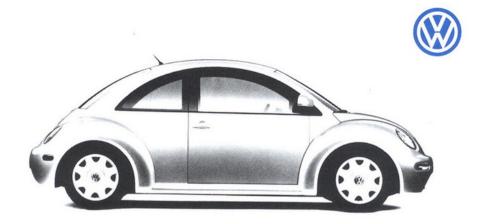


The New Beetle





# VOLKSWAGEN'S NEW BEETLE: ITS ENGINE'S IN THE FRONT, BUT ITS HEART'S IN THE SAME PLACE

DETROIT, Mich.—The New Beetle—a car that began as a beloved design study called Concept 1 exactly four years ago—made its highly anticipated worldwide debut at Detroit's North American International Auto Show today.



Set to arrive this spring at Volkswagen dealerships across North America, the New Beetle proves that something very good in a past life can come back as something even better, something totally new.

While it rekindles the magic of its legendary namesake, the New Beetle is not an update of the original but a completely new and modern car—a Beetle driving forward into the 21st century, inviting us optimistically to follow.

As a contemporary creation, the New Beetle is more than a ray of sunny originality in an all-too-serious car market; it is also very functional, with plenty of creature comforts and the very latest advancements in small-car safety.

It is significantly larger than the original, both inside and out, and shares no parts with its predecessor. It is powered by a front-mounted 115 horsepower four-cylinder engine, or as an option, a highly advanced Turbo Direct Injection diesel that delivers an EPA rating of 48 miles per gallon on the highway and a driving range of nearly 700 miles.

The New Beetle uses front-wheel drive and is equipped with a wealth of standard items, including CFC-free air conditioning, a pollen and odor filter, a six-speaker stereo

with CD-control capability, beverage holders, an anti-theft alarm system, halogen projector-beam headlights, four-wheel disc brakes and a central locking system with remote. It can be ordered with electronic ABS brakes, alloy wheels, cruise control, leather seating, integrated fog lamps, heatable front seats, and one-touch up and one-touch down power windows.

As a priority in its development, the New Beetle's advanced occupant safety system includes energy absorbing crush zones, pretensioning front safety belts, front and rear headrests, daytime running lights, dual airbags and front seat-mounted side airbags.

Based on Volkswagen's new Golf chassis—Europe's number-one selling car—the New Beetle is built to the highest standards. This is clearly expressed in its solid, one-piece appearance, which results from narrow panel gap tolerances in production. And by using state-of-the-art production techniques like laser welding, Volkswagen has given the New Beetle unmatched torsional and body rigidity.

Its fully galvanized body allows for a 12-year warranty against corrosion or rust perforation.

"Some may have predicted a retro car, but as you can see, the New Beetle is a completely modern design, almost futuristic. It is designed to appeal to people who fondly recall the past, as well as young people who have no connection at all to the original," said Clive Warrilow, President and CEO, Volkswagen of America, Inc.

"Where the original Beetle provided basic transportation, the New Beetle is an upmarket, lifestyle vehicle. It's highly emotional, a car that makes the experience of driving fun again."

Like most great ideas, the design of the New Beetle began as a dream. In the early 90s, Volkswagen's designers built a futuristic show car they called Concept 1 and unveiled it at the Detroit Auto Show in 1994. The response by those who saw it was universal: "build it."

True to that original concept, the New Beetle's charm begins with its eye-catching but brilliantly simple and honest styling. Its silhouette is instantly recognizable; its overall shape thoroughly modern—a harmonious convergence of smooth lines and pleasing geometric arches. The result is an unconventional visual statement of optimism, fun and individuality.

As the successor to a heritage of universal acceptance, the New Beetle's design appeal is meant to be egalitarian, cutting across all possible classes and demographics.

Detailed examples of the New Beetle's distinctive exterior design can be seen in the way the New Beetle's headlights and taillights sit directly into the body. The headlight housing is itself a special feature presenting a projector-beam halogen headlamp behind a clear, see-through polycarbonate lens.

