Fuels and Lubricants

FUELS

The quality of fuel used is an important factor in obtaining dependable performance and satisfactory engine life. Suitable fuels must be clean, completely distilled, well-refined and non-corrosive to the fuel system parts. Be sure to use fuel of a known quality from a reputable supplier.

In some conditions, the interval between service on the fuel system may be increased by adding John Deere Diesel Fuel Conditioner to the fuel.

FUEL SPECIFICATIONS

Either grade No. 1-D or Grade No. 2-D fuel as defined by ASTM designation D 975 for diesel fuels may be used. The Grade No. 2-D fuel is heavier and will produce more work per gallon. However, Grade No. 1-D fuel will give better performance under certain conditions. Use the chart below to determine correct grade of fuel.

Type of Engine Service	Surrounding Air Temperature	Diesel Fuel Grade No.
Light load, low speed, considerable idling.	Above 80°F. Below 80°F.	2-D 1-D
Intermediate and heavy load, high speed, minimum of idling.	Above 40°F. Below 40°F.	2-D 1-D
At altitudes above 5,000 feet	All	1-D

As further assurance of satisfactory operation, use fuel having less than 1.0 percent sulfur, preferably less than 0.5 percent.

For maximum filter life, sediment and water should not exceed 0.10 percent.

To maintain proper fuel delivery during cold weather operation, use number 1-D diesel fuel with a pour point at least 10°F. below lowest surrounding air temperature.

The cetane number should be 40 minimum. Low atmospheric temperature as well as high altitude operation may require use of fuel with a higher cetane number.

STORING FUEL

Prolonged storage of some diesel fuels may cause gum formation that could clog the fuel filters.

The importance of proper fuel storage cannot be stressed too highly. Many engine difficulties can be traced to dirty fuel and fuel that has been in storage too long. To keep the fuel system in its most efficient condition, keep all dirt, scale, water, and other foreign matter out of the fuel; and avoid storing fuel for a long period of time.

Fuel should be stored in a convenient place outside of buildings.

FILLING THE FUEL TANK



Location of Fuel Tank Cap

The fuel tank on your tractor is located at the front under the hood. The fuel tank cap is located at the front left-hand side of the hood.

Fill the fuel tank at the end of each day's operation to prevent moisture from collecting and freezing in the fuel system. Capacity of the fuel tank is 65 U.S. gallons.

LUBRICANTS

Effective use of lubricating oils and greases is perhaps the most important step towards low upkeep cost, long tractor life, and satisfactory service. Use only lubricants specified in this section. Apply them at intervals and according to the instructions in the lubrication and periodic service section.

ENGINE LUBRICATING OILS



We recommend John Deere Torq-Gard or Torq-Gard Supreme engine oil for use in the engine crankcase. These oils are compounded specifically for use in John Deere engines and provide superior lubrication under all conditions. NEVER PUT ADDITIVES IN THE CRANKCASE. Torq-Gard and Torq-Gard Supreme were formulated to provide all the protection your engine needs. Additives could reduce this protection rather than help it.

IF Torq-Gard or Torq-Gard Supreme is NOT USED, use an engine oil that conforms to one of the following specifications:

Single Viscosity Oils

API Service CD/SD
MIL-L-2104C
Series 3*

Multi-Viscosity Oils

API Service CC/SE, CC/SD, or SD
MIL-L-46152

** As further assurance of quality, the oil should also be identified as suitable for API service designation SD.*

Depending on the expected atmospheric temperature at start for the fill period, use oil of viscosity as shown in the following chart.

Air Temperature	John Deere Torq-Gard Oil	Other Oils	
		Single Viscosity Oil	Multi-Viscosity Oil
Above 32°F.	SAE 30	SAE 30	Not recommended.
−10°F. to 32°F.* *	SAE 10W-20	SAE 10W	SAE 10W-30
Below −10°F.	SAE 5W-20	SAE 5W	SAE 5W-20

** * If ambient temperature at start is below 10°F., use an engine heater. SAE 5W-20 oil may also be used if required. This will insure optimum lubrication of the engine and the turbocharger when starting, particularly if the engine is subjected to −10°F. or lower for several hours.*

Some increase in oil consumption may be expected when SAE 5W-20 or SAE 5W oils are used. Check oil level more frequently.

TRANSMISSION-HYDRAULIC SYSTEM OILS

Use only John Deere Type 303 Special-Purpose Oil or its equivalent in the transmission-hydraulic system. Other types of oil will not give satisfactory service, and may result in eventual damage. This special oil, available from your John Deere dealer, may be used in all weather conditions.

GREASES

Use John Deere Multi-Purpose Lubricant or an equivalent SAE multipurpose-type grease for all grease fittings. Application of grease as instructed in the lubrication section will provide proper lubrication and will keep contamination out of bearings.

STORING LUBRICANTS

Your tractor can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture, and other contamination.