

The Evolving Diesel Engine

Diesel engines have come a long way since the mid-90s. The key to diesel's evolution has been the advancement of new clean diesel technologies. Today's advanced renewable diesel fuels along with advancements in diesel engine and emissions control technologies have resulted in creating near-zero emissions across all applications. Plus, these fuels enhance diesel performance, maintain efficiency over other energy sources, and ensure long-term suitability for sustainability goals.



Vehicle MPG the current Government CAFE standard is requiring by 2025



Gallons of diesel saved by heavy-duty diesel trucks from 2007 to 2015



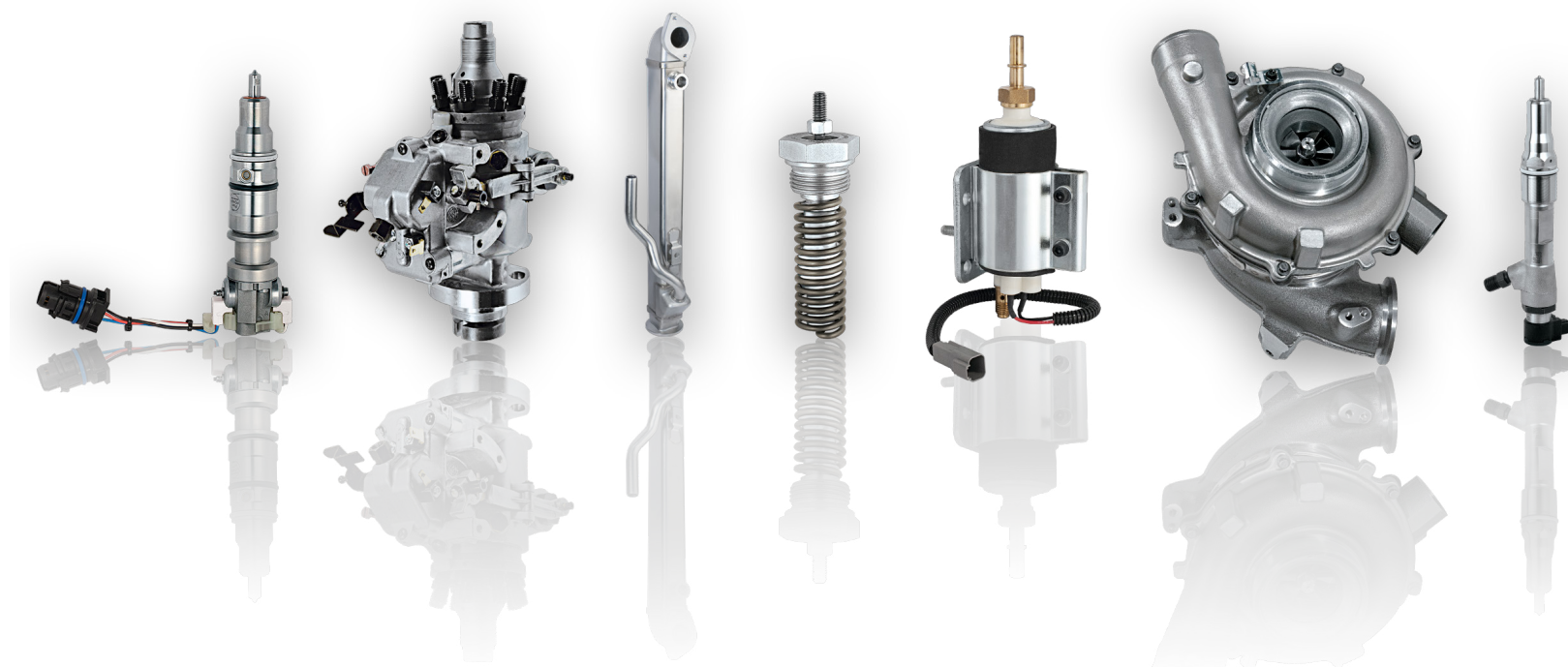
Expected diesel share of U.S. Passenger Car/Light Truck market by 2020



Percentage of new light vehicles that will use diesel engines

The Most Comprehensive Diesel Program in the Marketplace

To account for the burgeoning diesel market, NAPA® Echlin® has fully invested in diesel. Today, NAPA® Echlin® Diesel offers thousands of diesel parts in hundreds of unique diesel categories, and we're a basic manufacturer in most of them. NAPA® Echlin® Diesel is committed to supplying professional technicians with comprehensive coverage for genuine diesel parts, which is evident from our extensive offering of new and quality-remanufactured products.