The smooth surfaces and strong lines of the New Beetle are not disturbed by the fenders and bumpers on the New Beetle, which are built with a special dent resistant plastic, and are color-keyed, along with the mirror housings and door handles. A three-door hatch, the New Beetle's trunk lock is also cleverly disguised behind a chrome VW logo that swivels to unlock and offers an integrated handle.

The New Beetle can be ordered in four non-metallic colors: White, Red, Black and Yellow. Metallic options are Silver, Bright Blue, Green and Dark Blue.

The dimensions of the New Beetle prove it is no small car. It is 161.1 inches in length and 67.9 inches wide with a wheelbase of 98.9 inches.

Inside, 96.3 cubic feet of total interior volume can be found. Front occupants enjoy massive headroom and legroom, and access to the rear seating is made easier by the design of the front seats, which automatically spring forward, up and out of the way when the folding lever is lifted. At 12 cubic feet, trunk volume can be expanded by using the New Beetle's folding rear seat.

With a strong orientation to the future, the New Beetle's interior places its occupants comfortably in the 21<sup>st</sup> century. It is at once original, fun and cutting-edge—an environment creatively sculpted from high quality textured plastics and textiles.

In a playful nod to the past, the New Beetle interior offers a large assist handle above the glove compartment and retains two assist straps above the rear seats.

From the driver's view, classic elements of the original gain a modern interpretation. One round instrument gauge is used to display the speed, rev counter, engine temperature and fuel gauge. All displays are illuminated by a glowing, indigo blue; against this backdrop, red indicator needles on the gauges create a vibrant aura.

An especially original touch is the distinctive use of a bright finish on the steering wheel, gear shift, automatic shift knob and handbrake; as a cheerful accent, there is even a standard bud vase on the dash.

In keeping with the contoured exterior, ventilation outlets are smooth and round, as are console controls for the tailor-made stereo and temperature settings. Throughout the cabin, controls are illuminated in red.

Seats in the New Beetle are in keeping with Volkswagen's reputation for offering supportive and generously adjustable seating with headrests for all. Both driver and passenger can adjust for height with an ingenious ratcheting pump handle. The driver position is optimized with a standard tilt and telescoping steering wheel. Aside from a high quality velour cloth, seats can be ordered with optional leather or no-cost optional leatherette.

Other details inside in the New Beetle include lighted vanity mirrors, integrated armrests, carpeted floor mats, a remote fuel filler and hatch release, electronic side mirror adjustments, tinted glass, heated side mirrors and door storage nets.

Like the original, the New Beetle's driving experience is unlike anything else on the road. But driving the New Beetle is a new and invigorating experience, one that is a product of Volkswagen's most advanced technology. The result is a car that rewards its driver with the performance and fun expected in a modern German-engineered car.

Like most of today's Volkswagens, the New Beetle uses a front-wheel drive layout and a transverse engine design located in the front.

Performance in the New Beetle comes by way of two advanced powertrain options: a 115-horsepower, 2.0 liter four-cylinder overhead cam gasoline engine, and a high-tech Turbo Direct Injection diesel.

The New Beetle's fuel-injected 2.0 liter uses a cross-flow cylinder head, developing 122 foot pounds of torque at just 2,600 revolutions per minute. This wide torque band provides strong mid-range performance with plenty of on-demand power. When equipped with the standard five-speed manual transmission, it is EPA rated at 23 miles per gallon in the city and 29 mpg on the highway.

As an engine option, the New Beetle's TDI engine offers remarkable performance and unmatched economy. It utilizes a major advance in diesel technology where fuel is

injected and ignited directly in the engine's cylinder head. This is accomplished by the use of an advanced electronic diesel control. In simple terms, it can be said the TDI engine is a "drive by wire" with no mechanical controls from fuel pedal to fuel injection.

The result is a 90 horsepower diesel engine that provides a wealth of low end torque (149 ft. lbs. at 1,900 rpm), exceptional fuel figures and exhaust emissions that meet the stringent standards in the U.S. and Europe. In fact, the super efficient 1.9 liter TDI emits 20 percent less carbon dioxide than a comparable gasoline engine.

Mated to these powerplants is a standard five-speed manual with hydraulic clutch or an optional four-speed, electronically controlled automatic transmission that employs adaptive learning to better personalize shift patterns according to individual driving styles.

