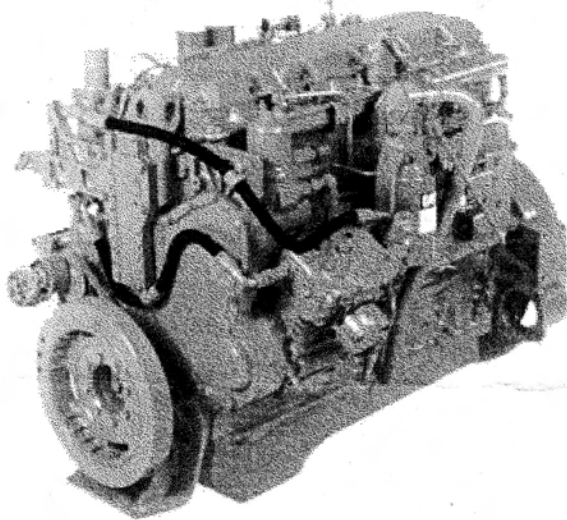


# CATERPILLAR

## Diesel Truck Engine

# 3126

175 hp, 210 hp @ 2400 rpm  
 190 hp, 210 hp, 230 hp @ 2200 rpm  
 250 hp, 275 hp, 300 hp @ 2200 rpm



Shown with  
Optional Equipment

### SPECIFICATIONS

6 Cylinder, 4-Stroke-Cycle Diesel	
Bore – in (mm) .....	4.33 (110)
Stroke – in (mm) .....	5.0 (127)
Displacement – cu in (L) .....	439 (7.2)
Aspiration .....	ATAAC**
Compression Ratio	
175-300 hp .....	16:1
AMA Rating for USA Tax Purposes – hp .....	40.94
Rotation (from flywheel end) .....	Counterclockwise
Capacity for Liquids – U.S. gal (L)	
Cooling System* .....	3.5 (13.2)
Lube Oil System (refill) .....	5.25 (20.0)
Weight, Net Dry (approx) – lb (kg)	
Including Flywheel .....	1,250 (568)

\* Engine Only. Capacity will vary with radiator size and use of cab heater

\*\* Air-to-Air AfterCooling

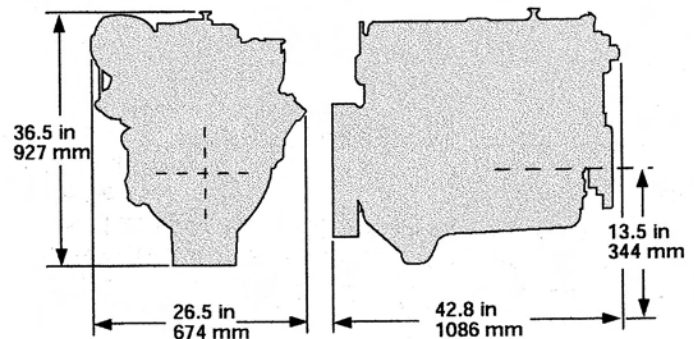
### STANDARD EQUIPMENT

- Air inlet manifold heater
- Cooling, belt driven jacket water pump, oil cooler
- Crankcase breather
- Dipstick (L.H. side)
- Electronic Control Module (ECM)
- Electronic Data Link, ATA/SAE
- Flywheel and SAE No. 2 housing
- Fuel, spin-on filter, transfer pump
- Governor – full-range electronically controlled
- Hydraulic Electronic Unit Injection (HEUI) system
- Lifting eyes
- Lubricating, spin-on filter, pump, front or rear sump pan
- Turbocharger
- Vibration damper

