

Duramax Engine Quick Facts

Years of Production:	2001 - 2004	2004.5 - 2006	2006.5 - 2007 Classic	2007 New - 2010	2011 - Current
Engine Production Code:	LB7	LLY	LBZ	LMM	LML
8th Digit of VIN:	1	2	D	6	8
Operating Protocol:	SAE J1850	SAE J1850	CAN	CAN	CAN
Configuration:	V8 (90 degree)	V8 (90 degree)	V8 (90 degree)	V8 (90 degree)	V8 (90 degree)
Firing Order:	1-2-7-8-4-5-6-3	1-2-7-8-4-5-6-3	1-2-7-8-4-5-6-3	1-2-7-8-4-5-6-3	1-2-7-8-4-5-6-3
Displacement:	403 Cubic Inches, 6.6 Liters	403 Cubic Inches, 6.6 Liters	403 Cubic Inches, 6.6 Liters	403 Cubic Inches, 6.6 Liters	403 Cubic Inches, 6.6 Liters
Block/Head material:	Cast Iron/Aluminum	Cast Iron/Aluminum	Cast Iron/Aluminum	Cast Iron/Aluminum	Cast Iron/Aluminum
Compression Ratio:	17.5:1	17.5:1 (16.8:1 in 2006)	16.8:1	16.8:1	16.8:1
Engine Compression Test Minimum:	300 PSI	300 PSI	300 PSI	300 PSI	300 PSI
Bore:	4.06 inches	4.06 inches	4.06 inches	4.06 inches	4.06 inches
Stroke:	3.90 inches	3.90 inches	3.90 inches	3.90 inches	3.90 inches
Aspiration:	Waste Gated Turbo	Variable Geometry Turbo (VGT)	Variable Geometry Turbo (VGT)	Variable Geometry Turbo (VGT)	Variable Geometry Turbo (VGT)
Intercooler:	Air to Air	Air to Air	Air to Air	Air to Air	Air to Air
Thermostat Full Open Temp:	230 Degrees Fahrenheit	230 Degrees Fahrenheit	230 Degrees Fahrenheit	230 Degrees Fahrenheit	230 Degrees Fahrenheit
Turbo Coolant Bypass Valve:	140 Degrees Fahrenheit	140 Degrees Fahrenheit	140 Degrees Fahrenheit	140 Degrees Fahrenheit	140 Degrees Fahrenheit
Minimum Oil Pressure (Idle, Hot):	14 PSI	14 PSI	14 PSI	14 PSI	14 PSI
Minimum Oil Pressure (1,800 RPM, Hot):	42 PSI	42 PSI	42 PSI	42 PSI	42 PSI
Valvetrain:	OHV, 4 valves per cylinder	OHV, 4 valves per cylinder	OHV, 4 valves per cylinder	OHV, 4 valves per cylinder	OHV, 4 valves per cylinder
Injection Type:	Common Rail, Direct Injection	Common Rail, Direct Injection	Common Rail, Direct Injection	Common Rail, Direct Injection	Common Rail, Direct Injection
Injection Pump:	Bosch High Pressure CP3	Bosch High Pressure CP3	Bosch High Pressure CP3	Bosch High Pressure CP3	Bosch High Pressure CP3
Injection Pressure:	23,000 Psi	23,000 PSI	26,000 PSI	26,000 PSI	30,000 PSI
Horsepower:	235 hp @ 2,700 RPM (2001)	310 hp @ 3,000 RPM	360 hp @ 3,200 RPM	365 hp @ 3,100 RPM	397 hp @ 3,000 RPM
	300 hp @ 3,100 RPM (2004)	320 hp @ 3,000 RPM (2006)			
Torque:	500 lb-ft @ 1,600 RPM (2001)	520 lb-ft @ 1,600 RPM	650 lb-ft @ 1,600 RPM	660 lb-ft @ 1,800 RPM	765 lb-ft @ 1,600 RPM
	520 lb-ft @ 1,800 RPM(2004)	560 lb-ft @ 1,600 RPM (2006)			
Stock Rev. Limiter:	3,250 RPM	3,250 RPM	3,250 RPM	3,450 RPM	
Engine Idle RPM:	680 RPM	680 RPM	680 RPM	680 RPM	680 RPM
Emissions Equipment:	N/A	Catalytic Converter, EGR	Catalytic Converter, EGR	Catalytic Converter, EGR, DPF	Catalytic Converter, EGR, DPF, SCR
Oil Capacity:	10 Quarts	10 Quarts	10 Quarts	10 Quarts	10 Quarts
Engine Weight:	835 Lbs	835 Lbs	835 Lbs	835 Lbs	835 Lbs