Like all of today's Volkswagens, the New Beetle expresses the German engineering passion of designing and building cars with exceptional road-holding qualities.

It begins with an extra rigid body structure and four-wheel independent suspension system, both of which help give the New Beetle a rock-solid feel. The front

suspension uses a MacPherson strut design with control arms, stabilizer bar and coil spring struts. The rear suspension employs a "V" profile independent torsion beam axle with integral sway bar and trailing arms. The torsion beam axle is mounted to the vehicle with Volkswagen's unique track-correcting bushings—a feature designed to minimize unwanted steering effects.

The New Beetle comes standard with power-assisted rack and pinion steering and 16-inch all-season tires. An Anti-lock Braking System (ABS) is optional, and standard stopping power is provided by large, power-assisted, dual-diagonal circuit ventilated front discs and solid rear discs.

Active safety in the New Beetle comes from its precise handling, the security of front-wheel drive, advanced braking and other accident avoidance aids like daytime running lights (DRL).

For protection when an accident can't be avoided, the New Beetle offers a highly advanced passive safety system that comprises a multitude of state-of-the-art safety features and structural elements designed to work together to help protect its occupants.

This system begins with the New Beetle's exceptionally rigid body structure that includes energy absorbing crumple zones. In a severe crash, these deformation zones sacrifice themselves in an accordion-like fashion, absorbing the energy to help spare the critical central structure.

This system works in concert with an advanced supplemental restraint system. In addition to front driver and passenger airbags, the New Beetle uses a new seat belt tensioning system that tightens and optimally positions the front belts within milliseconds of a severe crash. These three-point safety belts are also equipped with shoulder height adjustments. To help secure a child safety seat, which should only be used in the rear seats, automatic locking retractors (ALR) and emergency locking retractors (ELR) are provided.

The New Beetle is among the first Volkswagens to utilize side airbags for front seat occupants. This system is integrated into the front seats for good reason: no matter where the front occupant adjusts his or her seat position, the airbag maintains its protective relationship. This cannot always be assured if the side airbag is installed in the door or the

roof pillar. Side protection is further enhanced by special reinforcements and structural members, including anti-intrusion tubes and foam padding in the doors.

Additional frontal impact protection comes from the steering system via a collapsible steering column and a steering wheel specially cushioned and designed to manage impact energy.

Further details of how the New Beetle interior provides occupant protection are found in the absence of sharp interior edges, the recessed handles and control switches, crushable sun visors, a foldable rearview mirror and non-override door locks.

#### **Protection Plus**

Standard on the 1998 New Beetle is one of the most comprehensive customer care owner protection plans available to new car buyers. Volkswagen's Protection Plus includes a two-year/24,000 mile new vehicle limited warranty and the industry's best manufacturer's limited powertrain warranty at 10-years/100,000 miles. Now, with the fully galvanized New Beetle, the Protection Plus package includes an outstanding limited corrosion warranty of 12 years with no mileage restrictions.

In addition to the extensive warranties, Volkswagen dealers will perform all scheduled maintenance at no charge for two years or 24,000 miles. Roadside assistance is also provided for two years with no mileage restrictions.

