



Ford "Vulcan"

3.0L V-6

VIN Codes (8th Position):

U = 3.0L Regular Gasoline OHV (12v) - Ranger/Taurus/Sable

V = 3.0L Flexible Fuel Gas/Ethanol OHV (12v) - Ranger

1 = 3.0L Flexible Fuel Gas/Methanol OHV (12v) - Taurus/Sable

2 = 3.0L Flexible Fuel Gas/Ethanol OHV (12v) - Taurus/Sable

Vehicles	'86 and up: Ford Aerostar, Probe, Ranger, Taurus, Tempo, Mazda B3000, Mercury Sable, Topaz. Not available all years except the Taurus
Engine Type	Over-head Valve Engine
Displacement	182 cu.in. / 3.0 liters * / 2999 cc (Bore and Stroke = 3012 cc)
Bore	3.504 in. / 89 mm
Bore Spacing	4.33 in. (Same as 3.0/3.2 SHO**)
Stroke	3.1496 in. / 80 mm (Same as 3.0/3.2 SHO**)
Compression ratio	9.25:1 * 9.3:1 +
Power (SAE net)	140hp @ 4,800 rpm * 145hp @ 4,800 rpm + 150 hp/112.5 kW a/ @ 5000 rpm ('96)
Torque	160 lb.-ft. @ 3000 rpm * 165 lb.-ft. @ 3600 rpm + 185 lb.-ft @ 3750 rpm ('96)
Intake manifold	2 Piece, Cast Aluminum (Plenum reversible for transverse engines)
Injection	Sequential Electronic Fuel Injection, Multi Port Injected (SEFI MPI)
Fuel Pressure	Vacuum Regulated at: '86-'91: 30-40 psi '91-'01: 30-45 psi 2 bolt 5.0L adjustable regulator bolts-in.
Fuel Requirements	Gasoline, 87 Octane ('86) Flex-Fuel: Any mix of Gasoline or E85 (85% Corn Fuel/15% Gasoline)

Block	Cast iron 60-degree V-6 (different family than 2.8, 2.9, 4.0, no swaps)
Pistons	Cast Aluminum, 3-rings: 1.5mm/1.5mm/4mm (3.0L SHO Forged Aluminum)
Piston Pin Diameter	.9119" to .9124" (Ford I-4: 2000cc, 2300cc. V-8: 221, 260, 289, 302, 5.0) .912"
Connecting rods	Forged Steel, center to center length: UNK
Crankshaft	Nodular Cast Iron (3.0/3.2 SHO Forged Steel)
Main Journal Diameter	2.5194 in. **
Rod Journal Diameter	2.1257 in. (3.0/3.2 SHO is 2.047 in.) ** (Chevy 350 large journal: 2.100". 327 small journal: 2.000")
Rod Side Clearance	.010" +
Cam Shaft Specs	Duration (unk), Lift .260" **
Valve lifters	'86-'93: Hydraulic '94-'01: Hydraulic roller tappets (same as the 5.0L). Lifter guide plates are not interchangeable. Must use 3.0L guide plates.
Oil Pump	Standard, gear mesh, mechanical pump, driven by distributor. 40-60 psi @ 2,500 rpm+
Heads and valve gear	Cast iron. 2 valves per cylinder; single springs w/ dampers; rubber valve stem seals; pedestal mounted, stamped steel rocker arms, M8 mounting bolts; steel push rods; bronze valve guides and hardened seats.
Rocker Arm Ratio	1.61:1 (lift at valve: 0.4186") with stock cam. Options: 1.73:1 (lift at valve: 0.4498"), 1.8:1 (lift at valve: 0.468") with after market roller rockers with pedestals milled for proper geometry, or adjustable valvetrain (Add: hardened push rods, push rod guide plates, 3/8" or larger studs, adjusting nuts and mill pedestal mount flush)
Rocker Arm Pedestals	Cast steel, non-hardened. .862" overall height with .474" pivot height =. Interchangeable with 302 Boss, Late 5.0, 351C/M, 400M, 429, 460. Can use Crane roller pedestal conversion kit with stock rockers for reduced friction.
Valve sizes, mm	42.2mm intake * 34.7mm exhaust * 40mm / 1.570" Intake + 33mm / 1.300" Exhaust + Measured with micrometer from Perfect Seal Replacements: 1.662" head Intakes with 5/16 in. stem / 4.164 in. length = 1.372" head Exhausts with 5/16 in. stem / 4.164 in. Length =
Valve Springs	1.84" Free height '86 to '94: 1.58" installed height with 65 lbs seating pressure '95 and up: 1.65" to 1.73" installed height Ford SVO Sportsman E351 springs w/ 100 lb seated pressure will fit.
Engine management	Mass Air Flow Sensor (MAF)
Ignition	Electronic Engine Control: '86-'94: EEC-IV (pronounced: "EEK-4") '95 and up: EEC-V (pronounced: "EEK-5")

Emission Control	Fuel Evaporative Canister, PCV, EGR on some
Emission Level	Low Emissions Vehicle (LEV)
Spark Distribution	'86 to unk: Distributor, Electronic Advance, Integrated Thick Film Ignition (TFI) module. Contains an "Octane Rod" that can be changed for a more aggressive timing curve based on octane (Ford). unk to '94: Distributor, Electronic Advance (radiator support mounted TFI) '95 to '01: Electronic, Distributor-less Ignition System (EDIS) w/ On-Board Diagnostics II (OBD II)
Firing Order	1-4-2-5-3-6 +
Timing	'86 to '94: 10 degrees BTDC, adjustable at distributor '95 and up: 10 degrees BTDC, Computer controlled (Chip)
Spark Plug Gap	.044" +
Built at	Ford Motor Company Lima Engine Plant 1155 Bible Road Lima, Ohio 45801

Sources: (Originally Compiled by Boss 3.0 @ RPS)

Ford Motor Company unless marked
 ** Ford SVO Catalog
 * Ford Taurus Brochure 1986
 + Chilton's Repair Manuals
 = Actual measurements

Coil Pack Terminal ID & Cylinder Numbering

