



Audi

Service.



The Audi TT Coupé

Design and Function

Self-Study Programme 207

For internal use only.

The plant – the plants



Ingolstadt plant

The model series Audi A4 and Audi A3 are produced in Ingolstadt. A separate production line has been set up for the body in white of the Audi TT Coupé.

The head office of Technical Development is also located in Ingolstadt.



Special trucks were developed for transferring the bodyshells to Győr for final assembly.



High-tech from Győr

Qualified specialists and a good infrastructure are key factors for the Audi production shop in Győr.

Audi has been manufacturing four-cylinder 5V, V6 and V8 engines here since 1997. Final assembly of the TT has also been taking place here since 1998.

Axle and steering geometry measurement

100% reliability is ensured through a series of systematic checks integrated in the production process.

Watertightness test



Functional tests are an integral part of the production process

Mounted parts are tested for accuracy of fit, build quality and functionality after each stage of assembly.

Electrical function test

Quality that is measurable

After final assembly, extensive tests and adjustments are carried out on every single Audi.

Roller dynamometer

Exhaust emission test and optimal setup

Acoustic test bench

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The Self-Study Programme provides you with information regarding design and function.

The Self-Study Programme is not a Workshop Manual.

Please refer to the Service Literature for all the relevant maintenance and repair instructions.

New.



**Important.
Note.**



A brief introduction to the TT

Design needs no explanation

The name alone suggests that this is an Audi with a difference. The Audi TT was named after the legendary Tourist Trophy race on the Isle of Man - the only one of its kind in the world.

The Audi TT is equally as unique as its legendary namesake.

The interior styling matches the exterior perfectly - a fact reflected in the features of the dash panel, the styling of the instruments, the air nozzles and controls.

The styling of some parts has also been influenced by the use of aluminium.

Engines

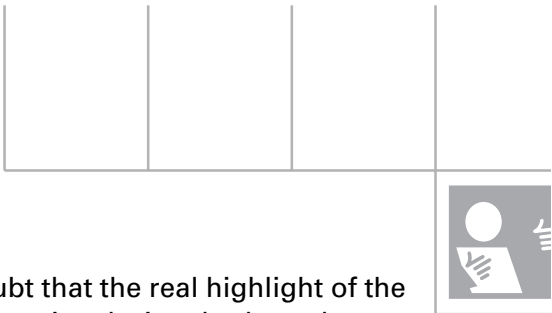
As befits a sports car, the Audi TT is powered by a four-cylinder 5-valve turbocharged engine developing 180 bhp with a sports gearbox in the front-wheel drive and quattro versions. A four-cylinder 5-valve turbocharged engine developing 225 bhp is available for the quattro version.



Running gear

The running gear also underscores Audi's total commitment to the sports car concept. The front axle kinematics were revised with regard to steering quality and response. This, in combination with the Audi TT's sporty, stiff suspension tuning, ensures excellent handling and a high standard of driving safety.

The basic version is equipped with 16-inch wheels shod with size 205/55 R 16 tyres. A 17-inch suspension is standard with the quattro and available as optional equipment for all other engine variants.



There is no doubt that the real highlight of the Audi TT is its emotive design, both on the exterior and in the interior. The engineers at Audi had an ambitious development goal: to meet all functional and quality standards as well as the latest statutory requirements and Audi's high standards of safety without compromising the design concept and while retaining the car's full viability for everyday use.



SSP207/1

Quattro power train

The TT will feature a new generation of Audi technology and the new Haldex viscous coupling, further emphasising the vehicle's sporty character.

Safety

Safety is paramount: That's why the TT is equipped with front airbags for the driver and front passenger. The TT already complies with the new European safety laws which will come into effect in the year 2003 as well as the tougher requirements according to the US Head Impact Protection Act.

