



# 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.

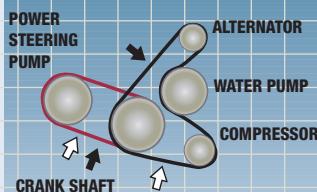
For instance, there's a yaw rate sensor mounted under the console between the shifter and parking brake handle, and it requires calibration after installation.

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

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

#### ELECTRICAL SYSTEM

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

#### CAPACITIES

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

#### LUBRICANTS

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

#### MAINTENANCE

<b>Oil and filter:</b>	5,000 miles
<b>Spark plugs:</b>	30,000 miles

#### CHASSIS SPECS

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

#### SUSPENSION SYSTEM

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

#### FRONT ALIGNMENT SPECS

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

#### REAR ALIGNMENT SPECS

<b>Toe:</b>	0°20' ± 20'
<b>Camber:</b>	-0°57' ± 25'