# # #

## 1998 US New Beetle Technical Specifications



ENGINE:	Gasoline			Diesel		
Туре	2.0l, 4-cylinder, in-line 1.9l, 4-cylinder, in-lin			, in-line		
Bore, in	3.25					
Stroke, in	3.65			3.76		
Displacement, in <sup>3</sup>	121.1	121.1 1984 cm <sup>3</sup>			1896	
Compression Ratio	10.0:1	10.0:1 19.5:1				
Horsepower (SAE) @ rpm	115 @ 520	115 @ 5200 (85 kW @ 5200) 90 @ 4000 (66 kW @ 4000)				
Max. torque, lbs - ft @ rpm	122 @ 2600 (165 Nm @ 2600) 149 @ 1900 (202 Nm @ 19				02 Nm @ 1900)	
Fuel Requirement	Regular unleaded Diesel					
ENGINE DESIGN:						
Arrangement	Front mou	nted, transverse				
Cylinder Block	Cast iron					
Crank Shaft	Cast iron,	Cast iron, 5 main bearings				
Cylinder Head	Aluminum	Aluminum alloy, cross flow				
Valve Train	Single over head cam shaft, spur belt driven, 2 valves per cylinder,				der,	
	maintenan	maintenance free hydraulic lifters				
Cooling System	Water cooled, water pump, cross flow radiator, thermostatically					
	controlled	controlled electric 2-speed radiator fan				
Lubrication		Rotary gear pump, intermediate shaft driven, oil cooler				
Fuel/Air Supply	Sequential multi port fuel injection (Motronic)					
Emissions System	OBD II, 3-way catalytic converter with 2 oxygen sensors (upstream and					
	downstrea	downstream), enhanced evaporation system				
ELECTRICAL SYSTEM:						
Alternator, Volts / Amps	14 / 90					
Battery, Volts (Amp Hrs)	12 (60)					
Ignition	Digital elec	ctronic with knock	k sensor			
Firing Order	1-3-4-2					
DRIVE TRAIN:						
Configuration	Front-whe	el drive				
Transmission Gear Ratios	5-Speed M	Manual	4-Speed A	utomatic		
	Gasoline	Diesel	Gasoline	Diesel		
1st	3.30:1	3.78:1	2.71:1	2.71:1		
2nd	1.94:1	2.12:1	1.44:1	1.44:1		
3rd	1.31: 1	1.36: 1	1.00:1	1.00:1		
4th	1.03:1	0.97:1	0.74:1	0.74:1		
5th	0.84:1	0.76:1				
Reverse	3.06:1	3.60:1	2.88:1	2.88:1		
m			1			

3.39:1

4.53:1

3.71:1

4.24:1

Final Drive

## 1998 US New Beetle Technical Specifications

**Drag Coefficient** 

0.38



CAPACITIES:			
Engine Oil (with filter), qt	4.8		
Fuel Tank, gal	14.5		
Cooling System, gt	6.7		
STEERING:			
Section for the property of the party of the	Dock and ninian nauv	ar accieted	
Type	Rack and pinion, power 35.4	er assisted	
Turning Circle (curb to curb), ft	17.8 : 1		
Ratio	17.8:1	Jenard Level 5	
INTERIOR VOLUME - SAE:			
		EPA	
Passenger Volume, ft <sup>3</sup>	84.3	84	
Trunk Volume, ft <sup>3</sup>	12.0	12	
Seating Capacity	Four	38 4 5	
	Front	Rear	
Volume, ft <sup>3</sup>	49.7	34.6	
Head Room, in	41.3	36.7	
Shoulder Room, in	52.8	49.4	
Leg Room, in	39.4	33.0	
BODY, CHASSIS AND SUSPE	NSION:		
Type	Unitized construction,	bolt-on front fenders	
Front Suspension	Independent MacPher	son struts, coil springs, telescopic	
• *************************************	shock absorbers, stal	bilizer bar	
Rear Suspension	Independent torsion b	eam axle, coil springs, telescopic	
•	shock absorbers, stab	ilizer bar	
Service Brakes	Power assisted, dual	diagonal circuits, 256 mm vented front	
	discs and solid rear di	scs	
Anti Lock Braking System	Optional, all 4 wheels		
Parking Brake	Mechanical, effective	on rear wheels	
Wheels	61/2 J x 16, steel, with	full wheel covers, 5 bolts	
Tires	205/55 R 16H all seas	son	

# 1998 US New Beetle Technical Specifications



DIMENSIONS:			
Wheelbase, in		98.9	
Track:	Front, in	59.6	
	Rear, in	58.7	
Overall Length, in		161.1	
Overall Width, in		67.9	
Overall Height, in		59.5	The same of the sa

	5-Speed Manual	4-Speed Automatic
Curb Weight, Ib	2,712	2,778
Payload, lb	992	936

	5-Speed Manual		4-Speed A	utomatic
	Gasoline	Diesel	Gasoline	Diesel
City, mpg	23	41	22	34
Highway, mpg	29	48	27	44



#### Legend:

- Standard, at no additional charge. O Option, at additional charge.
- Part of option package, at additional package charge. Not available.