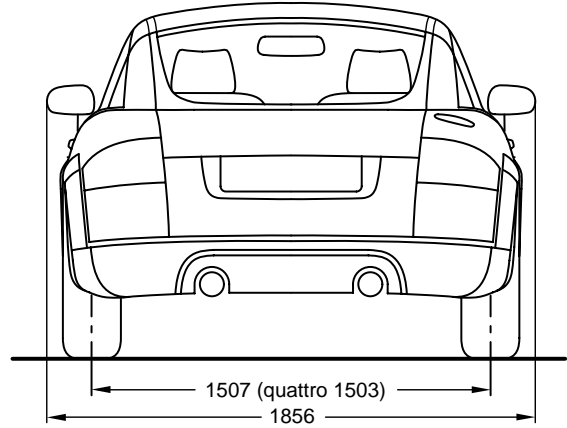
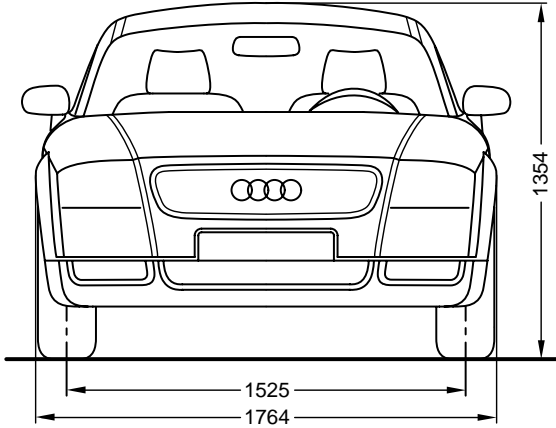
Design

We at Audi firmly believe that the most important thing about designing is that actions speak louder than words. Suffice to say, a good design speaks for itself. The TT has a "wheel-hugging" design, that is to say the entire body is styled around the wheels. That also goes for the front and rear bulges as well as the roof and window lines and the low-slung passenger cabin.

A brief introduction to the TT



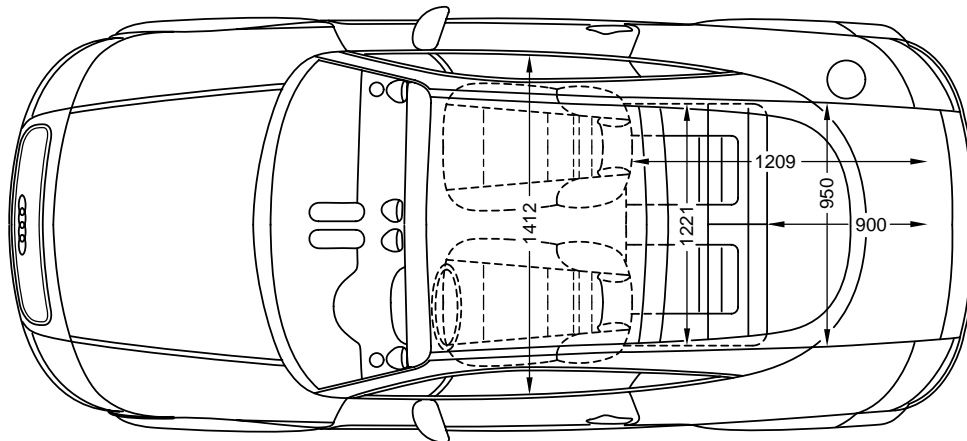
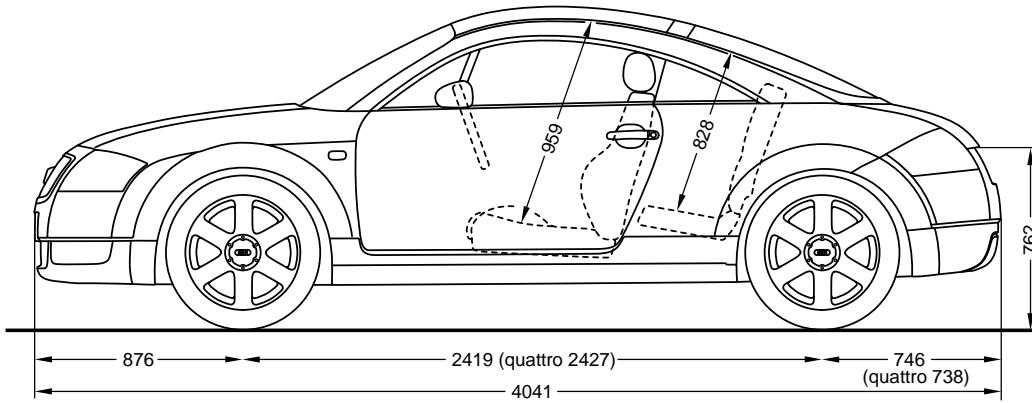
Vehicle dimensions