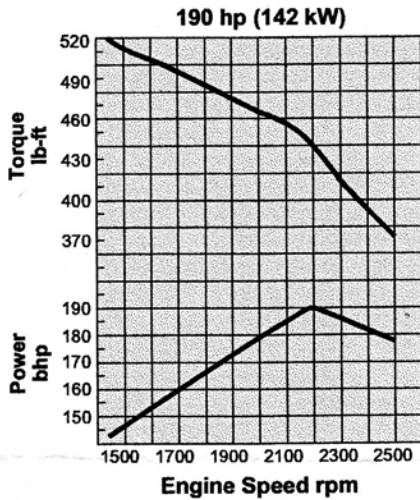
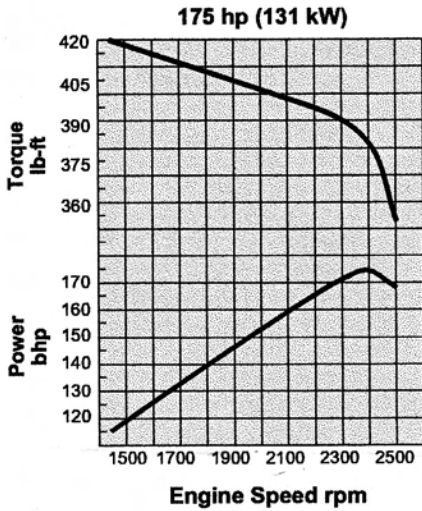
### ACCESSORY EQUIPMENT

- Air compressor, gear driven, 13.2 cfm (0.37 m<sup>3</sup>/min), or (16.5 cfm [.46m<sup>3</sup>/min]) with gear driven pump drive
- Air inlet elbow
- Alternator, 12 Volt, 115 Ampere; 21SI and drive
- Block heater, 1000 Ampere
- Coolant, conditioners
- Exhaust adapters
- Fan drives
- Front PTO adapter
- Front support
- Hydraulic pump drive, SAE A or SAE B
- Turbocharger compressor outlet elbow
- Starting motor, 12 volt

### DIMENSIONS



### PERFORMANCE CURVES



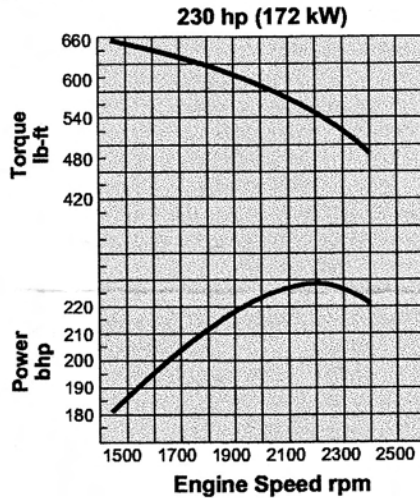
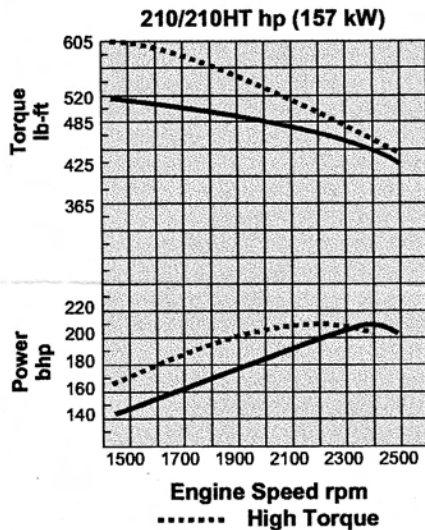
### PERFORMANCE DATA

Rated hp (kW)	175 (131)
Rated rpm	2400
Governor Speed rpm*	2500
Low Idle rpm	700
Operating Range (rpm)	1060
Altitude Capability – ft (m)	10,000 (3050)
Peak Torque – lb-ft (N·m)	420 (569)
Peak Torque rpm	1440
Torque Rise (%) (Gov. rpm)	19

\* Selection of Rear Axle Ratio should be based on Governed Speed rpm.

