
SUVs
(2011-07)



2-26486
EGR Valve
Chrysler / Dodge / Jeep
Cars, Trucks & SUVs
(2010-03)



2-3001

EGR Valve

Ford / Lincoln / Mercury

Cars, Trucks, SUVs & Vans

(2011-95)



2-36000 EGR Valve GM Trucks & SUVs (1995-87)



2-26154

EGR Valve

GM

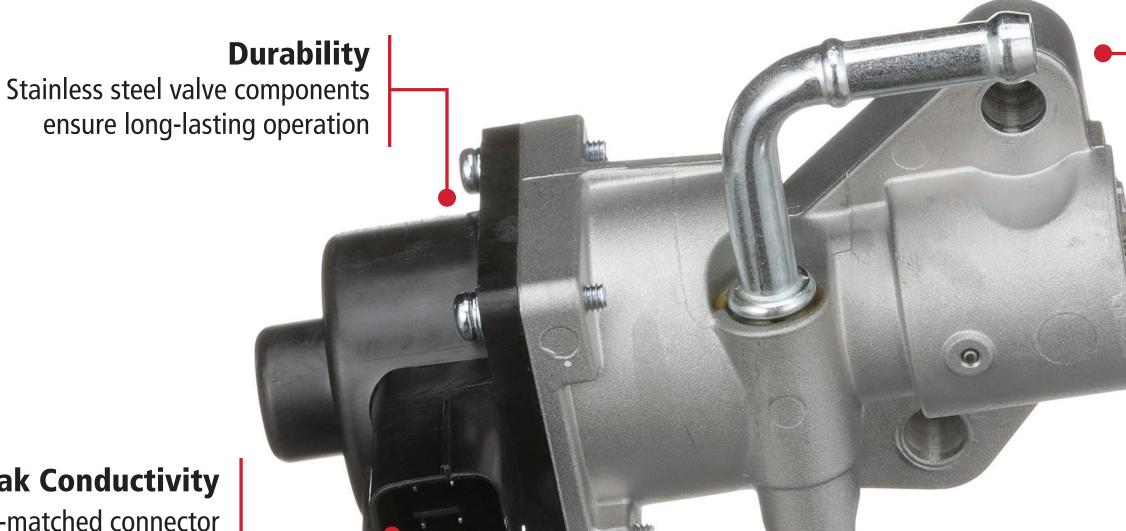
Cars, Trucks, SUVs & Vans

(2005-93)

Precision Engineering

Every Echlin® EGR Valve is manufactured and calibrated for precise performance. To ensure troublefree operation, each one must pass comprehensive quality testing including computer-controlled bench testing for resistance, leakage, and response and flow rates.

Echlin® EGR Valve



Corrosion-Resistant

Anti-rust coating provides additional protection against harsh elements

Peak Conductivity

OE-matched connector fits the factory engine wiring harness

2-26684 Ford / Mercury / Mazda Cars, SUVs & Vans

(2023-03)





Easy Installation

Includes EGR gaskets for a comprehensive and complete repair

(NAPA) ECHLIN.

EGR Components NAPAEchlin.com

Precision Manufacturing in the USA

Popular emission components such as ESIMs and Canister Purge Solenoids are manufactured in the USA at our Greenville, SC and Independence, KS facilities. Many other key emissions components are designed and manufactured at our Reynosa, Mexico facility, helping to maintain a strong North American manufacturing footprint. This allows us to completely control the manufacturing process from raw materials all the way to a finished part, ensuring your customers receive a 100% tested and approved quality component.

SMP USA Emission Control Manufacturing Facilities

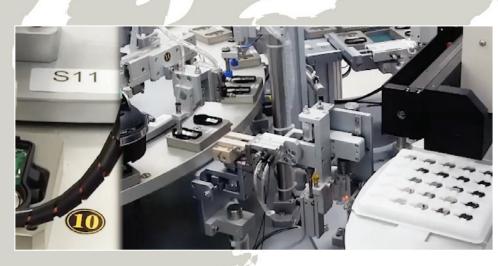
Popular Categories Made in USA:

- Canister Purge Valves
- Canister Vent Valves
- Canister Purge Solenoids
- Canister Vent Solenoids