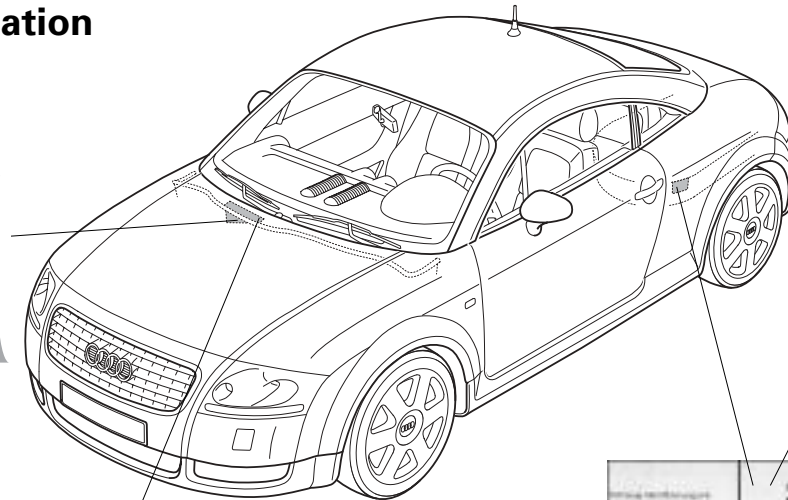
The “+ and -” dimensions are reference values compared to the Audi A3

Length: -111 mm
 Width: +45 mm
 Height: -69 mm

Track width
 Front: +12 mm
 Rear: +12 mm
 + 8 mm quattro
 Wheelbase: -93 mm
 -85 mm quattro



Vehicle identification



Key of manufacturing plants within the Group in digit position 11:	World manufacturing code			Part describing vehicle					Part identifying vehicle								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
A Ingolstadt N Neckarsulm 1 Győr X Poznan K Karmann/Rheine				Filler constant = Z Digits 1 + 2 vehicle class. acc. to structure table					Model year, alphanumeric as prescribed by law Manufacturing plant within the Group (as at 04/94) Serial No. beginning with:								
Audi Hungaria Motor Kft:	T	R	U	Z	Z	Z	8	N	Z	X	1	0	0	0	0	0	1
Audi AG:																	
A3	W	A	U	Z	Z	Z	8	L	Z	X	A	0	0	0	0	0	1
A4	W	A	U	Z	Z	Z	8	D	Z	X	A	0	0	0	0	0	1
A6 (incl. SKD Poland)	W	A	U	Z	Z	Z	4	B	Z	X	N/X	0	0	0	0	0	1
A8	W	A	U	Z	Z	Z	4	D	Z	X	N	0	0	0	0	0	1
Cabrio	W	A	U	Z	Z	Z	8	G	Z	X	K	0	0	0	0	0	1
Audi 100 (C3, CKD)	W	A	U	Z	Z	Z	4	4	Z	X	A	0	0	0	0	0	1

* Vehicles to US specification (USA, Canada, Saudi Arabia, tourists)
 On the VIN (behind the windscreen), the certification label and on official documents, the fillers (Z) are replaced by a vehicle code (digits 4-8) or by a test mark (digit 9). This (18-digit) number is the official vehicle identification No. (VIN) in the countries listed above.

A brief introduction to the TT



Environmentally-friendly production

Environmental protection is firmly rooted in Audi's corporate strategy. During the vehicle development process, all environmental criteria are incorporated into the product and production concept from the outset. Economic goals and ecological needs are balanced so that no conflicts of aims arise.

Produce locally - think global:

Audi lays great store by waste avoidance, reduction and recycling.

- Almost all production resources and supplied parts are delivered in re-usable packaging.
- Most sheet-metal blanks are designed so as to minimise cutting waste after pressing.



