



THE LATEST IN FUEL SYSTEM CLEANING TECHNOLOGY FROM VALVOLINE.

Valvoline's New Powerful "All Engine Clean" System is a professional cleaning treatment designed to remove hard-to-reach engine deposits in gasoline engines. These innovative cleaners were formulated strong enough to attack the baked-on carbon build-up in modern GDI engines, but safe enough for use in all gasoline engines.



All Engine Clean First Defense Kit

(Part No. 884531, 6/2pk)

The First Defense 2-part Kit helps prevent and address drivability issues caused by deposit build-up, especially in modern engines. The Intake Cleaner is a proprietary formula made with organic-based molecules that safely attack intake valve and combustion chamber deposits, including those on the face of an injector. Designed for use with Valvoline's Complete Intake/Fuel Rail Device to create a mist into the air stream to prevent puddling and to find the toughest-to-reach deposits in an engine.

- Low Smoke, Low Odor Chemistry
- Low Toxicity, No Known Carcinogens
- Effective on both GDI and PFI engines
- Works with VP055 Intake Canister Tool



All Engine Fuel Rail Cleaner

(Part No. 884352, 12/18oz)

Utilize Fuel Rail Cleaner as a stand-alone service to maintain injector performance or combine with the First Defense kit for a complete approach to cleaning an engine's entire fuel system from tank to exhaust in under an hour. helps prevent and address drivability issues caused by deposit build-up, especially in modern engines. These powerful cleaners are injected directly into the fuel system with the Valvoline Complete Intake/Fuel Rail Device.

- Safe for catalytic converters and oxygen sensors
- Helps remove deposits from injectors to improve flow
- Works with VP055 Intake Canister Tool and 863637 Fuel Rail Adapters



WHY FUEL SYSTEM SERVICES?

Carbon Deposits in Engines are Unavoidable

Valvoline research and testing indicates buildup of carbon deposits on Intake Valves results from two mechanisms which can cause loss of power and fuel economy.



Motor Oil

- Seeps past valve seals
- Low viscosity engine oils are typically worse due to increase tendency to flow and creep
- Conventional motor oils are typically worse due to lower flash point
- PCV (Positive Crankcase Ventilation): Recirculation of exhaust gases to the emissions system that contain partially burnt fuel

Fuel Exhaust Vapors

- EGR (Exhaust Gas Recirculation): Incomplete combustion of fuel is recirculated through intake

Direct Injection (GDI) engines do not provide a fuel wash over the intake valves, making them more susceptible to carbon build-up. Sticking can occur on the valve seat and valve guide triggering cold start misfires.

What Types Of Issues Can Result From Carbon Buildup?

Signs

- Check engine light
- Hesitation
- Reduced fuel economy
- Greater emissions
- Rough idle
- Cold morning start
- Loss of power

Fuel Services are Important for Business

- Helps build trust by improving vehicle performance for customers
- Top Selling Chemical Service sold within Service Centers
- Easy to perform, quick services
- Helps drive gross margin dollars and average tickets

What equipment is required?

No expensive machine necessary. The required tools to perform are featured to the right.

Tools designed for 884531 First Defense 2-Part Kit



Canister Tool with Throttle Body Sprayer
Part No. VP055



Optional VPS Map Sensor Adapter
Part No. 882574



Optional MAP Sensor Adapter w/tube
Part No. 882576

Add these for use with 884352 Fuel Rail Cleaner



Fuel Rail Adapter Set
Part No. 863637
Uses same VP055 Canister Tool