

# Highlights

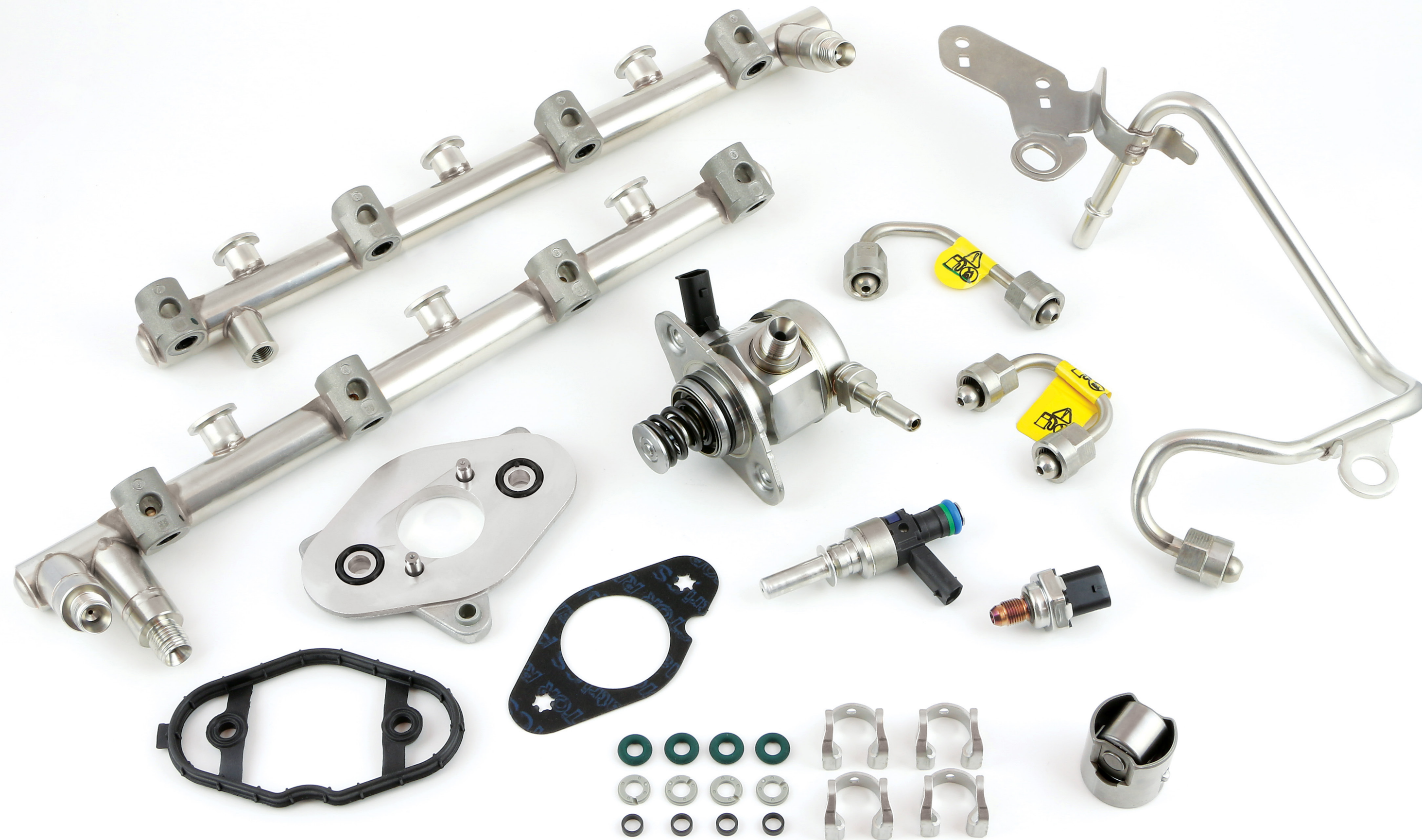
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The advertisement features a blue background with a yellow hexagonal logo on the left containing the word "NAPA" in blue. To the right of the logo is the word "ECHLIN" in white, with a registered trademark symbol. Below the logo, the text "ENGINE MANAGEMENT PRODUCTS" is written in white, stacked vertically. The background of the advertisement is a close-up image of an engine, showing various components like the cylinder head, valves, and timing belt. The overall design is clean and professional, emphasizing the company's focus on engine management products.