Thousands of Diesel Parts, and Hundreds of Diesel Categories

Here's just a sample of our offering:

- Air Intake Heater
- Canister Purge Solenoid
- Canister Purge Valve
- Canister Vent Solenoid
- EGR Control Solenoid
- EGR Cooler
- EGR Valve Mounting Gasket
- EGR Valve Pressure Feedback Sensor
- Emission Fluid Injection Nozzle
- Emission Fluid Temperature Sensor
- Emissions Fluid Pump
- Engine Belt Tensioner
- Exhaust Back Pressure Sensor
- Exhaust Gas Temperature Sensor
- Fast Idle Temperature Switch
- Fuel / Water Separator Sensor
- Fuel / Water Separator Valve
- Fuel Filter Housing
- Fuel Heater
- Fuel Injection Control Module
- Fuel Injection Control Pressure Sensor
- Fuel Injection Driver Module
- Fuel Injection Harness
- Fuel Injection Heat Shield
- Fuel Injection Pump - New
- Fuel Injection Pump - Remanufactured
- Fuel Injector - New & Reman
- Fuel Injector Line
- Fuel Injector Rail
- Fuel Injector Return Hose
- Fuel Injector Seal Kit
- Fuel Injector Sleeve
- Fuel Line O-Ring Kit
- Fuel Pressure Regulator
- Fuel Pressure Regulator O-Ring
- Fuel Pressure Regulator Upgrade Kit
- Fuel Pressure Relief Valve
- Fuel Pressure Sensor
- Fuel Pressure Warning Light Kit
- Fuel Rail Supply Line
- Fuel Shut-Off Solenoid
- Fuel Transfer Pump
- Glow Plug
- Glow Plug Control Sensor
- Glow Plug Controller Connector
- Glow Plug Indicator Relay Connector
- Glow Plug Relay Connector
- Glow Plug Temperature Sensor
- Glow Plug Wiring Harness
- High Pressure Oil Pump
- High Pressure Oil Pump Hose
- High Pressure Oil Pump Seal Kit
- High Pressure Oil Rail Ball Installation Tool
- High Pressure Oil Rail Ball Tube
- High Pressure Oil Rail Seal Kit
- Horizontal Fuel Conditioning Module
- Injection Pump Installation Kit
- Injection Pump Supply Line
- Injector Pump Driver Relocation Kit
- Injector Pump Module
- Intake Air Temperature Sensor
- Oil Cooler Gasket Kit
- Oil Cooler Kit
- Throttle Position Sensor
- Transmission Oil Temperature Sensor
- Turbocharger - New & Reman
- Turbocharger Actuator
- Turbocharger Speed Sensor
- Vacuum Pump
- Valve Cover Gasket
- Valve Cover Gasket with Harness
- Vertical Fuel Conditioning Module

And many more diesel parts and categories on the way!



Introducing NAPA® Echlin® Diesel 100% NEW Fuel Injectors

NAPA® Echlin® Diesel is proud to offer a line of 100% NEW Diesel Fuel Injectors, which includes NEW OE-production fuel injectors for 4.5L, 6.0L, 6.4L, and 7.3L Ford® Power Stroke® diesel engines as well as Navistar DT465, DT530, DT570, and HT570 and Maxxforce 5, 7, 9, 10, and DT.

What makes NAPA® Echlin® Diesel NEW Fuel Injectors the best

Extensive engineering and manufacturing expertise coupled with high-precision equipment means NAPA® Echlin® Diesel NEW Fuel Injectors include the latest engineering enhancements to match the OE injector. NAPA® Echlin® Diesel NEW Fuel Injectors are built for the highest levels of precision and consistency, which delivers uncompromising quality, performance, and fuel economy.