Rated hp (kW)	190 (142)
Rated rpm	2200
Governor Speed rpm*	2500
Low Idle rpm	700
Operating Range (rpm)	1060
Altitude Capability – ft (m)	10,000 (3050)
Peak Torque – lb-ft (N·m)	520 (705)
Peak Torque rpm	1440
Torque Rise (%) (Gov. rpm)	40

### PERFORMANCE CURVES



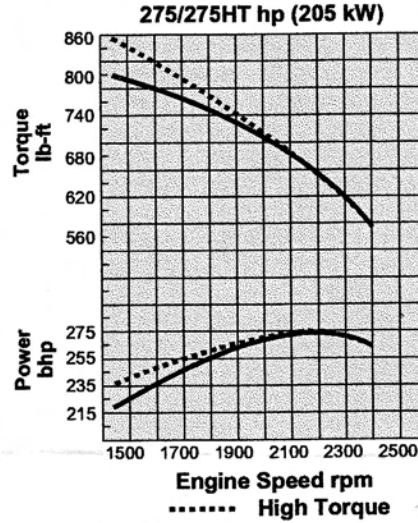
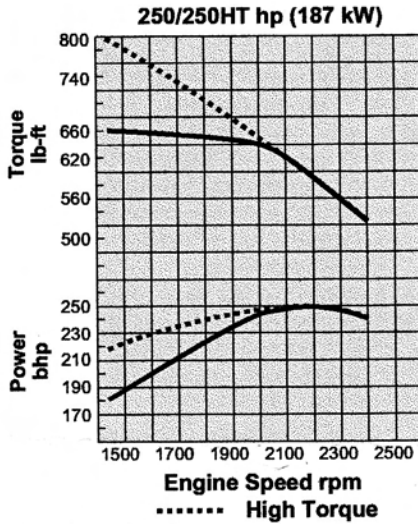
### PERFORMANCE DATA

Rated hp (kW)	210 (157)
Rated rpm	2400/2200
Governor Speed rpm*	2500/2400
Low Idle rpm	700
Operating Range (rpm)	1060/960
Altitude Capability – ft (m)	10,000 (3050)
Peak Torque – lb-ft (N·m)	520 (705)/605 (820)
Peak Torque rpm	1440
Torque Rise (%) (Gov. rpm)	23/37

\* Selection of Rear Axle Ratio should be based on Governed Speed rpm.

Rated hp (kW)	230 (172)
Rated rpm	2200
Governor Speed rpm*	2400
Low Idle rpm	700
Operating Range (rpm)	960
Altitude Capability – ft (m)	10,000 (3050)
Peak Torque – lb-ft (N·m)	660 (898)
Peak Torque rpm	1440
Torque Rise (%) (Gov. rpm)	36

## PERFORMANCE CURVES



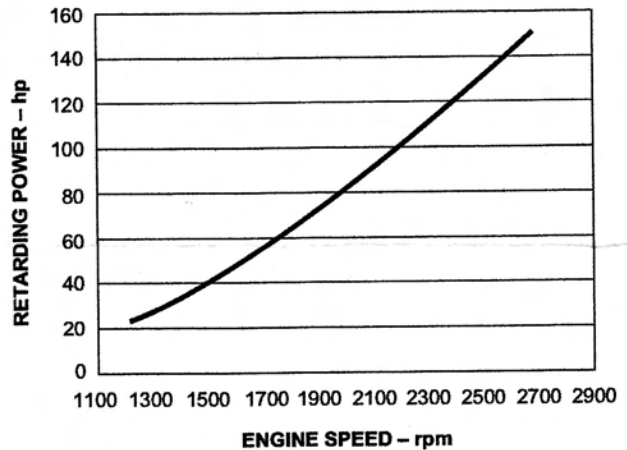
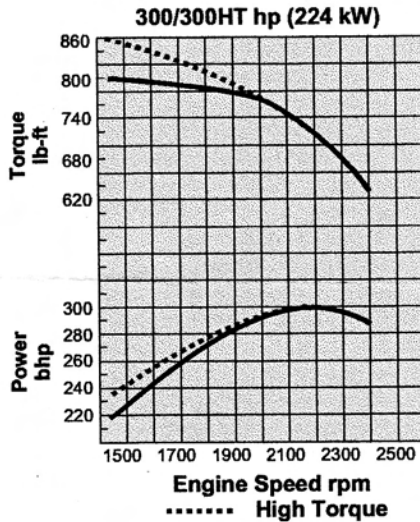
## PERFORMANCE DATA

Rated hp (kW)	250 (187)
Rated rpm	2200
Governor Speed rpm*	2400
Low Idle rpm	700
Operating Range (rpm)	960
Altitude Capability – ft (m)	10,000 (3050)
Peak Torque – lb-ft (N•m)	660 (898)/800 (1088)
Peak Torque rpm	1440
Torque Rise (%) (Gov. rpm)	26/52

\* Selection of Rear Axle Ratio should be based on Governed Speed rpm.