# What's in your box?



**NAPAEchlinGDI.com**



## GASOLINE DIRECT INJECTION

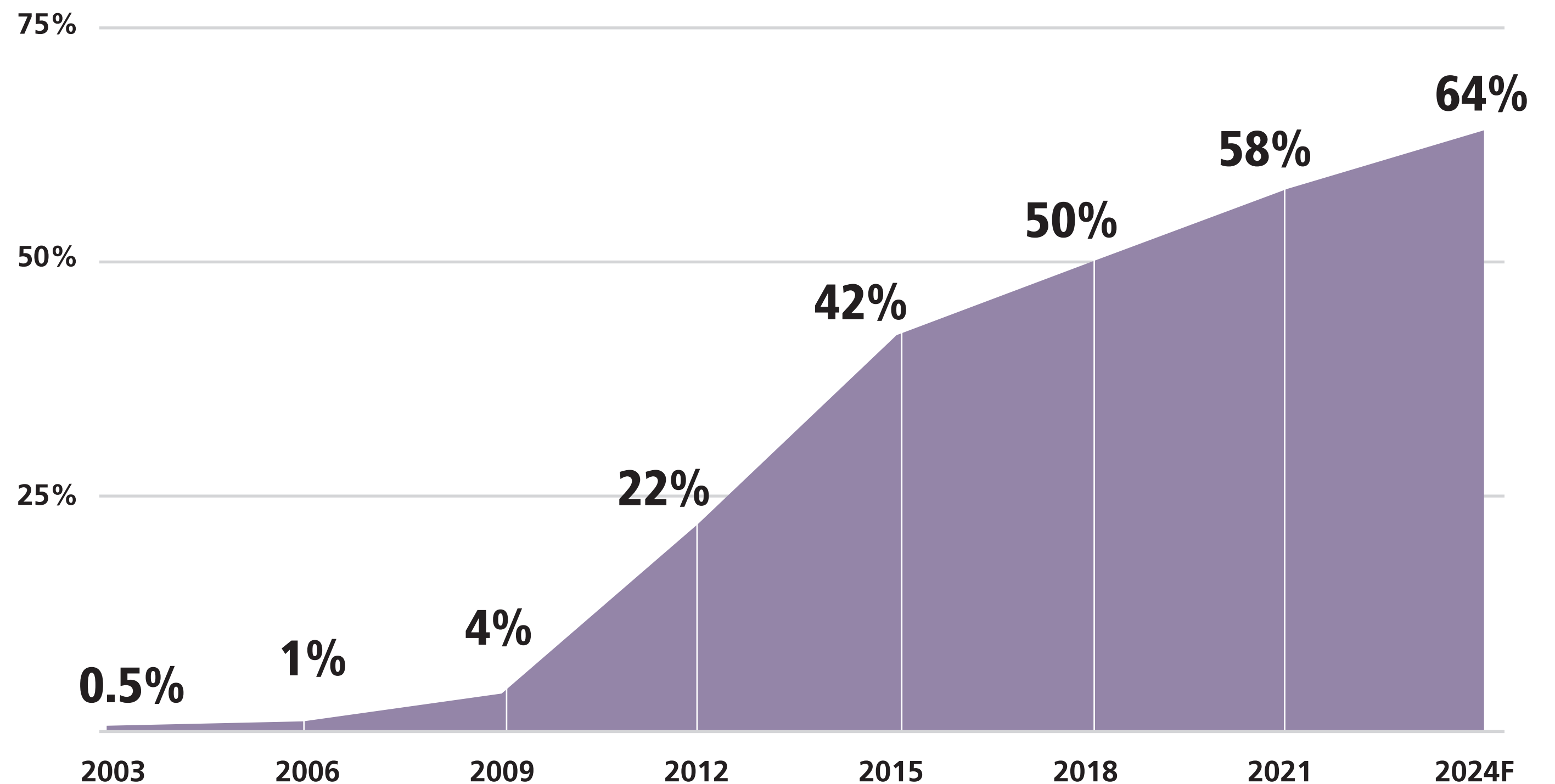
# Growing Market

To help improve fuel economy, vehicle manufacturers have quickly adopted Gasoline Direct Injection (GDI) technology.

