2009 Matrix Product Information

Note: All specs are for both front-wheel drive (FWD) and all-wheel drive (AWD) unless otherwise noted.

ENGINE	***STANDARD***	***S/XRS***
Type, Materials	1.8-liter, 4-cylinder, in-line 16-valve DOHC Dual Variable Valve Timing with intelligence (VVT-i), aluminum alloy block and head	2.4-liter, 4-cylinder, 16-valve DOHC Variable Valve Timing with intelligence (VVT-i), aluminum alloy block and head
Valvetrain	4-valve per cylinder with Dual VVT-i	4-valve per cylinder with Dual VVT-i
Displacement	1,798 cc	2,362 cc
Bore x Stroke	3.17 x 3.48 in.	3.48 x 3.78 in.
Compression Ratio	10.0:1	9.8:1
Horsepower	132 hp @ 6,000 rpm	158 hp @ 6,000 rpm
Torque	128 lb-ft @ 4,400 rpm	162 lb-ft @ 4,000 rpm
Ignition System	Toyota Direct Ignition (TDI)	Toyota Direct Ignition (TDI)
Fuel System	EFI	EFI
Recommended Fuel	87-octane unleaded	87-octane unleaded
Emission Certification	ULEV-II	ULEV-II
EPA Estimated Fuel Economy* (city/highway/combined MPG)	5M: 26/32/28 4ECT: 25/31/28	5M: 21/28/24 5ECT: 21/29/24 AWD 4ECT: 20/26/22

*2009 EPA MPG Estimates. Actual mileage will vary.

DRIVETRAIN	***STANDARD***		***S/XRS***		
Layout	Front-wheel drive		Front-wheel drive, All-wheel drive (S model, four speed automatic transmission only)		
Transmission Type	4-speed automatic	5-speed manual	4-speed automatic	5-speed automatic	5-speed manual
Gear Ratios					
1st	2.847	3.166	3.938	3.943	3.538
2nd	1.552	1.904	2.194	2.197	2.045
3rd	1.000	1.310	1.411	1.413	1.333
4th	0.700	0.885	1.019	0.975	0.972
5th	-------	0.725	-------	0.703	0.731
Reverse	2.343	3.250	3.141	3.145	3.583
Differential Ratio	4.237	4.312	2.814	3.391	4.235

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CHASSIS AND BODY		***STANDARD***	***S/XRS***
Suspension	- Front	MacPherson Strut	MacPherson Strut
	- Rear	Torsion Beam	S: Torsion S-AWD & XRS: Double wishbone
	- Stabilizer Bar Diameter (front/rear) inches	0.94/0.79	S: 0.94/0.79 S-AWD & XRS: 0.94/0.83
Steering	- Type	Electric Power Steering (EPS)	Electric Power Steering (EPS)
	- Overall Ratio	16.2:1	S & S-AWD: 16.3:1 XRS: 16.5:1
	- Turns (lock to lock)	3.1 turns	S & S-AWD: 3.1 turns XRS: 2.9 turns
	- Turning Circle (curb to curb)	36.0 ft.	S: 36.0 ft. S-AWD: 36.7 ft. XRS: 38.1 ft.
Brakes	- Front - type/diameter	Ventilated disc/10.8 in.	Ventilated disc/11.7 in.
	- Rear - type/diameter	Solid disc/10.2 in.	Solid disc/11.0 in. (S) Solid disc/11.1 in. (XRS/S-AWD)
	- Rear Swept Area	167 sq in.	182 sq in. (S) 192 sq in. (XRS/S-AWD)
	- Front Swept Area	207 sq in.	237 sq in. (S/XRS/S-AWD)
	- Parking	Center hand brake	Center hand brake
Wheel Size		6.5 x 16 in.	6.5 x 16 in. 7.0 x 18 in.(XRS)
Wheel Type and Material		Steel (Alloy available)	S: Steel XRS: Alloy (also available on Standard and S grades)
Tire Size		P205/55 R16	P205/55 R16 P215/45 R18 (XRS with Alloy)
Tire Type		Steel-belted radial tires	Steel-belted radial tires
Spare Tire/Wheel		Temporary	Temporary

Note: All specs are for both front-wheel drive (FWD) and all-wheel drive (AWD) unless otherwise noted.

