

# 2000 ENGINES

## GASOLINE ENGINE SPECIFICATIONS

### Six-Cylinder Engines (Cont'd)

Engine		4.0L (245) OHV SEFI V-6	4.0L (245) SOHC SEFI V-6
Horsepower	— (bhp @ rpm) <sup>(1)</sup>	160 @ 4200	210 @ 5250
Torque	— (lbs.-ft. @ rpm) <sup>(1)</sup>	225 @ 2750	240 @ 3250
Compression Ratio (to 1) Nominal		9.0	9.7
Type and No. of Cylinders		60° Overhead Valve (OHV), V-6	60° Single Overhead Cam (SOHC), V-6
Bore and Stroke (in.)		3.95 x 3.32	
Displacement Liters (cu. in.)		4.0L (245)	4.0L (245)
Taxable Horsepower		37.4	
Engine Mounting		3-Point, Rubber	
<b>CYLINDER BLOCK</b>	— Material	Cast Iron	
<b>CYLINDER HEAD</b>	— Material	Cast Iron	Cast Aluminum
<b>CAMSHAFT</b>	— Type	4-Bearing, Forged Steel	4-Bearing (Fabricated)
Material		Forged Steel	Forged Steel Cams (STS2 Tube)
Journal Diameter (in.)		1.952-1.907	1.102
Cam Lift	— Intake (in.)	0.272	0.259
	— Exhaust (in.)	0.276	0.259
<b>CAMSHAFT BEARINGS</b>	— Type	Replaceable Bushing—Steel-Backed	Directly Fitted Into Head (No Liners)
Material		Lead Tin Bronze	—
<b>CAMSHAFT DRIVE</b>	— Type	Chain Drive	
Gear Material		Steel (Sintered)	
<b>CRANKSHAFT</b>	— Type	4-Bearing	
Material		Nodular Iron	
Length, Overall (in.)		19.59	
Crankpin Journals	— Diameter (in.)	2.126	
Length (in.)		0.821	
Main Bearing Journals	— Diameter (in.)	2.244	
Length (in.)	— No. 1	1.040	
	— No. 2	1.040	
	— No. 3	1.040	
	— No. 4	1.040	
Gear Material		Steel (Sintered)	
Vibration Damper	— Type	Cast/Rubber	
<b>MAIN BEARINGS</b>	— Type	Replaceable Insert—Selective Fit	
Effective Length (in.)	— Nos. 1,2,	0.84	
	— No. 3	0.84	
	— No. 4	0.84	
Total Effective Projected Area (sq. in.)		4.60 Journal/18.40 Total	
<b>CONNECTING RODS</b>	— Type	I-Beam	
Material		Forged Steel	
Length Center-to-Center (in.)		5.75	
<b>CONNECTING ROD BEARINGS</b>	— Type	Replaceable Insert—Selective Fit	
Material (Steel-Backed)		Aluminum	
Effective Length (in.)	— Each Bearing	0.601	
Total Effective Projected Area (sq. in.)		4.01 Journal/16.05 Total	
<b>PISTONS</b>	— Material	Aluminum Alloy	
Length (in.)		2.26	
Bowl		Yes	No

