

## LUBRICANTS

### Engine Lubricating Oils



X3377N

Fig. 1-Torq-Gard Supreme Engine Oil

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

If oil other than Torq-Gard Supreme is used, it must conform to the following specifications:

#### SINGLE VISCOSITY OILS

##### DIESEL ENGINES

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

##### GASOLINE ENGINES

API Service CD/SE,  
CD/SD, CC/SD or SD  
MIL-L-46152  
MIL-L-2140C\*

#### MULTI-VISCOSITY OILS

##### DIESEL AND GASOLINE ENGINES

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

\* As further assurance of quality, the oil should be identified as suitable for API Service Designation SD.

Depending on the expected prevailing temperature 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 (0°C)	SAE 30	SAE 30	Not recommended
-10°F to 32°F ** (-23°C to 0°C)	SAE 10W-20	SAE 10W	SAE 10W-30
Below -10°F (-23°C)	SAE 5W-20	SAE 5W	SAE 5W-20

\*\*SAE 5W-20 oil may also be used to insure optimum lubrication at starting; particularly when engine is subjected to -10°F (-23°C) or lower temperatures 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.

### Break-In Oil

Use Torq-Gard Supreme SAE 10W-20 oil for the first fill after a major engine overhaul.

### Hydraulic System

Use John Deere Hy-GARD Transmission and hydraulic Oil or its equivalent in the hydraulic system.

### Final Drive Cases

Use only SAE 85-140 API GL5 Gear Lubricant in the final drive cases.

### Main Drive Gear Case

Use only SAE 85-140 API GL5 Gear Lubricant in the main drive gear case.

### Cutterbar Drive Case

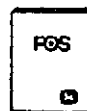
Use only SAE 85-140 API GL5 Gear Lubricant in the cutterbar drive case.

### Greases

John Deere Multi-Purpose Lubricant or its equivalent is recommended for all grease fittings. Application of lubricant as instructed in the lubrication chart will provide proper lubrication and will prevent contamination of bearings.

### Storing Lubricants

Your windrower can operate efficiently 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.



For more information on lubricants, refer to "Fundamentals of Service" manual on General Information, "FOS-50."

## Group 25 SEPARATION

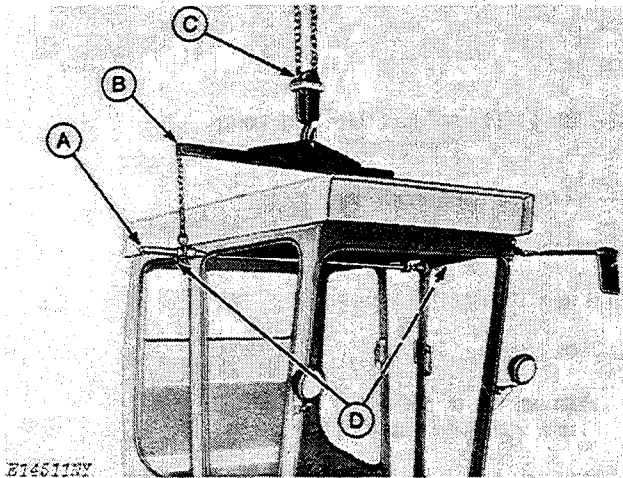
### OPERATOR'S CAB

When the windrower is equipped with a cab, it may be necessary to remove the cab in order to service the windrower or the cab components.

#### REMOVAL

Disconnect all electrical wires and remove all bolts that mount the cab to the operator's platform. If air conditioning is installed, the hoses must be disconnected.

**⚠ CAUTION:** When disconnecting the refrigerant hoses, first discharge the compressor or complete system as explained on page 80-10-12. Follow all safety precautions listed to avoid personal injury.



A—Lifting Rod  
B—Sling

C—Hoist  
D—Retainer Pins

Fig. 1-Removing Operator's Cab

Open cab door and secure in this position.

Remove push-out plug from right hand side of cab and install lifting rod (A, Fig. 1). The hex. nut on the rod must engage the channel along the top of the door opening. This will prevent the lifting rod from sliding out of the cab, which would let the cab fall, causing serious damage. See "Making Special Tools" on page 10-25-2, for instructions to make the lifting rod (A) and sling (B).

Lift the cab off the windrower with the lifting sling and a hoist (C). Secure the lifting sling (B) on the lifting rod (A) with a retainer pin (D) at each end of rod. Make the lifting sling as instructed on the next page.

**⚠ CAUTION:** When lifting the cab, be certain to install a retainer pin (D) at each end of lifting rod (A) to prevent accidental dropping of the cab. Personal injury and/or damage to cab could result.

