Proven Protection and Performance for Your Diesel
Protect your Equipment

The heart of the diesel engine is its fuel injection system and a major enemy of this system is poor quality diesel fuel. Through extensive research and testing, Stanadyne found wide gaps in diesel fuel quality around the world play havoc with precision diesel fuel injection systems. Poor quality fuel can wear components, gum up valves and clog filters. To resolve these problems and protect the injection system, Stanadyne developed its own line of diesel fuel additives.

Performance Formula®, our premium, multipurpose, all season diesel fuel additive tackles virtually any diesel fuel related problem. No other fuel additive provides all the benefits of Stanadyne’s Performance Formula:

- Upgrades and stabilizes fuel by reducing sludge and fuel tank contaminants
- Cleans and protects fuel system components
- Removes varnish and other deposits to prevent plugging
- Increases power & economy with cetane improver
- Protects against low sulfur fuels to reduce wear
- Protects against corrosion with an alcohol free formula
- Helps remove water from fuel
- Provides hot and cold weather protection

Stanadyne’s Performance Formula fuel additive eliminates the need for expensive “premium” or blended fuel and is your insurance against poor quality diesel fuel.

Protection Test

Test Engineers ran two identically prepared fuel pumps for more than 2,000 hours (approximately 125,000 road miles). Both ran on DF-2 diesel fuel, one had Stanadyne Performance Formula added to the fuel at the recommended treatment ratio. At the end of the test, the pumps were completely disassembled and inspected. The results, pictured here, show significant differences — parts to left, without additive, are dirty and worn; parts to right, with additive, are clean and protected.
Performance with Savings

As well as protecting your engine, Performance Formula®, as its name implies, also improves engine performance. It achieves this by ensuring clean pumps and injectors, reducing wear on components and restoring lubricity. In addition, the cetane improver in Performance Formula results in easier starting, less smoke and more complete combustion. The net result is more horsepower, torque and miles per gallon. Consequently, a significant cost savings to you. Regular use of Stanadyne’s Performance Formula will more than pay for itself — by savings at the filling station, from repairs and by extending maintenance intervals.

Performance Test

Independent test engineers ran transient and steady state tests over time on school buses, using a Mustang dynamometer to obtain torque and horsepower ratings before and after the use of Performance Formula. According to the test engineers, the improvements after adding Stanadyne Performance Formula were dramatic and impressive, as shown on the torque and horsepower graphs.

<table>
<thead>
<tr>
<th>AVERAGE % IMPROVEMENT</th>
<th>After using Performance Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horsepower</td>
<td>+7.5 %</td>
</tr>
<tr>
<td>Torque</td>
<td>+9.8 %</td>
</tr>
<tr>
<td>Miles Per Gallon</td>
<td>+9.6 %</td>
</tr>
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</table>
Proven by Independent Testing

Southwest Research Institute — one of the world’s leading R&D facilities in the field of engine, component and vehicle testing — evaluated ten of North America’s most popular diesel fuel additives in three key areas:

- Cetane number (affects ease of starting, noise, power output and emissions)
- Lubricity (critical with today’s low sulfur fuels)
- Cold weather protection (against waxing or gelling diesel fuel)

The results shown in the charts are clear — Stanadyne Performance Formula is the best in all three tests.

Approved by Engine and Vehicle Manufacturers

Stanadyne diesel fuel additives have been tested and approved by engine and vehicle manufacturers since 1993. Ford, General Motors, Volkswagen, Navistar, John Deere, Caterpillar, AM General and others have recommended using Stanadyne diesel fuel additives in their engines or vehicles.

Today’s new technology fuel systems such as: High Pressure Common Rail, HUEI and MUEI fuel systems, unit injectors, as well as conventional rotary distributor and in-line injection pumps have all been tested and approved using Performance Formula. Engine warranties should not be affected and indeed several fuel injection repair facilities offer extended warranty if Stanadyne additives are used regularly to protect the sensitive fuel system components.
Benefit the Environment

One of the greatest challenges facing the diesel engine industry is the necessity to reduce particulate (smoke) and other emissions in order to protect the environment.

Stanadyne is America’s largest independent designer and manufacturer of diesel fuel injection equipment. Our company’s innovative technology in fuel injection pump and nozzle design has helped engine manufacturers around the world meet stringent emission standards.

Now we have test evidence, that using another Stanadyne product, Performance Formula fuel additive, can also help reduce the amount of particulate (smoke) emissions from diesel engines. Recent “snap test” results, using industry standard smoke test meters, show that using Performance Formula can reduce particulate emissions up to 49%. This could mean the difference between “pass” or “fail” under certain local or national emissions regulations.

INITIAL SNAP TEST

• Stanadyne is a leader in diesel fuel injection equipment technology.
• Diesel fuel quality has a major effect on sensitive injection systems and overall engine performance.
• Poor quality fuel leads to poor performance, low efficiency and expensive repairs.
• Regular use of Stanadyne’s specially formulated diesel fuel additives can dramatically improve power, torque and miles per gallon, while reducing smoke and other harmful emissions.
• Only Stanadyne additives are made by a fuel injection equipment manufacturer, approved by engine and vehicle makers and proven to be the best in independent tests.
Stanadyne's complete line of diesel fuel additives: Performance Formula, Performance Formula Junior, Winter 1000, Lubricity Formula and Injector Cleaner for Gasoline (Petrol) Engines. See our brochure #99499 for full details of all Stanadyne fuel additives.

**Only Stanadyne diesel fuel additives are:**

- Made by a fuel injection equipment manufacturer
- Approved by diesel engine and vehicle makers
- Proven to perform best in independent tests.