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<b>PISTON RINGS</b>	— Number	Three	
Top Compression Ring	— Material—Finish	Nodular Cast Iron Moly Filled	
Second Compression Ring	— Material	Cast Iron	
	— Finish	None	
Oil Control Ring	— Type	Two Rail—Spacer Expander	
Material		Steel	
<b>PISTON PINS</b>	— Type	Pressed in Rod	
Material		Alloy Steel, Cold Extruded	
Length (in.)		2.83	
Diameter (in.)		0.947	
<b>VALVE OPERATING MECHANISM</b>			
Tappets	— Type	Hydraulic—Roller	Hydraulic Lash Adjuster
Push Rods	— Material	Steel	—
	— Length (in.)	5.48	—
Rocker Arms	— Type	Roller Finger	
	— Material	Cast	Sheetmetal
	— Type-Adjustment	None	
<b>VALVES, INTAKE</b>	— Type	Recessed Head	
Material		Chromed Steel	
Head Diameter (in.)		1.7166	1.811
Stem Diameter (in.)		0.316	0.275
Stem Oil Control		Umbrella/Steel-Rubber	
Angle of Seat		45° 45'	45° 20'
Valve Lift	— Valve Lash (in. @ Zero Lash)	.405	.472
Rotator Type		One-Bead Key	Three-Bead Key
Spring Pressure (lb.) @ Specified Length (in.)		76 @ 1.59 w/Valve Closed	213 @ 1.42 w/Valve Closed
<b>VALVES, EXHAUST</b>	— Type	Recessed Head	
Material	— Head	Chrome Steel	
	— Stem	Chrome Flash	
Head Diameter (in.)		1.36	1.53
Stem Diameter (in.)		0.316	0.275
Stem Oil Control		Umbrella/Steel-Rubber	
Angle of Seat		45° 45'	45° 20'
Valve Lift	— Valve Lash (in. @ Zero Lash)	.405	.472
Rotator Type		Three-Bead Key	
Spring Pressure (lb.) @ Specified Length (in.)		76 @ 1.59 w/Valve Closed	213 @ 1.42 w/Valve Closed
<b>COOLING SYSTEM</b>			
	— Type	Pressurized Series Flow	
Radiator	— Type	Cross-Flow, Fin & Tube	
Thermostat		Poppet-Type, Pellet-Operated	Poppet-Type, Pellet-Operated With Controlled Bypass
Operating Temperature		92°C (198°F)	
Water Pump	— Type	Centrifugal, Prelubricated	
Bearing	— Type	Ball & Roller	
Drive		Poly-Vee Belt	
Recirculating Bypass		Thru Heater	Thru Added Bypass
Fan	— Type	12-Blade	
Material		Plastic	
Diameter (in.)		18.0	
Ratio (Fan-to-Crankshaft rpm)		1.18:1	

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<b>ELECTRICAL</b>			
Ignition System	— Type	12-Volt Electronic Distributorless Ignition System (EDIS) — Spark Timing Controlled by EEC-V Computer With Integrated EDIS	
Spark Plugs	— Thread Size	14mm	
Firing Order		1-4-2-5-3-6	
Starting Motor	— Type	Positive Engagement	
Control		Ignition Key Switch Actuates Solenoid Relay	
Alternator	— Type	Diode Rectified Series Machine	
Battery Ground		Negative	
<b>FUEL SYSTEM</b>			
Fuel Metering System		Sequential Electronic Fuel Injection — Six Port-Mounted Fuel Injectors Electronically Triggered by EEC-V Module	
Fuel Pump	— Type	Single Electric	
Driven By		Fuel Pump Relay	
Location		In-Tank, High Pressure	
Fuel Filter	— Type—No. Used	In-Line Large Capacity Filter—One	
Location		Left Frame Rail	
Fuel Reservoir	— Type—No. Used	One	
Location	—	In-Tank	
Air Cleaner	— Type	Dry Element (Remote), Conical	Dry Element (Remote), Panel
<b>LUBRICATION SYSTEM</b>	— Type	Pressure to Main, Camshaft, Tappets and Connecting Rod Bearings; Metered Pressure to Rocker Arms; Oil Mist to Cylinder Walls and Piston Pins; Metered Flow to Timing Chain	Pressure to Main Bearings, Camshaft Bearings, Connecting Rod Bearings, Spray Bar (From Spray Bar To Roller Fingers), Hydro Lifter; Sprayed Oil To Chain; Pressurized Oil To Chain Tensioners, Oil Pump Drive and Balance Shaft Bearings; Oil Mist and Injected Oil To Cylinder Walls and Piston Pins
Oil Pan Plug		Non-Magnetized	
Oil Pump	— Type—Location	Rotor Type @ Rear Main Cap	
Intake	— Type	Non-Floating, Shrouded Screen in Sump	
Oil Filter	— Type	Full-Flow, Disposable	
Attachment		Adapter, Right Rear	
Oil Refill Capacity (qts.)			
With Filter Change		5.0	
Without Filter Change		4.0	
Normal Oil Pressure (psi @ rpm-hot)		30 @ 2000	

(1) Representative 1999 Horsepower and Torque ratings adjusted to SAE J-1349 net. Ratings shown are typical and not precise for every model/engine calibration.