GDI is now the fastest growing fuel injection segment with more than half the U.S. fleet equipped with GDI engines.

In fact, the use of GDI engines has grown by over 600% since 2010!

### Vehicles Equipped with GDI



Source: SMP Internal Data

GASOLINE DIRECT INJECTION

Sales Opportunities

There are many service repair opportunities within the GDI system. In 2020, Honda updated their TSB, alerting techs that the original GDI injectors are throwing numerous DTC codes and illuminating the MIL on late-model Odyssey, Pilot and Ridgeline.

Because NAPA® Echlin® offers a complete GDI program, we have everything Honda requires to complete this repair — a set of NEW GDI injectors, plus fuel feed lines, gaskets and seal kits!



MIL Comes On with DTC P0300-P0306 or P219A/B  
Supersedes 18-025, dated May 29, 2019, to revise the information highlighted in yellow.

AFFECTED VEHICLES

Year	Model	Trim Level	VIN Range
2018	Odyssey	ALL	ALL
2019		ALL	5FNRL6...KB000001 thru 5FNRL6...KB026674
2017-18	Pilot	ALL	ALL
2019		2WD ALL	5FNYP5...KB000001 thru 5FNYP5...KB001450
		4WD ALL	5FNYP6...KB000001 thru 5FNYP6...KB006305
2017-18	Ridgeline	ALL	ALL
2019		2WD ALL	5FPYK2...KB000001 thru 5FPYK2...KB002884
		4WD ALL	5FPYK3...KB000001 thru 5FPYK3...KB012495



SYMPTOM

The MIL comes on with DTC P0300 (random misfire detected), and/or P0301-P0306 (cylinder misfire detected), or P219A/B (air-fuel ratio variation of cylinder [bank 1, rear bank/bank 2, front bank]).

POSSIBLE CAUSE

Debris from the high pressure pump or the fuel injector machining process can cause internal wear or clogging inside the injector.

CORRECTIVE ACTION

Replace the fuel injectors.



NAPA® ECHLIN® SOLUTION

New GDI Fuel Injector

NAPA® Echlin's 2-39424 premium New GDI Fuel Injectors include the retaining clip to keep the the injectors in position while protecting against vibration

## GDI COMPONENTS

# Impact on Engine Systems



Fuel deposits that can foul injectors are a common problem in GDI engines — left unchecked, the deposits can actually alter the engine timing causing drivability problems



Under-maintained GDI systems can result in lower fuel economy, reduced performance and eventually, a costly valve cleaning



GDI engines operate at higher temperatures which can cause the oil to break down — it's important to strictly adhere to suggested oil change intervals on GDI engines



## GASOLINE DIRECT INJECTION

# What's New

GDI is the fastest growing fuel injection segment. NAPA® Echlin® is committed to introducing new GDI injectors regularly to give you the parts you need.

For the most recent applications check the online catalog at [www.NAPAEchlin.com](http://www.NAPAEchlin.com)



**2-39461**  
Ford 2.3L Truck & SUVs  
(2021-19)  
VIO: 1M



**2-39450**  
Ford Transit Connect  
(2020-19)  
VIO: 77K



**2-39514**  
Audi/VW A3, Golf  
(2020-15)  
VIO: 70K



## GASOLINE DIRECT INJECTION PROGRAM RELATED PARTS

# What's New

NAPA® Echlin's GDI Program is much more than injectors. We are continually expanding our industry-leading GDI components group including High Pressure Fuel Pumps, Fuel Feed Lines, and other GDI replacement parts to make sure technicians have everything needed for a complete GDI service.

For the most recent applications check the online catalog at [www.NAPAEchlin.com](http://www.NAPAEchlin.com)