Rated hp (kW)	275 (205)
Rated rpm	2200
Governor Speed rpm*	2400
Low Idle rpm	700
Operating Range (rpm)	960
Altitude Capability – ft (m)	10,000 (3050)
Peak Torque – lb-ft (N•m)	800 (1088)/860 (1170)
Peak Torque rpm	1440
Torque Rise (%) (Gov. rpm)	38/49

## PERFORMANCE CURVES



## PERFORMANCE DATA

\* Selection of Rear Axle Ratio should be based on Governed Speed rpm.

Rated hp (kW)	300 (224)
Rated rpm	2200
Governor Speed rpm*	2400
Low Idle rpm	700
Operating Range (rpm)	960
Altitude Capability – ft (m)	10,000 (3050)
Peak Torque – lb-ft (N•m)	800 (1088)/860 (1170)
Peak Torque rpm	1440
Torque Rise (%) (Gov. rpm)	27/36

## Exhaust Brake Performance

Three operational modes can be programmed: Coast, Latch or Manual

## **ELECTRONIC FEATURES**

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Electronic self-diagnostics

Compatible with Caterpillar electronic technician, electronic control analyzer programmer and MPSI Pro-Link service tools

Cold weather startup strategy and electronic idle control functions

ECM storage of operational, maintenance and diagnostic data.

Customer selectable, re-programmable operational parameters:

- Engine Monitoring System
- Cruise control with exclusive SoftCruise
- Vehicle speed [mph (km/h)] limiting and protection
- Idle shutdown timer & override
- Maintenance monitor (miles (km's) or hours)
- Customer password protection
- Exhaust brake operational modes
- Adjustable low idle rpm

Programmable Power Take-Off (PTO) functions:

- Adjustable speed control [mph (km/h)] of vehicle while in PTO mode
- Adjustable maximum engine rpm speed
- Adjustable minimum engine rpm speed
- Limit engine torque to driven equipment
- Adjustable ramp rate up or down from PTO set speed
- Adjustable rpm "bump" rate
- Selectable PTO configuration for "in cab" or station of remote operation

## **GEARING CONSIDERATIONS**

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Selection of a rear axle ratio should be based on the governed rpm speed of the engine. For the 175, 190, 210 hp ratings the governed speed is **2500 rpm**. For all other ratings (210HT-300HT) the governed speed is **2400 rpm**.

For the best balance of performance and fuel economy, spec axle ratios and tire sizes to obtain: **2000 rpm @ 60 mph** (96 km/h) subject to the following: Maximum cruise speed of **65 mph** (105 km/h) **or below**. Maximum recommended engine speed at cruise – 2400 rpm. Minimum recommended engine speed at a cruise speed of 55 mph (88 km/hr) – **2000 rpm**

Depending on the application, the absolute minimum startability in first gear should be 6%, preferably in excess of 10%. On/off highway severe service applications will require considerably greater startability. Minimum gradeability should be 0.5% at cruise rpm.

To further optimize the matching of your truck to the performance characteristics of the engine, a computerized spec'ing tool called Truck Performance Analysis (TPA) is offered by your Caterpillar® dealer. It calculates the effects of various driveline variables on engine operation such as transmissions, axles, and tires. This lets you see the results before you finalize your truck specs.

## **RATING CONDITIONS**

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**Performance** is based on SAE J1349 standard conditions of 29.61 in. Hg (100 kPa) and 77°F (25°C).

**Fuel consumption** is based on fuel oil having an LHV of 18,390 Btu/lb (42 780 kJ/kg) and weighing 7.001 lb/U.S. gal (839 g/L).

The curves shown are for a standard engine without fan, but equipped with air compressor and fuel, lubricating oil, and jacket water pumps.