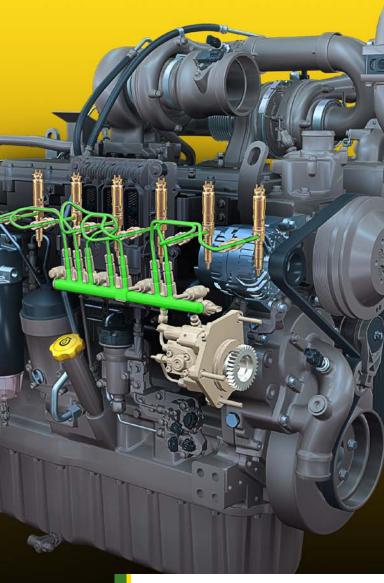
## FUEL TREATMENT SOLUTIONS

Better performance, right from the start





# Your John Deere dealer has the solutions for your engine and fuel system needs

While the products in this brochure will help keep your equipment running at peak performance, many new engine technologies — particularly engines using Ultra-Low-Sulfur Diesel (ULSD) — may require periodic service by a certified technician. Many customer complaints center on diesel engine smoke, rough running, misfiring, starting problems, and increased diagnostic trouble codes in equipment that runs ULSD.

If you experience any of these conditions, your John Deere dealer can diagnose and fix fuel system problems, often in the same visit.

### Improve machine life and performance with Fuel-Protect

The John Deere family of Fuel-Protect fuel treatments and solutions promotes longevity for any brand of equipment in your fleet. We offer solutions for maintenance and a preventive approach for effective fuel use.

# Fuel-Protect Stabilizer keeps your gasoline fresh during storage

Fuel degrades rapidly in equipment stored for the season, and draining gas from your equipment can also cause a host of problems. John Deere Gasoline Stabilizer prevents oxidation from forming the corrosion, gum, and varnish that can clog your fuel system when your equipment is brought out of storage.

### Count on John Deere Gasoline Stabilizer to:

- Protect fresh gasoline for up to 12 months.
- Keep fuel from breaking down into performancerobbing gum and varnish.
- Perform equally well in all two- or four-cycle qasoline engines.
- Ensure quick and easy starts when equipment is put back to work.
- Eliminate the need to drain and dispose of gasoline.
- Provide protection to fuel systems of stored equipment in all seasons.



### Maintain your diesel fuel quality and engine efficiency with our Diesel Fuel Conditioners

Available in two formulas to cover a full range of temperatures throughout the year, our fuel conditioner is recommended for use in all diesel fuels and up to 20-percent blend (B20) biodiesel.

John Deere Diesel Fuel Conditioner is for year-round use to uphold fuel performance and maintain peak engine efficiency. Regular

use will minimize many of the problems caused by impurities and variances in diesel fuels.

#### **Diesel Fuel Conditioners features:**

- New detergent for Tier 3 and older equipment.
- Cleans and maintains fuel system for optimal power and performance.
- Prevents injector sticking in High Pressure Common Rail (HPCR) fuel systems.
- Lubricity improver for added protection and combats even the most severe diesel fuels.
- Increased cetane number for faster, smoother fuelefficient starting.
- Stabilizes diesel fuel for longer storage.
- Can safely be used with Keep Clean and FQS 1.5 Microbicide®.

#### Additional Cold Weather formula features:

- Offers lower cold filter plugging point (CFPP) and pour point, which increases engine operability.
- Contains a deicer to prevent fuel lines from freezing.



## Run strong with Keep Clean

Our Keep Clean solution for diesel injectors is specially formulated to restore and maintain performance in engines with modern high-pressure and legacy diesel fuel systems, including injector sticking, misfiring, rough idling, excessive exhaust smoking, power/fueling loss, and hard starting.

Keep Clean is formulated to be blended with diesel fuel in bulk storage tanks or in the tanks of equipment using modern high-pressure or legacy diesel fuel systems. Meets EPA requirements for use in ULSD. Keep Clean works as the primary prevention method to stop deposits from forming in injectors. It also can be used to recover injector performance in those engines already suffering from the buildup of deposits.