### High Pressure Fuel Pump

**2-34117**

Hyundai and Kia 2.4L (2016-11)  
VIO: 2.1M



### High Pressure Fuel Pump

**2-34119**

Hyundai and Kia 1.6L (2015-13)  
VIO: 495K



### High Pressure Fuel Pump

**2-34170**

BMW 2.0L (2018-14)  
VIO: 315K



### Fuel Feed Line

**2-34478**

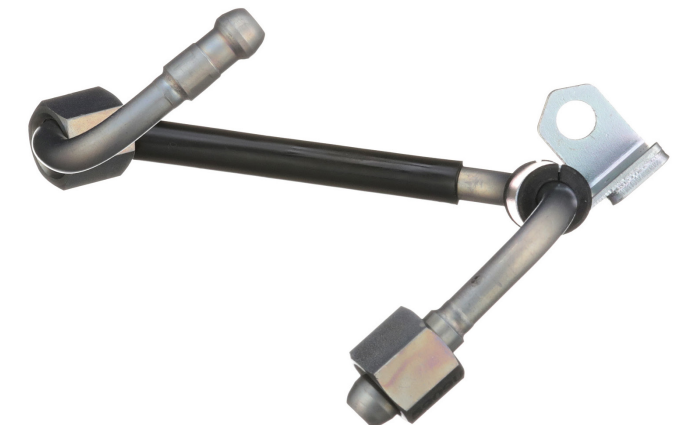
Ford 5.0L (2020-18)  
VIO:585K



### Fuel Feed Line

**2-34480**

GM 6.2L (2020-15)  
VIO: 6.2M



### Fuel Feed Line

**2-34477**

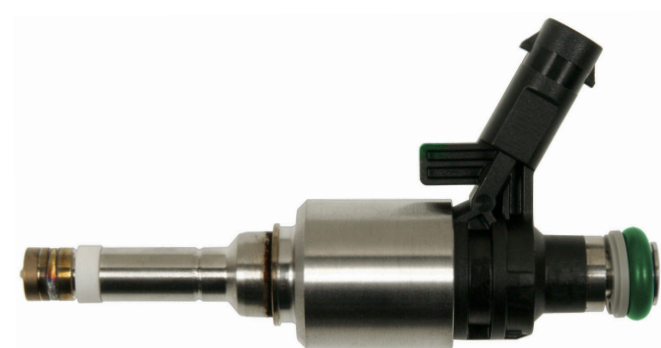
Nissan 5.6L (2021-12)  
VIO: 290K



NAPA® ECHLIN® NEW GDI INJECTORS

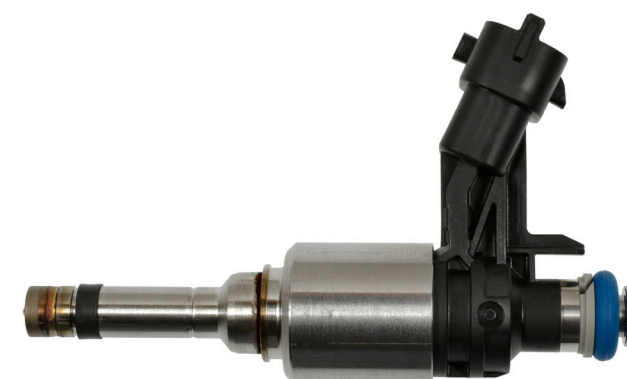
# Top Movers

## IMPORT APPLICATIONS



**2-39124**

Audi / VW Cars & SUVs  
(2017-08)



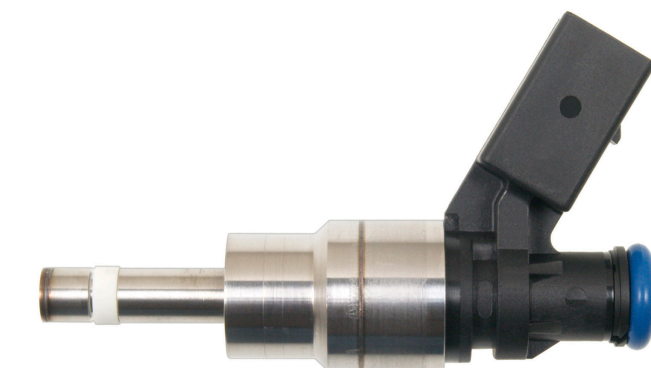
**2-39213**

Hyundai / Kia Cars  
(2017-12)



