

Diesel Fuel Frequently Asked Questions

<p>What is diesel fuel?</p>	<p>Diesel fuel is a complex mixture of hydrocarbon molecules derived from petroleum crude. While the term "diesel fuel" includes products such as burner fuel, heating fuel, X-Grade, D-Grade, fuel oil and others, it most commonly refers to a distillate that is burned in compression combustion engines or home heating systems. Diesel fuel is ignited in an internal combustion engine cylinder by the heat of air under high compression — unlike motor gasoline, which is ignited by electrical spark.</p>
<p>What is biodiesel?</p>	<p>Biodiesel is a clean-burning alternative fuel for diesel engines made from animal fats or vegetable oils, such as soybean oil. Pure biodiesel (B-100) contains no petroleum, is biodegradable and nontoxic. Pure biodiesel is often blended with petroleum diesel to create biodiesel blends, such as B2 or B5; this designation indicates a 2% or 5% biodiesel blend. Biodiesel blends can be used in most diesel engines with no modifications; refer to your equipment owner's manual for details. Cenex biodiesel fuels are produced using domestically-grown soybeans.</p>
<p>What is the most common cause of fuel pump and fuel injector problems in diesel equipment?</p>	<p>Contamination, dirt, water and other airborne materials are usually the cause. However, most of these problems are correctable. Good maintenance practices for storage tanks and regular filter replacement can prevent the pump and injector wear that results in premature repairs. Cenex Premium Diesel Fuels, Cenex Roadmaster XL® and Ruby Fieldmaster® contain aggressive detergents that clean dirty fuel systems and keep them in "like new" condition. This maximizes the life of fuel pumps and injectors, while optimizing power and fuel efficiency.</p>
<p>What is algae and how do I get rid of it?</p>	<p>Algae is bacterial or fungal growth. There are several forms, but they all live in water and feed on fuel. Generally they are a black slimy substance that plugs filters, and most often occur in farm storage tanks that are seldom used (as algae like dormant, warm conditions). Water is the key ingredient; if a tank is regularly drained of condensation, then no problems will occur. If water does accumulate and growth occurs, then the tank should be cleaned and treated with a biocide. Cenex Roadmaster XL and Ruby Fieldmaster contain demulsifiers that isolate water for easy removal, prevent water from going through the fuel system and prevent algae formation in the storage tanks.</p>
<p>Why does my diesel engine smoke?</p>	<p>Diesel engine smoke is caused by incomplete combustion. White smoke is caused by tiny droplets of unburned fuel resulting from engine misfire at low temperatures; this smoke should disappear as your engine warms up. Black smoke can result from faulty injectors, insufficient air or overloading/over fueling the engine. Blue or gray smoke is the result of burning lubricating oil and is an indication the engine is in poor mechanical condition.</p>
<p>How long can I store diesel fuel?</p>	<p>Tank location and storage temperatures impact a fuel's storage life. As diesel fuel is stored, it slowly reacts with oxygen in the air to form gums and varnishes. As temperature increases, the reaction also increases. The addition of contaminants such as water or rust accelerates this process. Generally, fuel should not be stored longer than six months. If long-term storage is required, the tank should be underground or inside to reduce temperature extremes, and it must have proper ventilation caps. If storage exceeds one year, testing is recommended. The stabilizer additives in Cenex Roadmaster XL and Ruby Fieldmaster reduce the formation of gum and varnish and can double the fuel's storage life.</p>
<p>Diesel fuel is diesel fuel, right?</p>	<p>Wrong. Diesel fuels vary widely by supplier. And, using a true premium diesel fuel can increase both the performance and longevity of your equipment. You'll notice the difference with quicker starts, more power, better fuel economy and less smoke. Most importantly, you'll reduce downtime and maintenance costs —benefits that go right to the bottom line. Cenex® Premium Diesel Fuels are <i>true</i> premium diesels - they're power, efficient performers, formulated expressly for today's diesel powered equipment. They contain a high-quality base fuel that works with an exclusive, proven additive package. They've been tested time and again, in the lab and field, to ensure they're the best fuels on the market.</p>
<p>What is the difference between plain #2 diesel and premium fuel?</p>	<p>There are many differences between standard diesel fuel and Cenex Premium Diesels. Our premium fuels have a higher cetane number, better lubricity and injector-cleaning capability versus standard #2 diesel. Cetane measures a fuel's ignition delay. Higher cetane equals a shorter delay and better ignition quality for quick starts and less pollution. Lubricity provides friction reduction, which extends the life of the fuel pump and reduces downtime. Detergents keep fuel injectors clean for optimum engine performance. They contain a top quality, proven additive package that delivers bottom line benefits.</p>
<p>Are all premium fuels alike?</p>	<p>No. Both base fuels and additives used to achieve "premium" status can vary widely by supplier. Cenex Ruby Fieldmaster offers a quality base fuel and a complete, balanced soy-enhanced additive package. It is continually researched and tested to ensure that it is the highest quality premium diesel fuel on the market; that's why we can confidently offer our unequalled Cenex Total Protection Plan® Warranty. A premium highway fuel like Cenex Roadmaster XL from CHS has the ability to deliver valuable benefits such as more power for pulling long hills, improved fuel efficiency, and reduced maintenance costs.</p>
<p>I've been using plain #2 diesel for years without a problem. Why switch now?</p>	<p>Over time, your engine's fuel pump and injectors get dirty—a gradual, hard-to-notice process that reduces both engine performance and fuel economy. Standard #2 fuel contains no additives to reduce water, extend storage life, or reduce the formation of gum, varnish and corrosion. Cenex Roadmaster XL and Ruby Fieldmaster keep your fuel system in "like new" operating condition for maximum power and performance.</p>