



THE COMPANY

ADI PERFORMANCE SYSTEMS

Is a manufacturer & distributor of high performance fuel & oil additives. They provide the industry with professional grade products that are not available to the general public. ADI adheres to strict quality control procedures & formulates their products to achieve superior results. They draw on their extensive knowledge & experience, in collaboration with their suppliers, to provide solutions that offer superior consumer & environmental benefits. These suppliers include BASF and Lubrizol; who are some of the largest and most technological advanced chemical companies in the world.

DIESEL INDUSTRY PROBLEMS

DIESEL INDUSTRY

In 2006, new emission standards were introduced, that set specific limits on the amount of pollutants that could be released into the environment. These new regulations effectively changed the diesel industry and modified the way diesel equipment and vehicles operate.

- 1) There was a reduction in the amount of allowable sulphur in diesel fuel to 15 ppm creating:
 - **Reduced lubricity** - Poses a potential threat to the injection equipment of a vehicle.
 - **Reduced fuel stability** - Increases susceptibility to oxidation, which reduces storage stability.
 - **Reduced fuel economy and reduced power** - The reduction of the aromatic content and density of the fuel causes reduced fuel economy and reduced power.

- 2) Post combustion equipment was added to all new diesel vehicles to reduce NOx and Particulate Matter. These new items have led to increased operating costs and more down time.
 - **Diesel Particulate Filters (DPF)** - Are designed to remove particulate matter from the exhaust gas of a diesel engine. This equipment has untimely regeneration cycles and creates increased maintenance costs.
 - **Diesel Exhaust Fluid (DEF - Urea)** - DEF tanks will be standard equipment for new diesel vehicles. This urea will be injected into the vehicle's exhaust stream to "scrub" NOx from the diesel exhaust, leading to increased operating costs.

- 3) Maximum limits were set on the phosphorus, sulphur and sulfated ash content of oils, creating:
 - **Reduced Performance** - This new CJ4 oil limits the performance capability in terms of wear protection to control / disperse soot and to neutralize acids.





FUEL SOLUTIONS

ADI PREMIUM ULS DIESEL BOOSTER®

ADI Premium ULS Diesel Booster® improves fuel economy, increases overall engine performance and minimizes engine wear in all climates.

- Dramatically improves lubricity for more power, less wear and better fuel economy.
- Extends DPF life and reduces untimely DPF regeneration cycles.
- Contains fuel stabilizers and anti-oxidants designed to neutralize microbial growth and extend shelf life of stored diesel fuel.
- Provides superior anti-gelling properties to -67°F to reduce wax formation and filter plugging in winter.
- Contains a cetane enhancer to boost performance and provide a more complete combustion.
- Substantially reduces injector failures.
- Removes moisture from fuel tanks and storage tanks.
- Reduces exhaust emissions by limiting the build up of particulate matter.



ADI FUEL SYSTEM CLEANER

ADI Fuel System Cleaner improves fuel efficiency in gas engines, cleans the fuel injector system and removes moisture from fuel tanks to prevent corrosion.

- Removes intake valve deposits and helps reduce harmful emissions.
- Reduces moisture from fuel tanks by emulsifying water into microscopic droplets.
- Contains a fuel stabilizer that prevents fuel from degrading and oxidizing over time.
- Optimizes injector spray pattern by dissolving fuel varnish build up on the injector tips.





CLEANING SOLUTIONS

ADI DIESEL INDUCTION AND EXHAUST CLEANER

ADI Diesel Induction and Exhaust Cleaner effectively cleans particulate matter and combustion by-products from the air induction and exhaust system.

- Safely cleans the EGR valve, EGR cooler and DPF.
- Significantly reduces harmful emissions.
- Reduces untimely and costly DPF regeneration cycles.
- Extends the life of the entire exhaust system.



ADI PRE-LUBE SERVICE

ADI Pre-lube cleans oil pan, passages, screens, valve train and valve stems to maximize lubrication and reduce wear in today's hotter running engines.

- Helps reduce oil consumption while decreasing hydrocarbon and nitrogen oxide emissions.
- Safely frees sticky piston rings and removes crankcase sludge & varnish from engines.



ADI BRAKE AND PARTS CLEANER

ADI Brake and Parts Cleaner completely removes brake dust, grease, oil and dirt and leaves no residue after evaporation. Contains no ozone depleting chemicals.

- Removes brake fluid, grease and oil.
- Effective on constant velocity joints as a degreasing agent.





LUBRICATION SOLUTIONS

ADI FUSION⁺

ADI Fusion⁺ boosts conventional motor oils to achieve Synthetic-like properties to improve performance, increase viscosity control and minimize sludge & wear in the engine.

- Fusion⁺ improves oxidative performance and overall thermal stability within the crankcase.
- Fusion⁺ has excellent anti-oxidant properties that enhance engine protection under extreme heat and pressure.
- Fusion⁺ reduces emissions during operation and extends oil change intervals.



ADI DIFF. & GEAR TREATMENT

ADI Diff. & Gear Treatment provides improved wear protection against viscosity breakdown in high heat and high demand applications.

- Improves performance levels of GL5 and MIL-PRF2105E lubricants.
- Reduces gear box noise, heat and friction.
- Delivers excellent shear stability and wear protection in differentials and gear box.



ADI F100

ADI F100 is a comprehensive friction reducing, metal treating, penetrating lubricant that can be used in a variety of applications.

- Substantially reduces friction and displaces moisture.
- Protects metal from rusting and can be used on electrical components.
- Improves removal of rusted parts.





The ADI Exhaust Atomizer (DPF 99).

The ADI Exhaust Atomizer is a tool that induces an atomized chemical spray into the DPF. The water based chemical is sprayed through a opening in the filter while the vehicle is running. The chemical along with the heat produced from the vehicle, creates a powerful steam that actively breaks down the particulate matter in the DPF. After the Regen. is run and all of the residual matter in the DPF is burnt away, the soot load and differential pressure drop to normal levels.

The tool drastically reduces service time and maintenance costs as it does not require the removal of the DPF. This helps to extend the life of the DPF, improve the performance of the filter and reduce untimely regenerations thereby increasing uptime.



DPF Demo. on a Prevest Bus: In a test completed in Nov. 2013, the DPF showed a soot level of 76%. After completing the service and running a regen. the soot level dropped to 6%. This represents a 92% reduction in the soot level of the DPF. **The service time was approximately 30 min.**

Another test was completed without using the ADI Exhaust Atomizer. By simply running a regen the soot level on another bus went from 86% to 46%. This represents a reduction of only 47% in the soot level of the DPF.



DPF Demo. on an International Truck: In a test completed in July 2014, the DPF showed a soot level of 66%. After completing the service by using the ADI Exhaust Atomizer the soot level dropped to 18%. A regen was then run to complete the cleaning process and the final reading measured the soot level at only 3%. This represents a 96% reduction in the soot level of the DPF. **The service time was approximately 1 hour.**

