

Shown with Optional Equipment

### CATERPILLAR® ENGINE SPECIFICATIONS

In-line 6-Cylinder, 4-Stroke-Cycle Diesel  
 Bore — in (mm) ..... 4.33 (110)  
 Stroke — in (mm) ..... 5.0 (127)  
 Displacement — cu in (L) ..... 441 (7.2)  
 Aspiration ..... Turbocharged  
 Compression Ratio ..... 16.5:1  
 Rotation (from flywheel end) .. Counterclockwise  
 Cooling System<sup>1</sup> — gal (L) ..... 3.5 (13.2)  
 Lube Oil System (refill) — gal (L) ..... 5.5 (21)<sup>2</sup>  
 Weight, Net Dry (approx) — lb (kg)  
 including flywheel ..... 1295 (588)

<sup>1</sup> Engine only. Capacity will vary with radiator size and use of cab heater.

<sup>2</sup> Optional 7.5 gal (28L) oil pan also available in some OEM chassis.

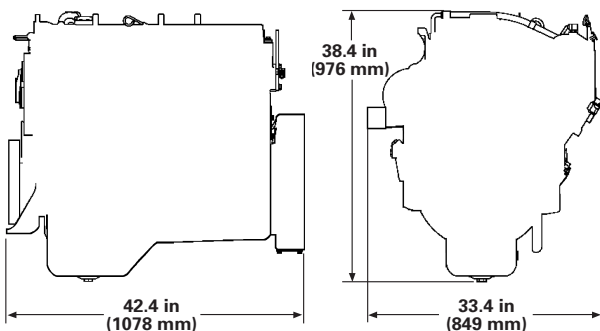
### STANDARD EQUIPMENT

- Air inlet manifold heater
- Cooling: belt-driven water pump, oil cooler
- Crankcase breather
- Diesel Oxidation Catalyst (required)
- Electronic Control Module (ECM)
- Electronic Data Link, SAE/ATA, SAE/J1939
- Fuel: spin-on secondary filter, transfer pump
- Governor: full-range, electronically controlled HEUI™ Fuel System
- Lifting eyes
- Lubrication: gear-driven pump, front or rear sump pan, full flow spin-on filter, oil filler, oil level gauge (dipstick)
- SAE No. 1 or SAE No. 2 flywheel housing
- Turbocharger
- Vibration damper

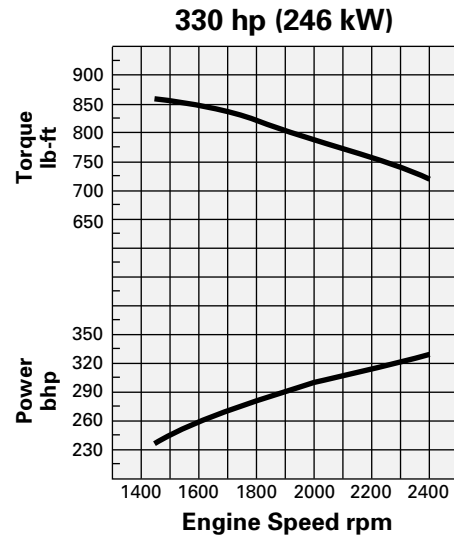
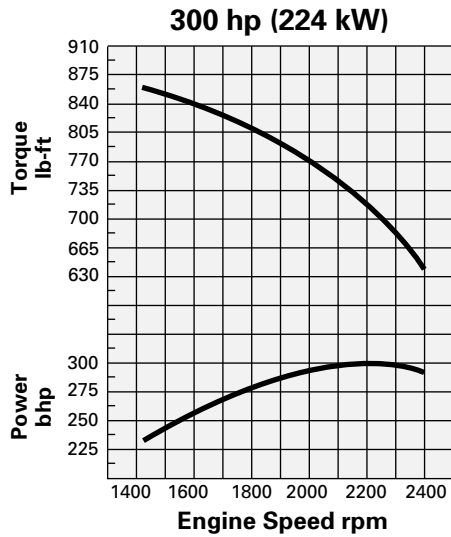
### ACCESSORY EQUIPMENT

- Air compressor: gear driven, 13.2 cfm (0.37 m<sup>3</sup>/min), 15.7 cfm (0.44 m<sup>3</sup>/min), or 16.5 cfm (0.46 m<sup>3</sup>/min)
- Air conditioner compressor mounting
- Air inlet elbow
- Automatic transmission adapter
- Auxiliary brake compatible (exhaust)
- Fan drive
- Fan drive mounting bracket
- Flywheel
- Front engine support
- Front PTO adapter
- Fuel priming pump
- Hydraulic pump drive, SAE A
- Jacket water heater
- Rear PTO (RPTO)
- Starting motor: 12V or 24V
- Turbocharger compressor outlet elbow