- Leak Detection Pumps
- ESIMs
- PCV Valves



Independence, KS 🗀



Greenville, SC

Testing and Validation

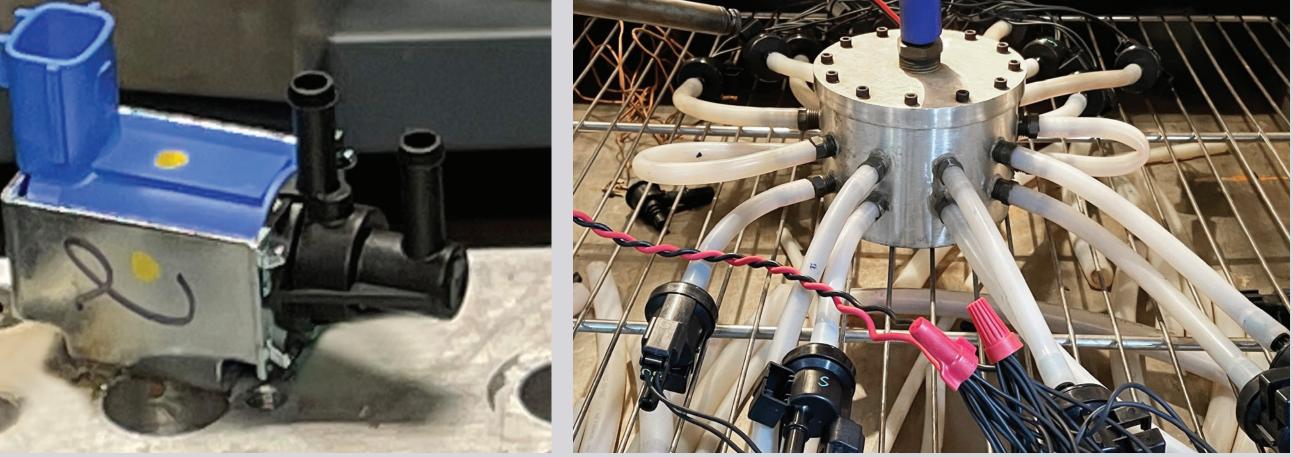
All Echlin® emission components undergo extensive testing, examination, and product validation. Performance benchmarking, product life-cycle testing, and end-of-line testing ensures that each part meets OE quality and operation.

Every testing process, while varying, remains thorough. For example, Echlin® Canister Purge Solenoids are subject to extreme condition tests including accelerated wear, thermal cycling, thermal shock, salt fog, vibration, and drop testing.



Echlin® Emission Control products undergo on-vehicle testing at our Irving, TX facility.





Canister Purge Solenoids undergoing vibration testing (left) and thermal cycle testing (right) at our Independence, Kansas facility.

NAPAEchlin.com

Echlin® Pro Training Tech Tip

As experienced ASE-certified automotive technicians themselves, Echlin® Pro Trainers are experts in emission systems.

Here's what they say to look out for during an emission system service.



After an EVAP system is
repaired, it is important to
verify the repair by running
a self test and verifying that
no DTCs have returned (this
might not be possible for
some small EVAP leak codes)



Crankcase breather systems on newer vehicles are now monitored and can set DTCs. **Some of these components** are labor intensive to access, so it is effective to replace them while other components are removed (starter, transmission, turbo, etc.)



Without a DTC, EVAP leaks

can be difficult to find.

Using a smoke machine

to fill the system and find

leaks is an excellent way to

diagnose a problem

Echlin® Professional Training

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

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

An extension of Echlin® training, our extensive YouTube video library has over 500 technical and installation videos.









Available Classes

Chrysler EVAP Tips and Tricks

Diagnosing Catalytic Converter Codes

Diagnosing Secondary AIR Injection Systems

EVAP System Diagnosis

Lean Engine Diagnosis

Misfire Diagnostics

Rich Engine Diagnosis



Available Classes

Advanced Engine Mechanical Diagnostics

EVAP Diagnostics

Ford Gas Vehicle Update

GM Engine Controls

Keeping It Clean - Emission Diagnostics and Repair

Misfire Diagnosis

Nissan / Infiniti Diagnosis



Emission Control Program

100 Years of Excellence

For 100 years, marketing support materials and advertisements have been created to build Echlin® into a well-known, trusted, and reputable national brand.

Building brand loyalty and recognition with professional technicians takes decades. For 100 years, Echlin® has been supporting NAPA® with national advertising campaigns and more recently, effective technical training programs. Most importantly, the Echlin® brand has endured because generations of professional technicians know they can trust what's in the box.

