



2004 Scion xB

INTENDED AS A LOW-COST entry-level vehicle, the Scion xB is amazingly well-equipped with four-channel ABS, Brake Assist (BA), Electronic Brake Force Distribution (EBD), Vehicle Stability Control (VSC) and Traction Control (TRAC).

There is also a long list of Toyota Racing Development (TRD) parts available, such as 18- and 19-inch wheels, a suspension kit, a performance clutch and a quick-shift kit. All that electronic content can make it difficult to install an

CHEAT SHEET



Production run: 2004-present
Model variants: xB
Engines: 1.5L DOHC 4-cyl. with VTi

aftermarket cell phone or stereo equipment.

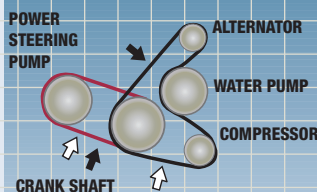
For instance, there's a yaw rate sensor mounted under the console between the shifter and parking brake handle, and it requires calibration after installation.

Though things are a

little tight under the hood, normal maintenance is straightforward and simplified by nice little touches like a coolant drain on the block.

The one exception is valve adjustment, which is more like a motorcycle. After measuring valve clearance, the camshafts must be removed to install new lifters of the proper thickness. Toyota doesn't list an amperage rating for the alternator, but the test spec calls for a minimum output of 30 amps with high beams on and the heater blower on high.

BELT POSITIONS SCION XB



← Measure Point for Belt Deflection

↖ Measure Point for Belt Tension

Three additional TSBs address faults that will turn on the malfunction indicator lamp (MIL) and set a steering wheel sensor code (C1231), a torque converter clutch code (P0741), and a knock sensor code (P0325). Otherwise this is a mechanically simple vehicle that should provide typical Toyota reliability.

Though it's a new model, there are some significant service bulletins. Two address air conditioning (A/C) problems, one for temperature control cable adjustment and the other for installing a higher-capacity A/C system that's available as a kit.

KEY SPECS

2004 SCION XB

XB ENGINE SPECS

Type:	I4, 1.5L, chain-driven DOHC, 4-valve, open deck, aluminum block and head
Displacement:	1,497cc (91 cid)
Bore x stroke:	74.9 x 84.5mm (2.95 x 3.33 in.)
Horsepower:	108 hp @ 6,000 rpm
Torque:	105 ft.-lbs. @ 4,200 rpm
Compression ratio:	10.5:1
Emission control:	EVAP
Fuel system:	MPFI
Fuel pressure:	44-50 psi @ idle, 21 psi hold
Fuel injectors:	13.4-14.2 ohms
Oil pressure:	4.3 psi @ idle, 22-80 psi @ 3,000 rpm
Valve clearance:	Intake, 0.006-0.010 in. (0.15-0.25mm); Exhaust, 0.010-0.014 in. (0.25-0.35mm). <i>See Technical Notes.</i>
Spark plug gap:	0.028-0.031 in. (0.7-0.8mm)
Firing order:	1-3-4-2
Ignition timing:	8°-12° BTDC @ idle
Base idle speed:	Manual, 600-700 rpm; automatic, 650-750 rpm

ELECTRICAL SYSTEM

Battery:	12V
Alternator:	<i>See Technical Notes.</i>
Ignition:	Direct

CAPACITIES

Oil/filter change:	3.9 qt. (3.6L)
Automatic trans:	3.1 qt. (2.9L)
Manual trans:	2.0 qt. (1.9L)
Fuel tank:	11.9 gal. (44.5L)
Cooling system:	4.5 qt. (4.3L)
Refrigerant:	13.9 oz. (380g)
Compressor:	3.0 oz. (60cc)

LUBRICANTS

Brake fluid:	DOT 3
Engine oil:	API SL, SAE 5W-30
Automatic trans oil:	Dexron III
Manual trans oil:	API GL-5, SAE 75W-90
Power steering:	Dexron III
Refrigerant:	R134a
Compressor:	PAG ND-OIL 8

MAINTENANCE

Oil and filter:	5,000 miles
Spark plugs:	30,000 miles

CHASSIS SPECS

Drivetrain:	FWD, five-speed manual or electronic four-speed over-drive automatic transmission
Brake system:	Disc/drum with four-channel ABS
WS sensors:	Front, 1400-1800 ohms; rear, 1000-1300 ohms
Front disc thickness:	0.787 in. (20mm) minimum
Rear drum diameter:	7.913 in. (201mm) maximum

SUSPENSION SYSTEM

Front:	MacPherson struts, A-arms, stabilizer bar
Rear:	Twist-beam axle, coil springs, tube shocks
Lug nut torque:	76 ft.-lbs. (103 Nm)
Axle nut torque:	159 ft.-lbs. (216 Nm)

FRONT ALIGNMENT SPECS

Toe:	0° ± 11'
Camber:	-0°34' ± 45'
Caster:	1°45' ± 45'
SAI:	10°01' ± 45'

REAR ALIGNMENT SPECS

Toe:	0°20' ± 20'
Camber:	-0°57' ± 25'