### DIMENSIONS



**PERFORMANCE CURVES**

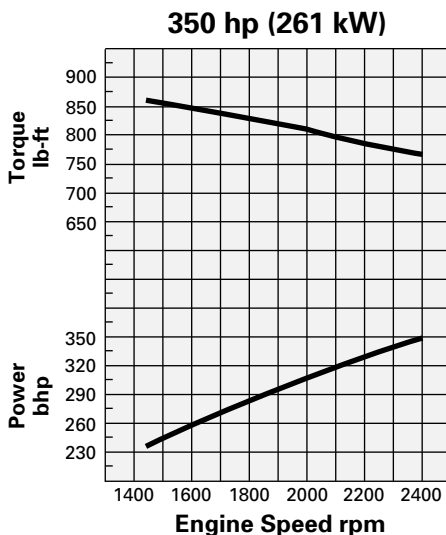


**PERFORMANCE DATA**

Operating Range (rpm) ..... 1440-2400  
**Governed Speed — rpm** ..... **2400**  
 Advertised hp (kW) ..... 300 (224)  
 Max hp @ 1600 rpm (kW) ..... 300 (224)  
**Peak Torque — lb-ft (N·m)** ..... **860 (1166)**  
 Peak Torque — rpm ..... 1440  
 Torque rise (%) ..... 38  
 Altitude Capability — ft (m) ..... 10,000 (3048)

Operating Range (rpm) ..... 1440-2400  
**Governed Speed — rpm** ..... **2400**  
 Advertised hp (kW) ..... 330 (246)  
 Max hp (kW) ..... 330 (246)  
**Peak Torque — lb-ft (N·m)** ..... **860 (1166)**  
 Peak Torque — rpm ..... 1440  
 Torque rise (%) ..... 19  
 Altitude Capability — ft (m) ..... 10,000 (3048)

**PERFORMANCE CURVES**



**PERFORMANCE DATA**

Operating Range (rpm) ..... 1440-2400  
**Governed Speed — rpm** ..... **2400**  
 Advertised hp (kW) ..... 350 (261)  
 Max hp (kW) ..... 350 (261)  
**Peak Torque — lb-ft (N·m)** ..... **860 (1166)**  
 Peak Torque — rpm ..... 1440  
 Torque rise (%) ..... 12  
 Altitude Capability — ft (m) ..... 10,000 (3048)

### ROUTINE MAINTENANCE RECOMMENDATIONS

#### Daily

- Walk-around inspection
- Check oil level
- Check coolant level
- Check air cleaner service indicator
- Drain water separator if water present

#### Preventive Maintenance (PM Level 1)

- Change oil & filter
- Scheduled Oil Sampling (S•O•S<sup>SM</sup>) analysis
- Drain water from fuel tanks and replace fuel filter
- Test coolant (supplemental coolant additive)
- Inspect radiator and Air-to-Air Aftercooler
- Clean crankcase breather (every other oil change)
- Check belts, hoses, and clamps
- Lube fan drive bearing
- Inspect, clean batteries
- Replace air compressor filter (if equipped)
- Inspect cylinder head ground stud

#### PM Level 1 Recommended Change Intervals

Oil Pan	Miles/Years
28L (30 quarts)	15,000/1
21L (22 quarts)	11,000/1

Refer to the operation & maintenance manual for complete details.

### CUSTOMER SERVICE INFORMATION

Customer Call Center (Toll Free) 877-777-3126  
 Parts & Service Directory LEGT3466

### RATING DEFINITIONS AND CONDITIONS

**Performance** is based on SAE J1995 standard conditions of 29.61 in. Hg (100 kPa) and 77° F (25° C).

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

### ELECTRONIC FEATURES

- Real time clock with date and time stamping of critical events
- Electronic self-diagnostics
- Compatible with Caterpillar Electronic Technician (ET)
- Cold weather startup strategy and electronic idle control functions
- ECM storage of operational, maintenance, diagnostic codes and diagnostic data
- J1939 compatible
- Customer selectable, re-programmable operational parameters:
  - 2-speed fast idle capabilities
  - Adjustable low idle rpm
  - Automated Transmission compatibility
  - Cooling fan control
  - Cruise control with exclusive Soft Cruise
  - Customer password protection
  - Engine Monitoring System — warning, derate, or shutdown
  - Enhanced theft deterrent and secure idle (Cat Messenger or Pocket Tec required)
  - Exhaust brake operational modes
  - Fleet Information Software capability
  - Idle shutdown timer & override
  - Maintenance monitor [miles (km) or hours]
  - OEM parameter lockout
  - Progressive shifting and gear-down protection
  - Selectable AT/MT/HT shift points for automatic transmission
  - Vehicle speed [mph (km/h)] limiting and protection
- Programmable Power Take-Off (PTO) functions:
  - Adjustable maximum engine rpm speed
  - Adjustable minimum engine rpm speed
  - Adjustable ramp rate up or down between PTO set speed(s)
  - Adjustable rpm “bump” intervals
  - Adjustable speed control [mph (km/h)] of vehicle while in PTO mode
  - Limit engine torque to driven equipment
  - Multi-speed PTO set speed capability
  - Selectable PTO configuration for “in cab” or station of remote operation