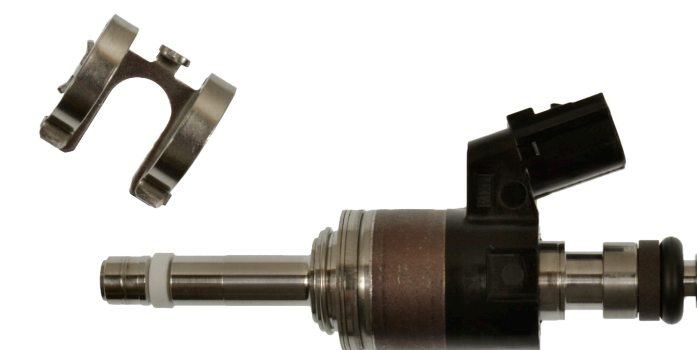
**2-18175**

Mazda 3, 6, CX-7  
(2013-06)



**2-1806**

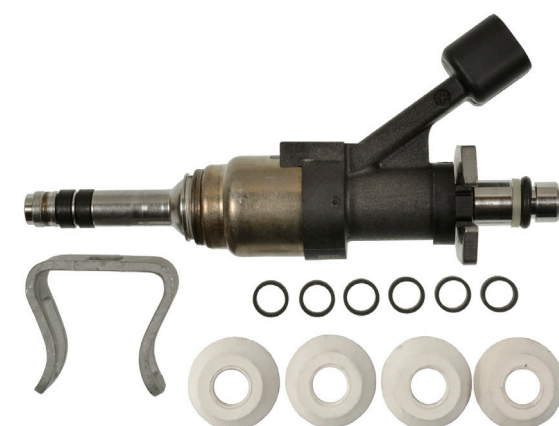
Audi / VW Cars  
(2011-05)



**2-39424**

Honda Odyssey, Pilot, Ridgeline  
(2020-16)

## DOMESTIC APPLICATIONS



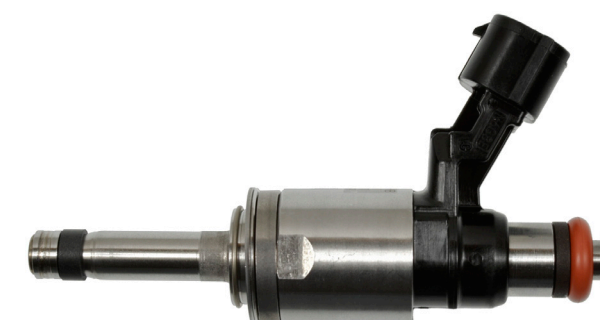
**2-39284**

Chevy / GMC Trucks & SUVs  
(2019-14)



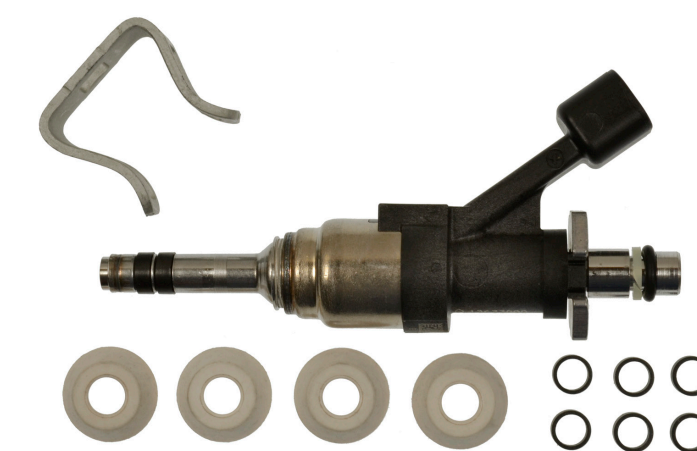
**2-39061**

GM Cars & Trucks  
(2011-08)



**2-39205**

Ford / Lincoln Trucks & SUVs  
(2019-11)



**2-39361**

Chevy / GMC Cars, Trucks, & SUVs  
(2018-14)



**2-39224**

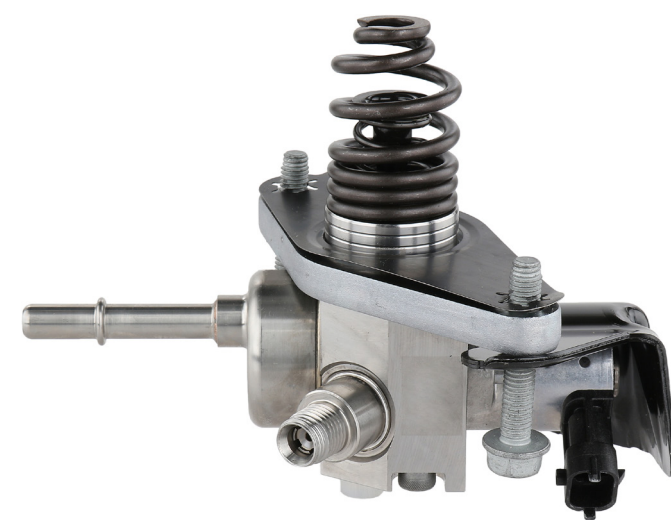
GM Cars & SUVs  
(2019-12)