OE standards, precision engineering and fully integrated capabilities set NAPA® Echlin® Diesel apart

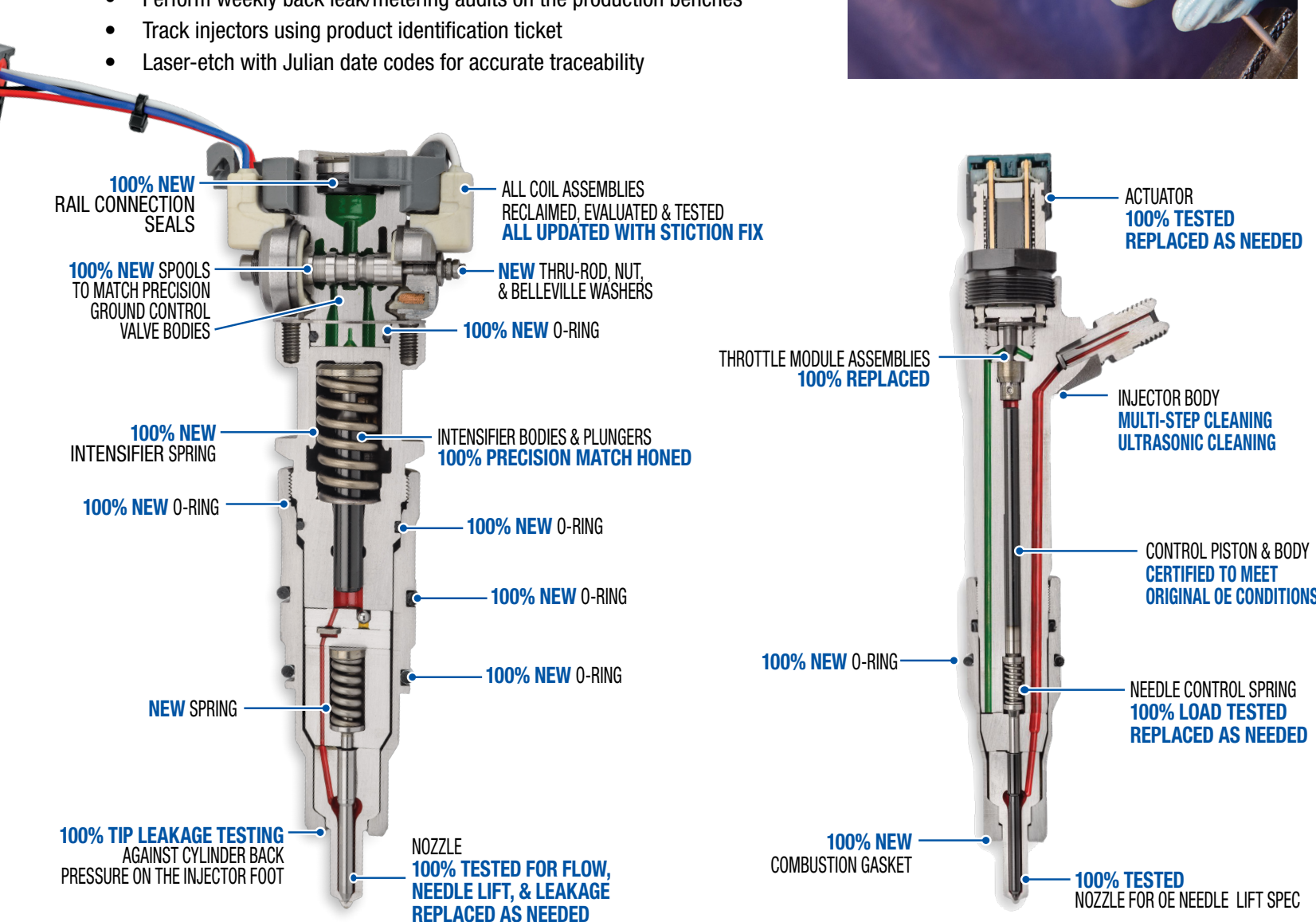
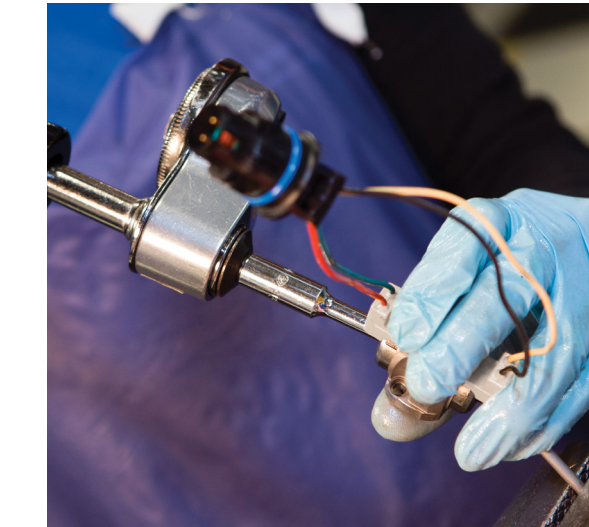
- 100% all-new OE-replacement unit includes the latest engineering enhancements to match the OE injector
- Undergoes extensive dynamometer, hot gas test stand, and diesel emissions testing to ensure proper performance
- Product of OE-production design, development, engineering, and manufacturing processes, including sub-micron machining and complex assembly systems