Power assisted front vented disc brakes, rear solid disc brakes ABS (anti-lock braking system) OBD II 50 state certification for gasoline and diesel engines	0
OBD II	•
	•
50 state certification for gasoline and diesel engines	
of state certification for gasonile and dieser engines	•
TLEV (transitional low emissions vehicle) concept for California, and	
Massachusetts and New York only	•
2.0l 115 hp 4 cylinder, in-line, gas	•
1.9l 90 hp 4 cylinder TDI, in-line, diesel	0
Anti-intrusion side door beams	•
1998 US Federal side impact compliance	•
Power assisted rack and pinion steering	•
Independent front McPherson struts	•
Independent track correcting torsion beam rear axle	•
Rear gas shock absorbers	•
5-speed manual	•
Clutch/starter interlock (car will not start if clutch is not depressed);	
manual transmission only	•
Hydraulic clutch	•
4-spd. improved-efficiency (ETA) automatic, adaptive, with automatic	0
	Massachusetts and New York only 2.0I 115 hp 4 cylinder, in-line, gas 1.9I 90 hp 4 cylinder TDI, in-line, diesel Anti-intrusion side door beams 1998 US Federal side impact compliance Power assisted rack and pinion steering Independent front McPherson struts Independent track correcting torsion beam rear axle Rear gas shock absorbers 5-speed manual Clutch/starter interlock (car will not start if clutch is not depressed); manual transmission only Hydraulic clutch

EXTERIOR		
Antenna	Roof mounted, amplified	•
Brake Lights	Center high mounted stop lamp (LED) in rear hatch under rear window	•
Bumpers	Body color bumpers	•
Corrosion Protect.	26-step paint/corrosion protection process	•
Doors	2 doors	•
	Door handles, body color	•
	Open door warning reflectors on lower door trim	•
Fender, Front	Plastic front fenders	•
Glass	Tinted glass	•
Horn	Dual tone horns	•



#### Legend:

Standard, at no additional charge.
 O Option, at additional charge.

● Part of option package, at additional package charge. - Not available.

Cup Holders (see storage, interior)

oup moraoro	(occ cicrage, interior)	
INTERIOR cont.		
Defroster	Electric rear window defroster	•
Doors/Side Panels	Molded door trim in leatherette with upper sill molding in exterior body	
	color (black on vehicles with white exterior)	•
	Integrated armrests in front door panels	•
	Integrated armrests in rear door/side panels	•
Floor mats	Front and rear carpet style, color coordinated	•
Fuel filler	Remote fuel filler release located on driver's door inner, flap connected	
	to fuel filler neck to protect body	•
nstrument Cluster	Speedometer, tachometer, odometer, trip odometer, fuel gauge, gear	
	indicator (if equipped with optional automatic transmission), warning	
	lights	•
	Red illumination for controls (switches and buttons), blue illumination	
	for displays (speedometer cluster and radio display)	•
	Headlights-on warning tone (upon opening of driver's door when	
	ignition key is removed)	•
Keys	Valet key	•
Lighting	Combination interior and reading lamp located in bottom sill of rear	
	view mirror with time delay	•
	Glove box light	•
	Luggage compartment light	•
Locks	Central power locking system (doors) with key operated closing	
	feature for optional sunroof (when available), opening & closing feature	
	for power windows (if so equipped) and selective unlocking at driver or	
	front passenger door	•
	Door mounted lock/unlock switches for central locking system	•
	Radio-frequency remote locking system with lock, unlock, trunk	
	release and panic buttons on transmitter	•
Mirrors, Interior	Driver and front passenger visor vanity mirrors, illuminated with cover	•
Power Outlets	2 power outlets (SAE size) in center console	•
Radio/Audio	AM/FM cassette stereo sound system with control capability for	
	(optional) CD changer, theft-deterrent warning light and coding	
	system. 6 speakers: 2 tweeters in A-pillar, 2 mid-woofers in front	
	doors, 2 mid-woofers in rear quarter trim.	•
	CD-changer preparation (cable from radio to luggage compartment)	•



#### Legend:

- Standard, at no additional charge. O Option, at additional charge.
- Part of option package, at additional package charge. Not available.