NAPA® ECHLIN® GDI PROGRAM

# Related Components

The best GDI injector can't perform as designed with restricted fuel lines or worn gaskets.

NAPA® Echlin's GDI Program offers technicians everything they need for a complete, GDI fuel system service.



## GDI High Pressure Fuel Pumps

GDI Injectors operate up to 2,000 psi. Maintaining fuel pressure is critical to the optimal performance of GDI systems

70+ SKUs and coverage through 2022



## GDI O-Rings, Gaskets, and Plates

The right O-rings, gaskets and GDI plates are essential to a proper system service.

Import and domestic coverage through 2021



## GDI Fuel Feed Lines

Direct-fit OE replacement lines for high- & low-pressure applications

75+ SKUs with coverage through 2021



## GDI Injector Seal & Service Kits

For a complete repair, we offer complete injector seal kits

20+ SKUs covering import and domestic applications



## GDI Fuel Pressure Sensors

Monitors flow to deliver precise fuel injection performance

100+ part numbers for import and domestic applications



## GDI Camshaft Followers

Direct-fit OE replacement ensures proper fit, form, and function

Coverage through 2022



NAPA® ECHLIN® GDI COMPONENTS

# NAPA® Echlin® Quality

GDI requires a special injector that can inject fuel under the high-pressure requirements of cylinder compression.



**NAPA® Echlin® 2-39284**  
New GDI Fuel Injector  
Chevy/GMC Truck (2019-14)



# Testing and Validation

To make sure every fuel injector meets our strict standards for precision quality, enhanced performance, and extra durability, NAPA® Echlin® performs initial life-cycle validation and 100% end-of-line testing. What’s more, we subject our fuel injectors to more than 35 different tests and inspections.