To ensure that our remanufactured diesel injectors perform flawlessly, we first make sure that they remain contamination-free during the rebuild process. We replace every necessary component with new and administer a precise, repeatable process that is followed every time. Here's a checklist we adhere to every time we remanufacture a NAPA® Echlin® diesel injector:

Quality Checklist

- Assemble in a temperature-controlled clean room (Class-100,000)
- Store all components overnight in stainless steel bins before assembly
- Use clean-room-certified towels, smocks, gloves, and sticky mats
- Replace all tested nozzles on CRI and HEUI injectors, as needed
- Replace all shims, intensifier springs, and external O-rings
- Test all solenoids and apply upgrades, wherever necessary
- Run OE Master injectors and plot/review the data points for comparison
- Scheduled maintenance of test stand, including fluid replacement, to reduce contamination
- Never test contaminated warranty injectors on production benches
- Perform weekly back leak/metering audits on the production benches
- Track injectors using product identification ticket
- Laser-etch with Julian date codes for accurate traceability



▶ Superior Medium-Duty Diesel Coverage

Genuine Diesel Parts for Vehicle Classes 4, 5, and 6



CLASS 4 14,001 to 16,000 lbs



CLASS 5 16,001 to 19,500 lbs

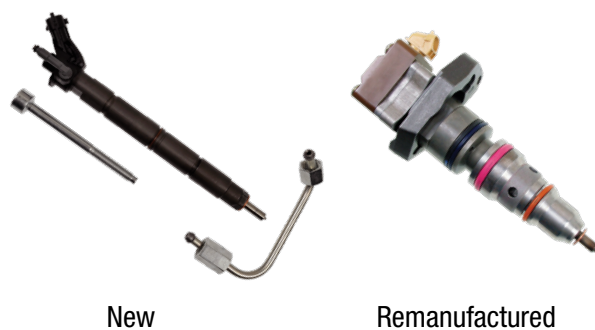


CLASS 6 19,501 to 26,000 lbs

Medium-duty vehicles belong to vehicle classes 4, 5, and 6. These three classes consist of any vehicle with a Gross Vehicle Weight Rating (GVWR) between 14,001 and 26,000 pounds, which is the total combined weight of the truck, including all passengers, fuel, fluids, and payload. These vehicles include everything from parcel delivery trucks to bucket trucks and school buses. NAPA® Echlin® is proud to provide an extensive offering of premium replacement parts for these medium-duty applications.

More Than 265 Diesel Engine Management SKUs for Medium-Duty Trucks

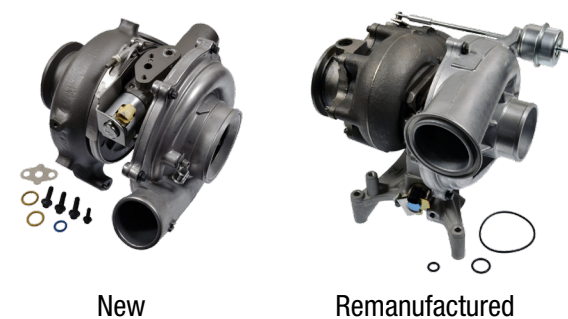
MD Diesel Fuel Injectors 70+ SKUs AVAILABLE



New

Remanufactured

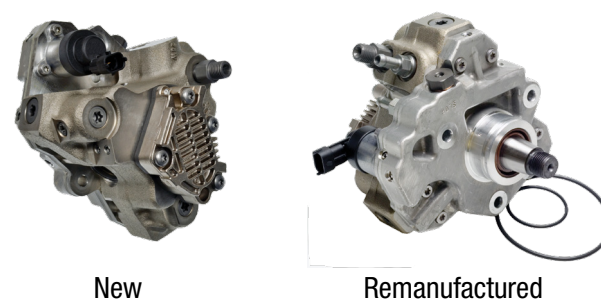
MD Diesel Turbochargers 15+ SKUs AVAILABLE