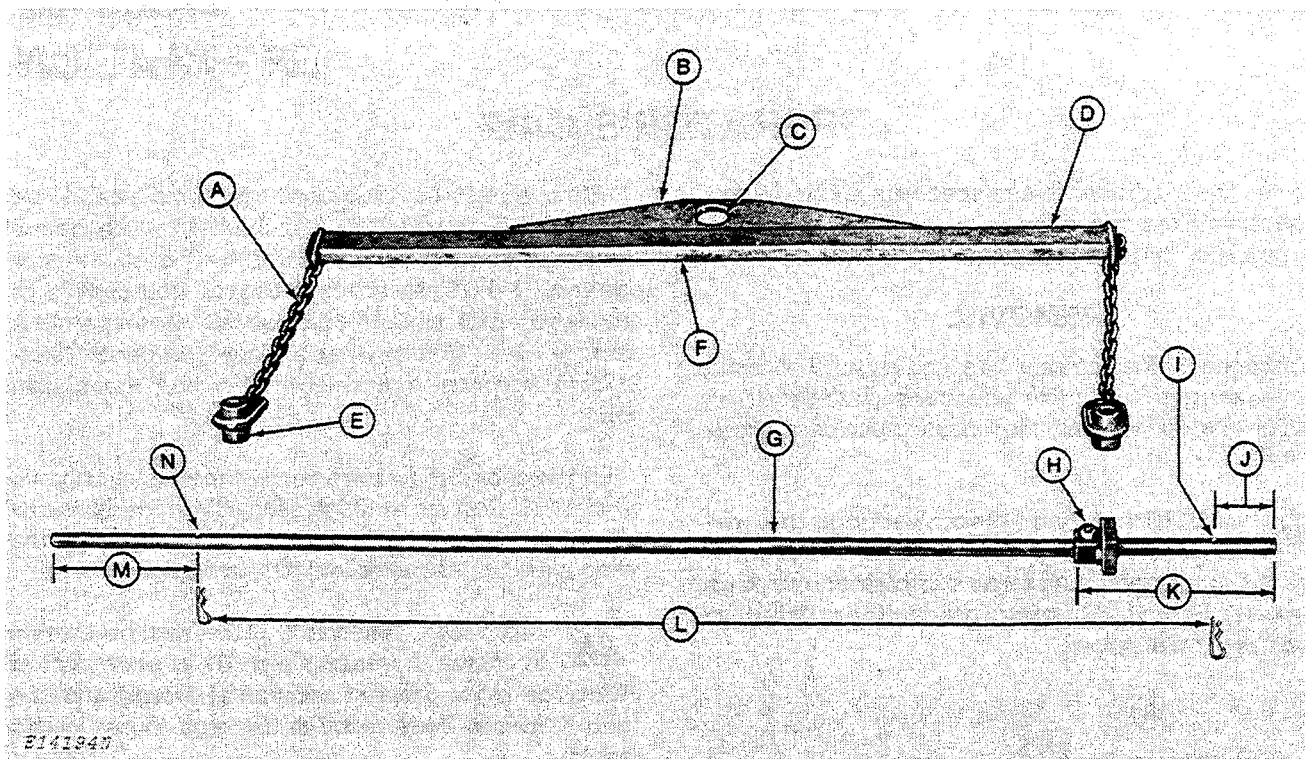
The hoist (C) must have a 1000 lb (453.6 kg) minimum lifting capacity.

#### INSTALLATION

Install the cab by reversing the procedure used to remove it. Connect all electrical wires and refrigerant hoses.

**IMPORTANT:** Refer to Section 80 - OPERATOR'S CAB for instructions to charge the air conditioning system, and for pressurizer system service instructions.

## MAKING SPECIAL TOOLS



A—Two Pieces of Chain Links  
16-1/2 in. (38 mm)

B—3/8-in. x 3 in. x 2 ft. Long  
(9.5 x 76 x 610 mm)

C—Hole

D—Channel - 1-1/4 in. x 2 in. x 4 ft. Long  
(32 x 51 x 1219 mm)

E—Two Pipe Spacers - 13/16-in. I.D. x 2 in. Long  
(21 mm I.D. x 51 mm)

F—Lifting Sling

G—Lifting Rod - 3/4 in. O.D. x 5 ft. Long  
(19 mm O.D. x 1524 mm)

H—3/4-in. (19 mm) Hex. Nut

I—9/32-in. (7.1 mm) Diameter Hole

J—3 in. (76 mm)

K—9 in. (229 mm)

L—Retainer Pin or 1/4-in. x 1-1/4 in.  
Cap Screw With Nut

M—7 in. (178 mm)

N—9/32 in. (7.1 mm) Diameter Hole

Fig. 2-Making Operator's Cab Lifting Rod and Sling

Weld hex. nut to the lifting rod (Fig. 2).