**Here are just a few of the elements and components that we test and inspect:**

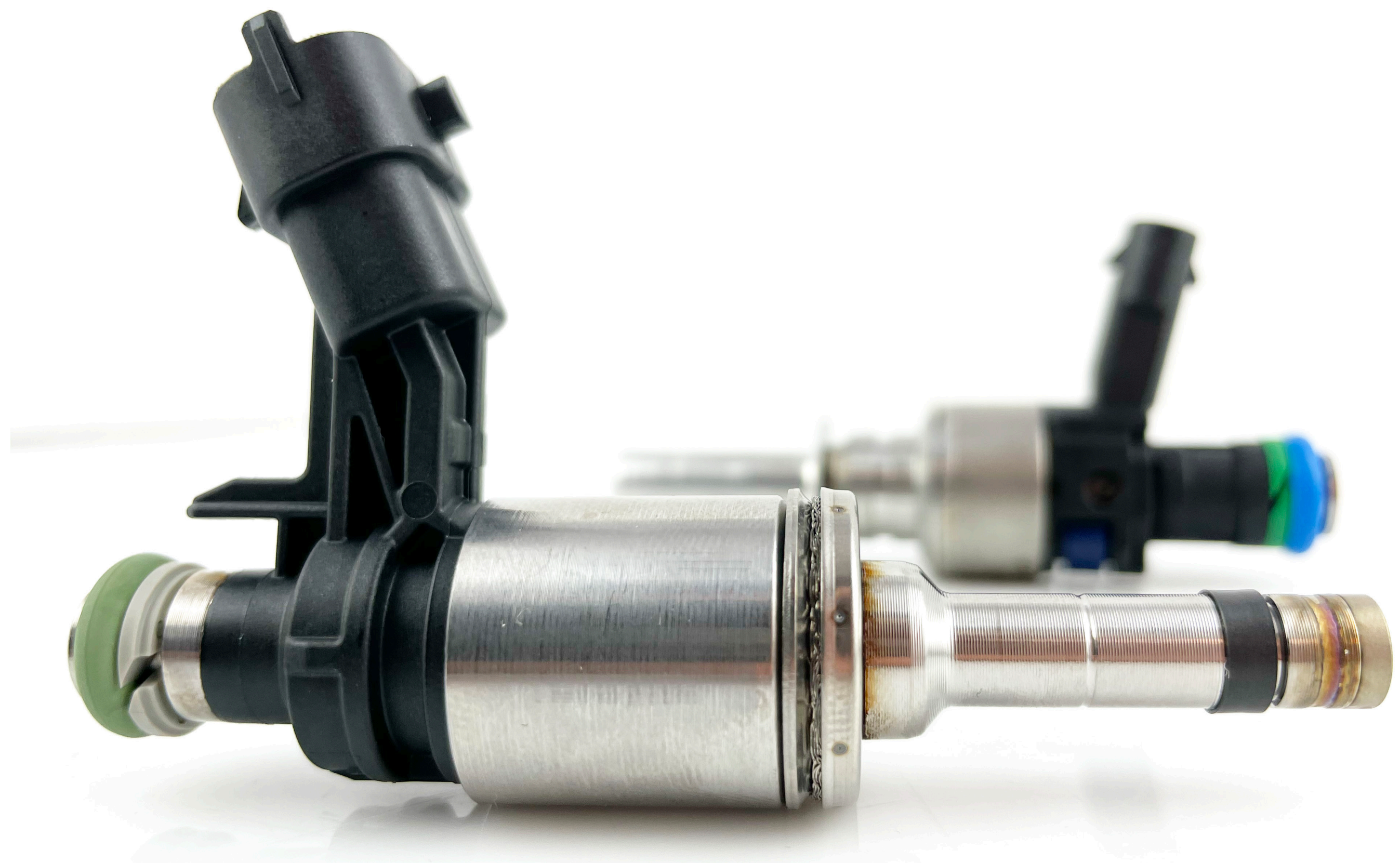
Body Color	Endurance	Spray Pattern
Body Style	Flow Linearity	Static Flow Rate
Coil Resistance	Flow Matching	Thermal Cycle Testing
Connector Shape	Humidity Storage	3 Axis Vibration
Dynamic Flow Rate	Shock Load	and more!



NAPA® ECHLIN® GDI COMPONENTS

# NAPA® Echlin® Solutions

NAPA® Echlin® GDI Injectors are always  
100% NEW. Here's why.



Most GDIs can't be remanufactured because they can't be disassembled to replace worn and failed components

Several aftermarket companies still offer GDI reman programs – and that's a problem. The injector isn't rebuilt, it's only cleaned, and internal components are more likely to fail sooner

NAPA® Echlin® only offers pristine, NEW GDI injectors that deliver optimal performance and longevity

NAPA® ECHLIN® GDI COMPONENTS

# NAPA® Echlin® Training Tech Tip

NAPA® Echlin® Trainers have installed hundreds of GDI Fuel Injectors and trained thousands of technicians. Here's what they say to look out for during a GDI install.



**When replacing or servicing GDI injectors, new O-rings and seals are required — you should never reuse O-rings and seals from an injector you are replacing**



**Any fuel line with a yellow tag, is one-time use only and must be replaced if it is removed**



NAPA® ECHLIN® GDI COMPONENTS

# NAPA® Echlin® Professional Training

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

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

An extension of NAPA® Echlin® training, our extensive ADA-compliant YouTube professional video library features more than 500 installation and product videos.



**PRO  
TRAINING**  
ON-DEMAND

NAPA® Echlin® offers an annual subscription to Pro Training On-Demand. This subscription grants access to more than 200 English, and over 50 Spanish 1-hour courses – and the NAPA® Echlin® on-demand library continues to grow. Topics range from fundamentals to advanced concepts, and include HVAC, diesel, hybrid, ignition, injection, electrical and communication diagnosis.



**PRO  
TRAINING**  
ON-SITE

Whether in-person at your location or virtually via computer, all NAPA® Echlin® Training classes feature a live instructor and are fully interactive as students work through real-life scenarios. Virtual class “workbooks” include on-demand links to video content and student configurable scan data.

**Visit [NAPAEchlinTraining.com](https://NAPAEchlinTraining.com)**