New

Remanufactured

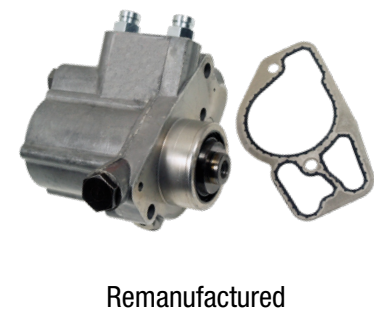
MD Diesel Fuel Injection Pumps 20+ SKUs AVAILABLE



New

Remanufactured

MD Diesel High Pressure Oil Pumps 20+ SKUs AVAILABLE



Remanufactured

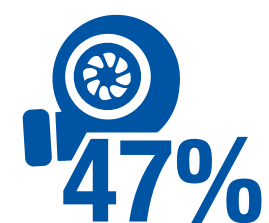
To learn more, visit NAPAEchlinDiesel.com

▶ Premium Diesel Turbochargers



The Growing Turbo Market

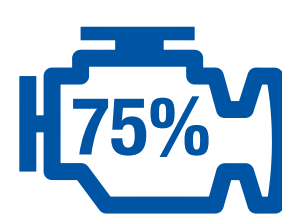
Current CAFE standards have pushed auto makers to increase fuel economy on new vehicles. With the rapid introduction of new smaller displacement turbocharged engines, consumers get V8 power while maintaining V6 fuel economy. Here are some industry predictions for turbochargers by 2020:



Percentage of new vehicles with turbochargers



Number of vehicles with turbo engines



Percentage of turbo market for 4-cylinder engines

50+ DIESEL SKUs

Number of new and remanufactured diesel turbochargers offered by NAPA® Echlin®

Comprehensive Turbocharger Coverage

NAPA® Echlin® is proud to supply professional technicians with the coverage they need for domestic and import applications. With more than 50 diesel SKUs covering over 6 million VIO, our line features both 100% new OE-quality turbochargers as well as quality-remanufactured turbochargers with OE-quality components.

Domestic Turbochargers

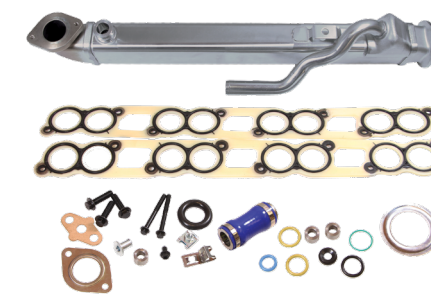
More than 40 new and remanufactured turbochargers for domestic diesel applications.

Import Turbochargers

10 new turbochargers for import diesel applications. And more on the way.

In addition to our strong diesel coverage, NAPA® Echlin® offers a line of new and remanufactured turbochargers for gasoline engines.

▶ Advanced Diesel Engineering



Improved 20 Spiral Tube Design

Diesel EGR Cooler - EGC202

Our upgraded EGR cooler design solves the OE issues of clogging and leaking, which means properly cooled combustion and extended lifespan of the EGR valve, engine valves, and head gaskets.



100% New, Upgraded Power Supply

Diesel Fuel Injection Control Module - FCM200

Remanufactured using our 100% new, upgraded power supply, which distributes heat more evenly and keeps diodes and other critical components cooler to prevent the failure that can occur in competitors' units.



Superior Remanufacturing Process

Diesel High Pressure Oil Pump - HPP218R

Our extensive remanufacturing process includes a complete teardown of the pump, the addition of new critical components, leak checks and thorough testing to ensure a superior, long lasting pump.



Premium Steel Construction

Diesel Air Intake Heater - AIH101

The corrosion-resistant steel on our Diesel Air Intake Heater leads to reliable conductivity connections, more consistent startup in cold weather, and smoother operation.



Upgraded Pump Design

Diesel Fuel Transfer Pump - DTP301

Our Diesel Fuel Transfer Pump with upgraded design and flow characteristics delivers quick startups and more consistent fuel pressure at all operating temperatures.



DIESEL

MORE DIESEL, MORE POWER
THOUSANDS OF DIESEL PARTS, HUNDREDS OF DIESEL CATEGORIES

