

## 2003 TOYOTA MATRIX

Pontiac came up with the concept, called it the Vibe and asked Toyota to build it at the Fremont, California factory where General Motors and Toyota have been assembling cars for many years. Toyota used the 2003 Corolla platform and mechanics and liked the concept so much that it asked GM if it could build a version of its own—the Matrix—with different lines, to which the American automotive giant agreed. The Matrix is available in base and XR trim in two- and four-wheel drive, with an XRS front-wheel drive version also available. The latter has a 180 h.p. engine and a six-speed manual transmission.

### **Interior and trunk**

Easily accessed, the Matrix invites front occupants to sit back into very comfortable seats equipped with height adjustment, good lateral supports, and with fabric that appears to be quite sturdy. Unfortunately, there is no adjustable lumbar support, and the driving position is far from perfect. A telescoping steering wheel would be necessary to allow arms and legs to be, simultaneously, the right distance from the pedals and the steering wheel. The high belt line may also make some people feel a bit claustrophobic.

The rear bench comfortably seats two adults, with plenty of headroom and legroom. The fold-down seatback is split 60/40 and folds flat to the floor. The seatback and floor are covered in slippery plastic, but both sections have a track in the back with an adjustable tie-down to help control cargo.

The cargo area is easily accessed thanks to a liftgate that opens wide, but space is limited with the seatbacks up. Folding the seatbacks provides more room, of course, while up to 8 ft. (2.44 m) of space becomes available on the right-hand side by folding the front-passenger seat.

### **Convenience and safety**

Though very well-finished, the cabin has some soundproofing gaps. Engine noise is prevalent during average to heavy acceleration, and road noise from the rear is poorly muffled, especially when the seatbacks are down. The cheap cargo-cover found in one of the compartments is not much help in this respect.

Storage spaces are plentiful, but the cup-holder should be able to hold more container sizes, especially in a vehicle that wants to attract people who are on the move.

Instruments and controls are well laid out. The heating system produces enough heat, but it is poorly distributed in the “Heat/Defrost” position, which directs most of the air towards the windshield. The new 115-volt household-type power outlet for plugging in a computer, which is featured in all versions of the Pontiac Vibe, is available only in the XRS version of the Matrix.

From a safety standpoint, the Matrix features two front airbags, large mirrors, ABS brakes in certain models, and four head restraints. Unfortunately the restraints don't raise high enough for tall people, particularly the ones in the rear. Visibility is good in all directions except toward the back due to the rear head restraints. The headlights lack power in low beam position, and unlike the Vibe, the Matrix cannot be ordered with side air bags.

### **Engine and transmission**

The 1.8-liter four-cylinder engine develops 130 horsepower and 125 pound-feet of torque (123 h.p. and 118 lb.-ft. in the all-wheel drive version). With 130 horses, acceleration is adequate, though passing requires a little planning because the power doesn't go very far. The engine is noisy in normal to heavy acceleration, and between 2,500 and 3,000 rpm there is a distinct vibration perceptible through the accelerator. The engine meets ULEV (Ultra Low Emissions Vehicle) standards.

The automatic gearbox shifts very smoothly, with very few exceptions. The well-gearred manual gearbox is smooth and precise, and it shifts easily but with an oddly cheap sound.

### **On the road**

The fully independent suspension is firm enough to bounce fairly briskly over some bumps. Otherwise, it provides genuine comfort and good road handling with little lean. When carrying a load, the stiff brisk bounce is somewhat tempered. The Matrix requires frequent steering wheel correction in windy conditions.

The power steering is nicely weighted and proves stable, precise, and fairly quick. While the turning circle is normal, few sensations are transmitted to the driver. The brakes prove to be very good overall.

At the CAA-Quebec Technical Inspection Center, the Matrix seemed to be well-built, with a few exceptions. For instance, there are small holes in the front fender liners, the gas tank filler pipe could be better protected, and some joints underneath were not sealed.

### **Conclusion**

The Matrix is a modern, and successful, twist on the station wagon. The eminently practical side of this type of vehicle, paired with unwavering contemporary styling, ensure that the Matrix won't have any trouble finding takers. In addition to versatility, the Matrix offers comfortable seating and pleasant road handling. One must, however, make sure that the driving position is well-suited to the driver.

**FOR**

Seat comfort  
 Handling  
 Storage space  
 Smooth automatic transmission  
 Versatility  
 Good braking

**AGAINST**

Engine vibration  
 Weak headlights  
 Rear visibility  
 Just adequate power  
 Heat/defrost air distribution  
 Driving position

**2003 TOYOTA MATRIX****Engine:** 16-valve, 1.8-litre 4 cylinder**Horsepower:** 123 h.p. @ 6,000 rpm;  
130 h.p. @ 6,000 rpm; 180 h.p. @ 7,600 rpm**Torque:** 118 lb.-ft. @ 4,200 rpm; 125 lb.-ft. @ 4,200 rpm; 130 lb.-ft. @ 6,800 rpm**Transmission:** 5-speed man.; 4-speed automatic**Suspension:** fully independent**Brakes:** disc/drum (XRS: 4-wheel disc)**Length:** 435 cm**Width:** 177.5 cm**Height:** 154 cm**Wheelbase:** 260 cm**Weight:** 1,211 - 1,340 kg**Tires:** P205/55R16; P215/50R17**Towing capacity:** 680 kg**Air bags:** standard front**Fuel consumption with manual transmission and 2WD:**

- Transport Canada rating: city: 7.7 L/100 km (37 mpg); highway: 6 L/100 km (47 mpg)
- Test result: 8.1 L/100 (35 mpg)

**Fuel tank capacity:** 50 litres; 4X4: 45 litres**Acceleration:** 0-100 km/h: 9.5 seconds 60-100 km/h: 5.3 seconds**Competition:** Chevrolet Cavalier, Chrysler Neon, Daewoo Nubira, Ford Focus, Honda Civic, Hyundai Elantra, Kia Spectra, Mazda Protegé, Nissan Sentra, Pontiac Sunfire and Vibe, Saturn SL, Subaru Impreza, Suzuki Aerio, Toyota Corolla, Volkswagen Golf and Jetta**Maintenance (amount may vary from dealer to dealer):**

Frequency: 3 months/5,000 km; total cost to 100,000 km: \$1,300

**Warranty:**

- Full basic coverage: 3 years/60,000 km
- Powertrain: 5 years/100,000 km
- Surface corrosion: 3 years/60,000
- Perforation damage: 5 years/unlimited kilometrage
- Emissions control system: 3 years/60,000 km (full coverage); 8 years/130,000 km (catalytic converter, electronic control module and onboard compuer)

**Factory replacement parts:**

Rear bumper: \$654

Brake pads: \$53

Front fender: \$246

Front brake disk: \$88

Muffler: \$135

**Average insurance premium** (Quebec City, replacement cost endorsement, claim-free insurance record, male or female driver 30 to 40 years old): \$736 to \$1,107

**Price according to trim line:**

Base (2WD): \$16,645

XR (2WD): \$26,925

XRS: \$24,540

Base (4WD): \$20,315

XR (4WD): \$24,110

**Main options:**

Option packages: \$2,675 to \$2,730

Automatic transmission: \$1,000

**Price as tested:** \$20,925

**Freight and preparation:** \$1,110

**Dealers:** Quebec: 71 Canada: 251

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