



Caterpillar

Operator's Manual

**D386 (S/n 13B1, 14B1,
15B1 & Up)**

**D397 (S/n 10B1, 11B1,
12B1 & Up)**

or Call 800-443-0625

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CT-O-ENG D386+

Operator's Manual

**OPERATION AND
MAINTENANCE
INSTRUCTIONS**

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CATERPILLAR

D397 ENGINE

D386 ENGINE

SERIAL NUMBERS

D397 - 10B1 - UP

D397 - 11B1 - UP

D397 - 12B1 - UP

D386 - 13B1 - UP

D386 - 14B1 - UP

D386 - 15B1 - UP

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Lubrication Instructions

GENERAL LUBRICATING INFORMATION

Careful attention to the following information on lubricants and their proper selection will add much to performance, economy and long life of the engine. The lubrication chart specifies the lubricants to be used, the points to be serviced and the hourly intervals of servicing according to "Hour Meter" hours.

All time intervals in the lubrication chart and maintenance instructions are for "Hour Meter" hours, therefore, daily readings will tell when to service the engine. The "Hour Meter" is located in the V of the engine on the right of the governor housing. It does not keep pace with the clock but when the crankshaft turns as many revolutions as are made in an hour at normal operating speed, the dial advances one number.

**HOURLY METER
LOCATED IN V OF ENGINE**



Change oil, check oil levels and refill compartments with the engine level. It is best to change oil when it is warm, after the engine has run for some time. Then, most of the sediment will be in suspension, and therefore, will readily drain.

Naturally, any precautions taken during cold weather to keep the engine warm will cause more rapid oil distribution and contribute to quicker starting. The engine should always be allowed to idle at not less than half engine speed for several minutes after starting to assure adequate lubrication before operating on normal load.

All oil companies have adopted the S.A.E. (Society of Automotive Engineers) viscosity number system which classifies crankcase lubricating oils and transmission oils in terms of viscosity or fluidity. The oils with the lower numbers are lighter, and flow more readily than do the oils with higher numbers. The S.A.E. number refers only to the viscosity of the oil, and has reference to no other characteristic or property.

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LUBRICATION CHART

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DIESEL D397 AND D386 ENGINES

The folded page is arranged to serve two purposes.

First, it is a complete outline of all the information required to lubricate the engine.

Second, the illustration and identification of points of lubrication can be used with the detailed illustrations and information on the pages following the chart as a reference for lubrication and service information.

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Key To Lubricants

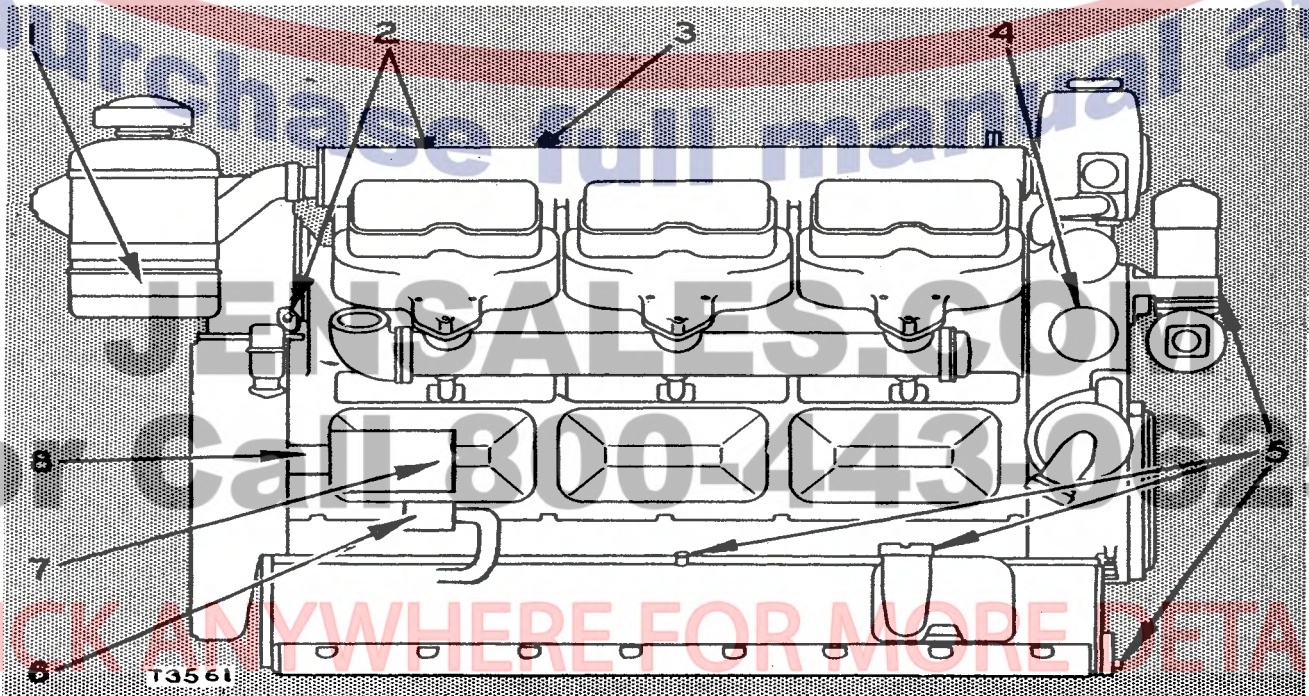
CO Crankcase Lubricating Oil

BR Ball and Roller Bearing Lubricant

Identification of Points of Lubrication, Lubricant To Apply and Interval of Service

Points And Identification		Lubri- cant	Interval						
			10 HRS.	60 HRS.	120 HRS.	250 HRS.	500 HRS.	900 HRS.	1500 HRS.
1	Air Cleaners	CO	X	X					
2	Governor And Fuel Injection Pump Control Housings	CO			X				
3	Tachometer Drive	BR						X	
4	Charging Generator	CO			X				
5	Crankcase Lubricating Oil System	CO	X			†X	**X		**X
6	Air Motor Oiler	CO	X						
7	Air Starting Motor Plain End	BR						X	
8	Air Starting Motor Gear Drive	CO						X	

Location Of Points Of Lubrication



† Change by-pass filter element in small capacity system.

** See CRANKCASE LUBRICATING OIL CHANGE PERIOD CHART for correct service period.