EXTERIOR DIMENSIONS	*STANDARD*	*S/XRS*
Wheelbase	102.4 in.	102.4 in.
Overall Length	171.9 in.	S: 173.0 in. AWD: 171.9 in.
Overall Width	69.5 in.	69.5 in.
Overall Height	61.0 in.	S: 61.0 in. AWD & XRS: 61.4 in.
Tread Width - Front	59.7 in.	59.8 in.
Tread Width - Rear	59.9 in.	59.9 in.
Ground Clearance	5.8 in.	5.3 in.
Coefficient of Drag	0.33	S: 0.32 XRS: 0.33 AWD: 0.34

INTERIOR DIMENSIONS	*STANDARD*	*S/XRS*
Seating Capacity		
Headroom (Front/Rear)	40.5/39.3 in. 38.9/38.7 in. (with sunroof)	40.5/39.3 in. 38.9/38.7 in. (with sunroof)
Legroom (Front/Rear)	41.6/36.2 in.	41.6/36.3 in.
Shoulder Room (Front/Rear)	53.3/52.6 in.	53.3/52.6 in.
Hip Room (Front/Rear)	52.3/43.7 in.	52.3/43.7 in.
EPA Passenger Volume	94 cu. ft. 91 cu. ft. (with sunroof)	94 cu. ft. 91 cu. ft. (with sunroof)
EPA Cargo Volume		
- Behind rear seats (cubic feet)	19.8 cu. ft.	19.8 cu. ft.
- With rear seats folded	61.5 cu. ft. 60.9 cu. ft. (with sunroof)	61.5 cu. ft. 60.9 cu. ft. (with sunroof)

WEIGHTS AND CAPACITIES	*STANDARD*	*XRS*
Curb Weight	5M: 2,865 lbs. 4ECT: 2,965 lbs.	S 5M: 3,065 lbs. XRS 5M: 3,140 lbs. S 5ECT: 3,140 lbs. XRS 5ECT: 3,220 lbs. AWD 4ECT: 3,360 lbs.
Maximum Towing Weight	1,500 lbs.	1,500 lbs.
Fuel Capacity	13.2 gal.	13.2 gal.
Engine Oil	5.0 qt.	4.8 qt.
Cooling System	5.8 qt.	6.0 qt.

Note: All specs are for both front-wheel drive (FWD) and all-wheel drive (AWD) unless otherwise noted.

STANDARD EXTERIOR FEATURES

Standard

- P205/55 R16 tires on 16-inch steel wheels with full wheel covers
- Power color keyed outside rearview mirrors (manual retractable)
- Daytime running lights (DRL)
- Heavy duty rear window defogger
- Intermittent windshield wipers
- Roof rack anchor mounts

S (In addition to or in place of Matrix Standard features)

- Variable intermittent rear window wiper
- Front and rear underbody spoiler (FWD only)
- Fog lamps (FWD only)
- Remote keyless entry (RKE)

XRS (In addition to or in place of Matrix S features)

- P215/45R18 tires on 18-inch alloy wheels
- Rear deck spoiler

STANDARD INTERIOR FEATURES

Standard

- 60/40 split rear seat
- Electric Power steering (EPS)
- Tilt/telescopic steering wheel
- Optitron meters
- Speedometer gauge with integrated outside temperature display
- Tachometer
- Three-spoke steering wheel
- Air conditioning with filter
- 12-volt power outlet
- Cup holders (two front, two rear)
- Console box with lid
- Day/night rear view mirror
- Fabric front door trim
- Driver’s seat vertical seat height adjuster
- Tonneau cover
- Driver and front passenger side airbags and side curtain airbags

S (In addition to or in place of Matrix Standard features)

- Shift activated power door locks and windows with one-touch down driver side

Note: All specs are for both front-wheel drive (FWD) and all-wheel drive (AWD) unless otherwise noted.

STANDARD INTERIOR FEATURES – CONT.