Weld the lifting sling as follows:

1. Pipe spacer to each length of chain.

2. A length of assembled chain to each end of channel.

3. Plate centered on top of channel.



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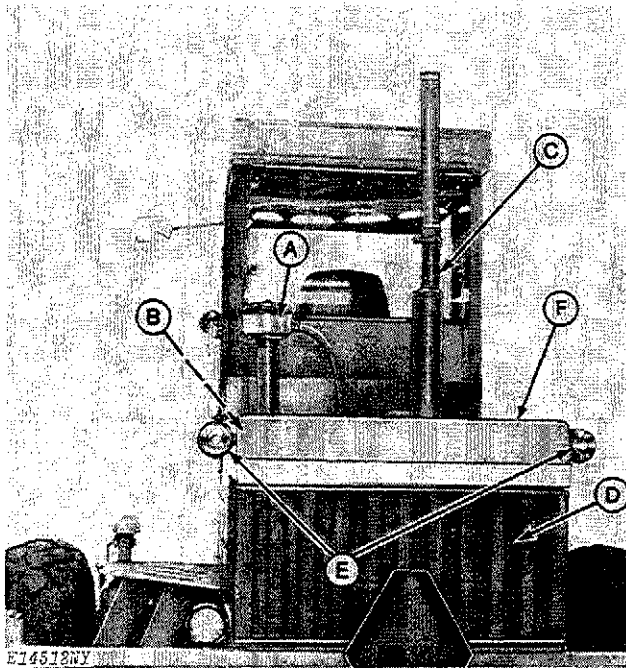
**to download the complete manual.**

**Thank you so much for reading**

# ENGINE

## REMOVAL

**IMPORTANT:** Be certain to plug all openings and cap all hoses or lines that are disconnected to prevent contamination of a particular system.



- |                        |                   |
|------------------------|-------------------|
| A—Precleaner           | D—Radiator Screen |
| B—Air Cleaner          | E—Warning Lamp    |
| C—Muffler-Exhaust Pipe | F—Engine Hood     |

Fig. 3-Removing Air Cleaner, Aspirated Precleaner, Muffler, Radiator Screen, and Engine Hood

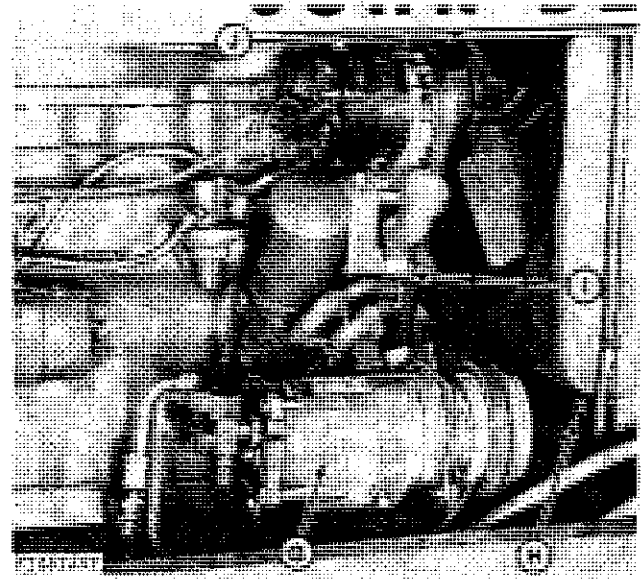
Remove aspirated precleaner (A, Fig. 3), air cleaner (B), exhaust pipe muffler (C), and radiator screen (D) (Fig. 3).

Disconnect warning lamp wires and remove warning lamps (E).

Remove engine hood (F).

Remove the compressor (G) and secure to the outside of main frame member. Do not disconnect the refrigerant hoses.

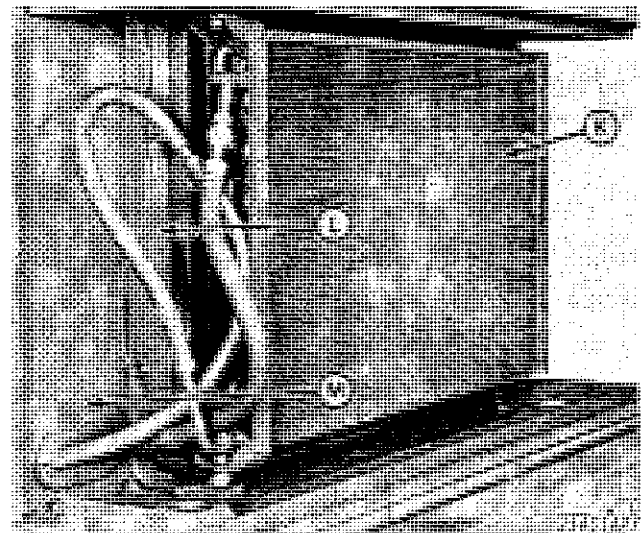
**IMPORTANT:** Be careful not to damage refrigerant hoses and compressor assembly.



- |                       |              |
|-----------------------|--------------|
| G—Compressor          | I—Lower Hose |
| H—Radiator Drain Plug | J—Upper Hose |

Fig. 4-Removing Compressor, Draining Cooling System, and Removing Radiator Hoses

Drain cooling system. Disconnect the upper and lower radiator hoses (Fig. 4).



- |             |                      |                  |
|-------------|----------------------|------------------|
| K—Condenser | L—Condenser Mounting | M—Radiator Panel |
|-------------|----------------------|------------------|

Fig. 5-Removing Condenser

Remove condenser (K).

**IMPORTANT:** Do not disconnect the refrigerant hoses.