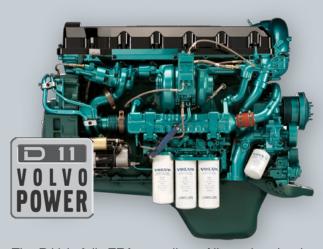
# VOLVO DII ENGINE FAMILY



The Volvo D11 is a fuel efficient, lightweight engine designed to improve reliability and minimize cost of operation. Five power ratings are available in the range from 355 to 405 hp. The D11 delivers performance competitive with larger engines with an impressive 405 hp and 1,550 lbs. ft. torque. It's also a lighter solution for maximizing fuel economy in regional, less than truckload (LTL) and distribution situations. It's available in VN daycabs, VAH auto haulers and VHDs making it perfect for regional operations.



The D11 is fully EPA compliant. All regulated pollutants have been reduced 99% from untreated levels. Volvo meets these demands with outstanding reliability and economy, in part because we use Selective Catalytic Reduction for the highest efficiency. SCR allows us to pursue a passive regeneration concept that uses NOx in place of diesel fuel to regenerate the soot, further reducing your cost of operation.

SPECIFICATIONS			
Ratings:	Power: 355 to 405 HP Torque: 1250 to 1550 lb-ft		
Base Engine Configuration	4 cycle / Inline Six		
Emissions	SCR Selective Catalytic Reduction		
Aspiration	Sliding Nozzle Variable Geometry Turbocharger		
Cam / Valve Configuration	SOHC / 4 Valves per Cylinder		
Cylinder Head	One Piece Rigid Deck Cylinder Head		
Injection System	Dual Solenoid Electronic Unit Injection		
Fuel Injection Pressure, psi (bar)	35,000 (2,400)		
Electronic Management System	Volvo VECTRO		
Rating Uprateability	Software Only, Throughout Range		
Displacement, cu. in. (L)	661 (10.8)		
Compression Ratio	17.0:1		
Bore & Stroke, in. (mm)	4.84 x 5.98 (123 x 152)		
Cylinder Spacing, in. (mm)	6.06 (154)		
Full Dress Dry Weight, lb. (kg)	2286 (1037)		
Fuel and Lubrication:			
Fuel Specification	Ultra Low Sulfur Diesel, 15 ppm		
Fuel Filters	Primary plus Secondary		
Total Lube Oil Capacity, qts. (L)	38 (36)		
Oil Filtration	Two Full Flow, One Bypass		
Oil Drain Interval, Normal Service, miles (km)	35,000 (56,000)		
Oil Specification	Volvo VDS-4, SAE 10W-30		
FLOCS Oil Drain Kit	Optional		
Engine Equipment:			
Air Compressor, CFM	Two Cylinder, 31.8		
Retarder	I-VEB Volvo Engine Brake		
Engine Brake Rating at 2200 rpm	440 hp @ 2200 rpm		
Engine Brake Rating at 1500 rpm	270 hp @ 1500 rpm		
Engine Brake Weight, lbs. (kg)	25 (12)		
PTO Port for Live Rear PTO Pump or Shaft	Standard		
Preheater, Electrical	Optional		

### FEATURES AND ADVANCED TECHNOLOGIES

### **BENEFITS**

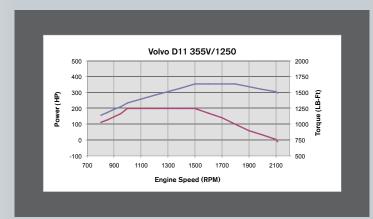
Warmhold Function	Warm up engine quickly and maintain engine temperature at very low idle speeds
Fuel System	Keeps fuel temperature regulated, allowing Volvo engines to operate more efficiently for better fuel economy and lower operating costs
Rear Mounted Engine PTO	Takes power directly from the engine, to utilize the PTO while the vehicle is being driven or stationary
Performance Bonus Guide	Patented sweet-spot measure to encourage soft driving for better fuel economy
Dual port poppet-style hydraulic EGR valve	Reliable stick-free performance. Close position to turbocharger assures precision EGR control for better fuel economy
Volvo air intake pre-heater	Assures starting in frigid climates



# **Specifications**

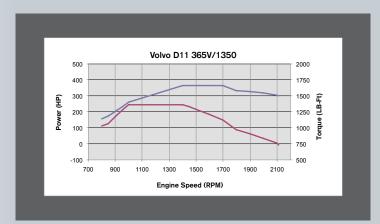


### Volvo D11 355V/1250\*



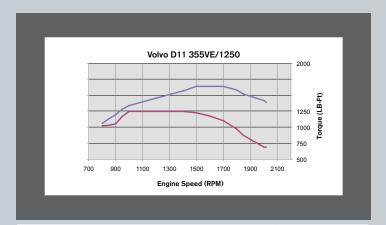
Advertised Power, HP	355
Peak Power, HP	365
Peak Torque, lb-ft@rpm	1250@1050
Governed rpm	2100
Governed rpm Recommended cruise speed range, rpm	2100 1200-1500