- Four-way adjustable front passenger seat with fold flat capability
- AC 115V power outlet
- Three-spoke leather steering wheel with audio switch and shift knob

XRS (In addition to or in place of Matrix S features)

- Sport fabric

STANDARD AUDIO SYSTEM

- AM/FM/CD MP3/WMA with four speakers
- XM® satellite ready antenna
- Auxiliary audio jack
- AM/FM/CD with MP3/WMA capability and six speakers (on S models)

STANDARD SAFETY AND SECURITY

- Driver and front passenger advanced airbags with occupant classification sensor, driver and front passenger side airbags and side curtain airbags
- Three-point seatbelts for all seating positions, Emergency Locking Retractors (ELR) on driver's belt, Automatic/Emergency Locking Retractors (ALR/ELR) on all passenger seatbelts
- Anti-lock brake system (ABS) with Brake Assist (BA) and Electronic Brake-force Distribution (EBD)
- Child protector rear door locks
- ISOFIX CRS top tether anchor brackets and ISOFIX CRS anchor attachments
- Daytime running lights
- Head-impact protection structure
- Vehicle Stability Control (VSC) with TRAC and cut-off switch (available on Standard and S, standard on XRS)
- Engine immobilizer
- Direct Tire Pressure Monitor System (TPMS)

STANDARD MECHANICAL FEATURES

AWD

- Independent double wishbone suspension
- Active torque control with electro-magnetic coupling

XRS

- Sport strut tower brace
- Double wishbone rear suspension
- Vehicle Stability Control (VSC) with TRAC with cut-off switch

Note: All specs are for both front-wheel drive (FWD) and all-wheel drive (AWD) unless otherwise noted.

FACTORY OPTIONS

Standard

- P205/55 R16 tires with 16-inch alloy wheels
- All-Weather Guard package includes rear seat heater ducts, heated rear view mirror and intermittent rear window wiper
- AM/FM/six-CD changer with MP3/WMA playback, XM® satellite ready with six speakers and steering wheel audio controls
- Power package that includes power windows, power door locks and remote keyless entry
- Cruise control
- Vehicle Stability Control (VSC) and TRAC with cut-off switch
- Tilt and slide power moonroof

S

- P215/45 R17 tires with 17-inch alloy wheels
- All-Weather Guard package includes rear seat heater ducts, heated rear view mirror and intermittent rear window wiper (standard on AWD)
- JBL AM/FM six-CD changer with MP3/WMA playback capability XM® satellite radio, hands-free with seven speakers
- AM/FM six-CD changer, MP3/WMA with six speakers, XM® satellite capable
- Navigation system with AM/FM/six-disc changer with MP3 playback capability, XM satellite radio ready, NavTraffic®, and six speakers
- Vehicle Stability Control (VSC) and TRAC with cut-off switch
- Tilt and slide power moonroof

AWD

- P215/45 R17 tires with 17-inch alloy wheels
- JBL AM/FM six-CD changer with MP3/WMA playback capability XM® satellite radio, hands-free with seven speakers
- AM/FM six-CD changer w/MP3/WMA playback and XM® satellite ready with six speakers
- Navigation system with AM/FM/CD with MP3/WMA playback capability, XM® satellite radio ready, NavTraffic® and six speakers
- Vehicle Stability Control (VSC) and TRAC with cut-off switch
- Tilt and slide power moonroof
- Front and rear under body spoiler with fog lamps

XRS

- AM/FM six-CD changer, MP3/WMA with six speakers, XM® satellite capable
- JBL AM/FM six-CD changer with MP3/WMA playback capability XM® satellite radio, hands-free with seven speakers
- All-Weather Guard package includes rear seat heater ducts, heated rear view mirror and intermittent rear window wiper
- Tilt and slide power moonroof
- Navigation system with AM/FM/CD with MP3/WMA playback capability, XM® satellite radio ready and six speakers

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AVAILABLE EXTERIOR COLORS

- Radiant Red
- Sundance Metallic
- Nautical Blue Metallic
- Classic Silver Metallic
- Magnetic Gray Metallic
- Black Sand Mica
- Blue Streak Metallic
- Super White

BASIC LIMITED WARRANTY COVERAGE

- 3-year/36,000-mile Comprehensive
- 5-year/60,000-mile Powertrain
- 5-year/unlimited-mileage Corrosion Perforation