Waste avoidance and reduction

From 1998 onwards, Audi will use only water-soluble paints in a effort to make its production process more environmentally-friendly. This step will see a dramatic reduction in solvent emissions. Today's fillers and base coats, for example, contain up to 45% solvent. By comparison, the solvent content in water-soluble systems is only about 6%.

Recycling

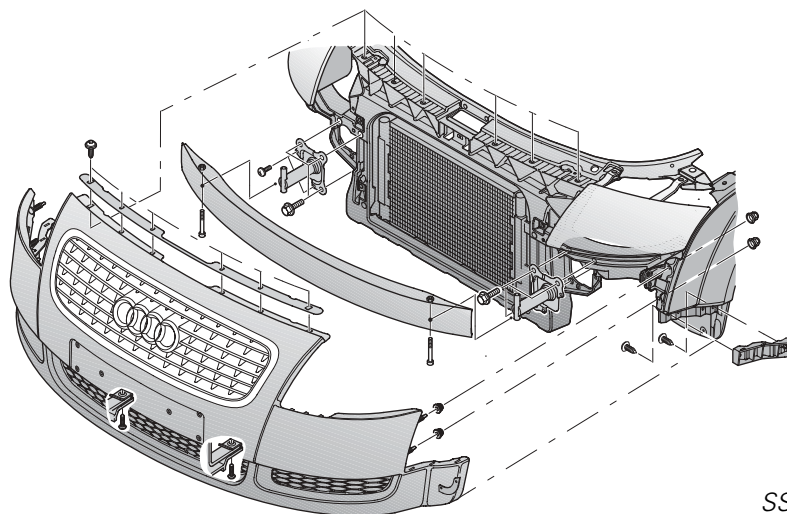
The recycling rate at Audi is now about 94% by weight. Metal cuttings from the press plant are used to manufacture small parts as far as possible. The resulting scrap is returned to the steelworks, where steel and zinc are separated from one another.

Other waste materials such as paper, cardboard, timber, polystyrene, etc. are collected separately and fully recycled .



Special features

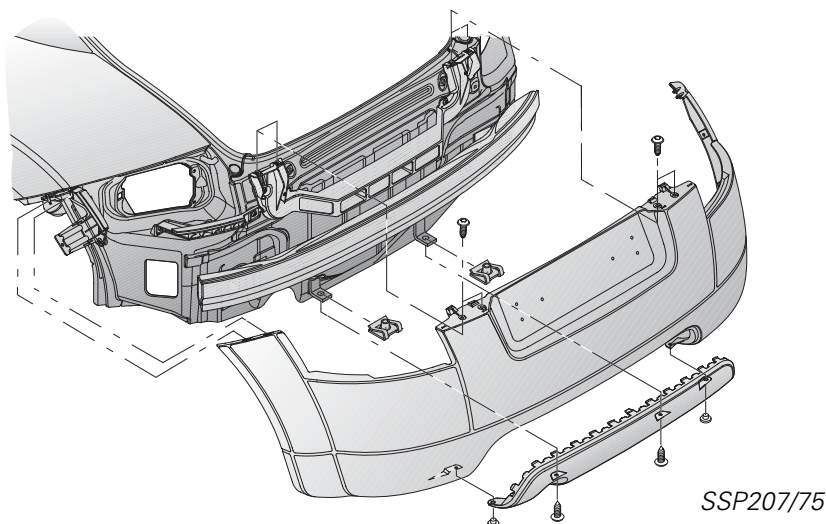
Front bumper



The front bumper comprises two parts: the cover panel and a decorative grille. The bumper carrier is made of aluminium and bolted to the side members by impact absorbing elements.

The guide profiles attached to the left and right wings ensure an even gap all round. A zero joint is created by attaching the bumper to the wing by means of threaded bolts as well as nut and washer combinations.

Rear bumper



The rear bumper comprises a total of 4 parts: the bumper panel, the rear cover, the aluminium cross-member and the central locating element.

The rear cover is available in two versions depending on engine variant (TT has one tailpipe, the TTS two). A seamless transition to the body side section (zero joint) is produced by means of 2 bolts on each body side section.