### Use Keep Clean to address injector deposits in:

- All makes of diesel equipment.
- New diesel engines, beginning with the initial fuel fill, to prevent deposits from forming in injector systems.
- Engines that have been cleaned by a certified technician with John Deere Clean-Up 2 and the Injector Flush Tool.
- Diesel engines experiencing injector sticking, misfiring, rough idling, excessive exhaust smoking, power/fueling loss, and/or hard starting conditions.
- Increases a fuel's thermal and storage stabilities.
- Use in bulk fuel tanks for easy distribution across the entire fleet.
- Can safely be used with Diesel Fuel Conditioners and FQS 1.5 Microbicide<sup>®</sup>.



# Emergency Thaw — for Extreme Cold Weather!

John Deere Emergency Thaw diesel fuel treatment liquifies gelled fuels in the diesel fuel system caused by freezing conditions. Melts ice from plugged fuel filters, restoring fuel flow to the engine.

Effective with all diesel fuels including ULSD, biodiesel, and renewable diesel blends:

- Inhibits fuel gelling.
- Inhibits fuel filter icing.
- 32-oz. bottle treats 400 gallons.



# Keep your tank clean with FQS 1.5 Microbicide®

An effective antimicrobial fuel preservation additive recommended for the control of bacteria and fungi in fuel systems that use or store liquid hydrocarbon fuels and oils. All fuel contains some water and even small amounts of water (< 0.5 percent) are sufficient to support microbial growth. Unless controlled, microbes in the fuel system create a number of problems, specifically:

- Attacks fuel and fuel additives, directly reducing fuel performance.
- Produces organic acids that corrode fuel system components.
- Produces slime that plugs fuel lines, filters and injectors.

#### FQS 1.5 Microbicide

Safeguards diesel, biodiesel and fuel oils by providing the following benefits:

- Provides excellent bactericidal and fungicidal efficacy.
- Works effectively in both fuel and water.
- Leaves no corrosive deposits when burned in fuel.
- Reduces engine maintenance cost.
- Helps prevent fuel system failures.
- Meets ULSD guidelines.
- <15ppm sulfur content.</p>



### Clean-Up 2 and Flush Tool

John Deere developed a service method to remove fuel system deposits without replacement of hardware.

Designed to remove deposits in the highpressure fuel system that may be preventing optimized combustion.

### Clean-Up 2 Maximum-Duty Cleaner:

- Used in conjunction with Flush Tool.
- Designed to address both polar and traditional injector deposits.
- Must be shaken well prior to use.
- Effective in Final Tier 4, Tier 3 and legacy engines.

#### Flush Tool:

- Cleans deposits within 45 minutes.





We recommend John Deere dual-stage fuel filters to capture harmful debris and moisture before it can cause damage to fuel-system components.

### These top-quality filters feature:

- A design that works with John Deere and competing brands.
- Robust construction that maintains an airtight seal.
- Advanced cellulose media that delivers maximum filtration performance.
- High-grade seals and components that provide superior durability and corrosion protection.
- Proprietary-flow technology that makes for optimum particle and water removal.

### Bulk fuel storage-tank filters excel on farms, ranches, and construction sites

Fuel filters that protect diesel in fuel-storage and transport tanks are essential for keeping your equipment running strong. Fuel contamination often occurs when tank trucks are used to haul fuel to the field or jobsite. Dust can infiltrate the tank or settle in the fuel nozzle — especially in drier climates. A good storage-tank filter may slow down fuel delivery, but contaminated fuel can shut down your equipment completely. John Deere fuel filters always provide

high-quality fuel system protection to increase your uptime.



## Cleaners, Chemicals and Lubricants

John Deere has the product you need, the quality and reliability you demand, and the prices you'll like.

Check out our selection of vehicle care products, variety of lubricants and hand cleaners for any job!



## Shop Towels and Absorbents

Start out clean. Toss when done.

Use our shop towels and absorbents for tough clean-up jobs around your house, workshop and property to easily absorb grease and oil.

We offer towels in buckets or boxes, single rolls and refills, as well as absorbent pads and rolls.



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