NTERIOR cont.		
Restraint System	Driver and front passenger airbag supplemental restraint system	•
	Front 3-point safety belts	•
	Height adjustment for front 3-point safety belts	•
	Rear outboard 3-point safety belts	•
	ALR, ELR (automatic locking retractor, emergency locking retractor)	
	for front passenger and rear outboard safety belts, to secure child seat	
	in place under normal driving conditions	•
	Child seat tether anchorage system (rear seat)	•
	Emergency tensioning retractors for front safety belts	•
	Driver and front passenger side airbags	•
Seating, Front	Front seats, fully reclining, with height adjustment and "ring style"	
	headrests	•
	"Easy entry system" integrated into front seat mechanism. Allows seat	
	to move forward for easy access to rear seating area.	•
	Heatable front seats (only in combination with heatable windshield	
	washer nozzles)	•
Seating, Rear	One-piece folding rear seat	•
	Rear seat outboard "ring style" headrests	•
Steering Wheel	3-spoke padded steering wheel	•
	3-spoke padded leather wrapped steering wheel (only in combination	
	with optional leather upholstery)	•
	Height adjustable and telescoping steering column	•
	Steering wheel deformable upon impact	•
	Collapsible steering column	•
Storage, Interior	Front door storage nets	•
	Front passenger seatback magazine/storage pockets	•
	Glovebox, lockable with interior shelf	•
	Center console with 3 front beverage holders and rear concealed	
	beverage holder, color coordinated	•
Trim (Details)	Leather wrapped steering wheel	•
	Leather shift knob and boot (manual trans. only), and handbrake	
	handle cover	•
Γrunk/Cargo Area	Luggage compartment carpeting on floor, left and right side, rear of	
	seat back. Molded trim on trunk lid.	•
	Remote electric hatch/trunk release located on driver's door	•

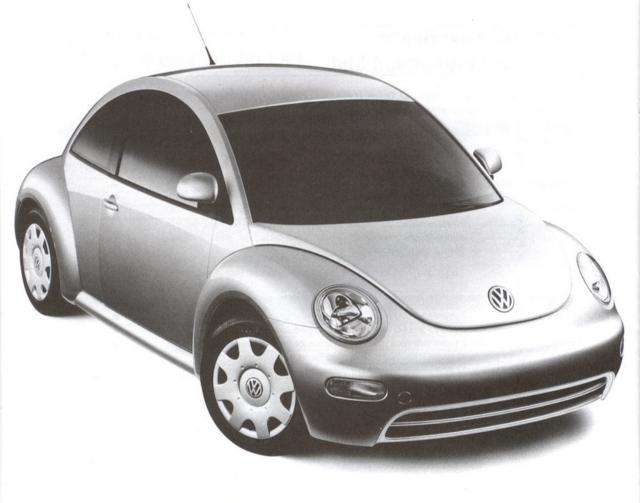


#### Legend:

- Standard, at no additional charge. O Option, at additional charge.
- Part of option package, at additional package charge. Not available.

INTERIOR cont.		
Upholstery	"Primus" velour seat fabric	•
	Leatherette seat trim	•
	Partial leather seat trim (seating surfaces)	•
Ventilation System	Rear seat heat and A/C ducts, side window defoggers in IP	•
	Pollen / Odor filter for incoming air	•
Windows	Manually operated windows	•
	Power windows (simultaneous operation possible) with one-touch- up/one-touch- down features (with pinch protection) and convenience close & open feature (central locking operated)	•

2 years / 24,000 mile New Vehicle Warranty	•
2 years / 24,000 mile no-charge scheduled maintenance	•
2 years unlimited mileage/ distance 24-hour roadside assistance	•
10 years / 100,000 mile Limited Powertrain Warranty	•
12 year unlimited mileage Corrosion Perforation Warranty	•
	2 years / 24,000 mile no-charge scheduled maintenance 2 years unlimited mileage/ distance 24-hour roadside assistance 10 years / 100,000 mile Limited Powertrain Warranty





The New Beetle









The New Beetle







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