### Volvo D11 365V/1350



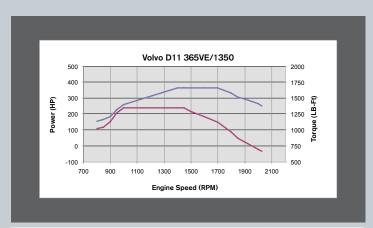
Advertised Power, HP	365
Peak Power, HP	375
Peak Torque, lb-ft@rpm	1350@1050
Governed rpm	2100
Governed rpm Recommended cruise speed range, rpm	2100 1200-1500

### Volvo D11 355VE/1250\*\*



Advertised Power, HP	355
Peak Power, HP	365
Peak Torque, lb-ft@rpm	1250@1050
Governed rpm	2100
Governed rpm Recommended cruise speed range, rpm	2100 1200-1500

### Volvo D11 365VE/1350



Advertised Power, HP	365
Peak Power, HP	375
Peak Torque, lb-ft@rpm	1350@1050
Governed rpm	2100
Governed rpm Recommended cruise speed range, rpm	2100 1200-1500

<sup>\*</sup>V indicates vocational application

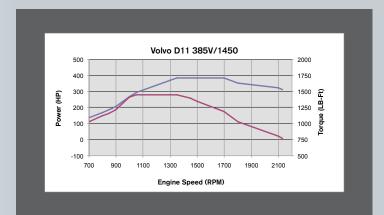
<sup>\*\*</sup>VE indicates highway application and reduced governor cut-in at 1800 rpm



# **Specifications**

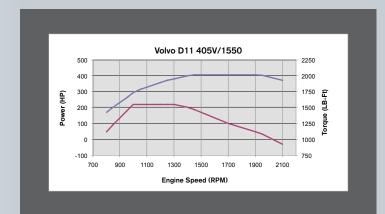


### Volvo D11 385V/1450



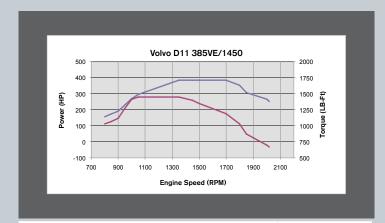
Advertised Power, HP	385
Peak Power, HP	400
Peak Torque, lb-ft@rpm	1450@1050
Governed rpm	2100
Governed rpm Recommended cruise speed range, rpm	2100 1200-1500

### Volvo D11 405V/1550



Advertised Power, HP	405
Peak Power, HP	405
Peak Torque, lb-ft@rpm	1550@1050
Governed rpm	2100
Governed rpm Recommended cruise speed range, rpm	2100 1200-1500

### Volvo D11 385VE/1450



Advertised Power, HP	385
Peak Power, HP	400
Peak Torque, lb-ft@rpm	1450@1050
Governed rpm	2100
Governed rpm Recommended cruise speed range, rpm	2100 1200-1500

### Volvo D11 405V/1550 XE



Advertised Power, HP	405
Peak Power, HP	405
Peak Torque, lb-ft@rpm	1550@1050
Governed rpm	2100
Governed rpm Recommended cruise speed range, rpm	2100 1200-1500



## Eco-Torque Specifications





Volvo's new Eco-Torque feature provides a new twist on encouraging fuel-economy driving. By switching to a lower torque curve in the top two gears, but allowing the higher torque curve during lug-back, Eco-Torque encourages low-rpm driving and provides a lower power level in non-demanding situations. But when conditions demand high torque at low rpm, the engine torque will switch up to the higher curve, in many cases allowing the hill to be topped in the highest gear.

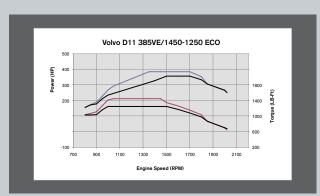
Dual-Torque ratings have a similar dual personality, but serve a special purpose. They take advantage of several vendor transmissions that will allow a higher torque in the top two gears. This means that they must operate in their lower torque in the low gears.

	MAXIMUM FUEL ECONOMY	MAXIMUM Performance	MAXIMUM Driveability	USE OF Lower rated Transmissions	MAXIMUM Uprateability
BASE RATINGS	×	✓	✓	×	✓
ECO-TORQUE Ratings	1	Х	1	×	1
DUAL-TORQUE RATINGS	1	×	×	1	Х

### **ECO-TORQUE SPECIFICATIONS**

Torque in all gears but top two, lb-ft	1450
Default torque in top two gears, lb-ft	1250
On demand torque in top two gears, lb-ft	1450

#### Volvo D11 385VE/1450-1250 ECO



Advertised Power, HP	385
Peak Power, HP	400
Peak Torque, lb-ft@rpm	1450@1050
Governed rpm	2100
Recommended cruise speed range, rpm	1200-1500
Start engagement torque, lb-ft@rpm	750@800
Torque in all gears but top two, lb-ft	1450
Default torque in top two gears, lb-ft	1250
On demand torque in top two gears, lb-ft	1450

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