

**PORSCHE**

Technical Manual

*Boxster*

Technical Information

Repair

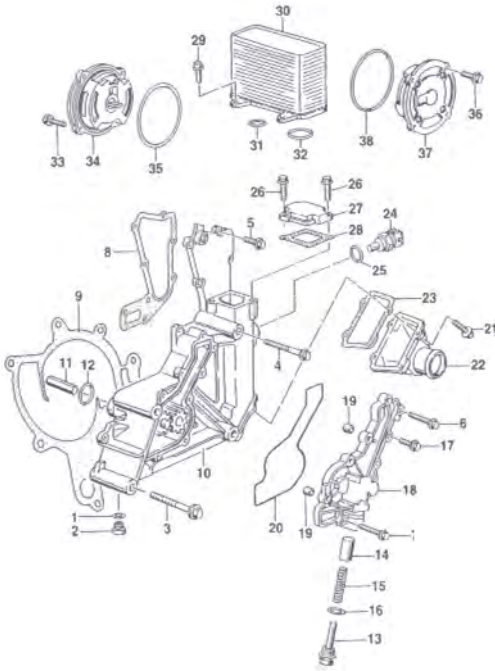
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Group 0  
Entire vehicle – General

Structure of exploded view

A 17 B Engine - Lubrication C Boxster

H Removing and installing oil pump with coolant guide housing



D 17 - 6 F 17 20 19 Removing and installing oil pump with coolant guide housing  
E 986171 G Printed in Germany, 1996

C Boxster B Engine - Lubrication A 17

H Removing and installing oil pump with coolant guide housing

J	No.	Designation	Qty.	Removal	K Note:	Installation
	1	Coolant drain plug M10 x 1				Tightening torque: 10 + 5 Nm (7 + 3.5 lbf.)
	2	Sealing ring A10 x 13.5				Always replace
	3	Hexagon-head bolt M10 x 100				Tightening torque: 45 Nm (33 lbf.)
	4	Hexagon-head bolt M10 x 100	1			Tightening torque: 45 Nm (33 lbf.)
	5	Hexagon-head bolt M6 x 20	8			Tightening torque: 10 Nm (7 lbf.)
	6	Hexagon-head bolt M6 x 70				
	7	Hexagon-head bolt M6 x 70				
	8	Gasket				Always replace; insert or fit only if coolant guide housing has been put onto crankcase
	9	Gasket				Always replace; insert or fit only if coolant guide housing has been put onto crankcase
	10	Oil pump with coolant guide housing				
	11	Driver				Always replace
	12	O-ring				
	13	Plug with guide pin				Tightening torque: 25 Nm (18 lbf.)

17 20 19 Removing and installing oil pump with coolant guide housing  
G 986171 E F 17 - 7 D  
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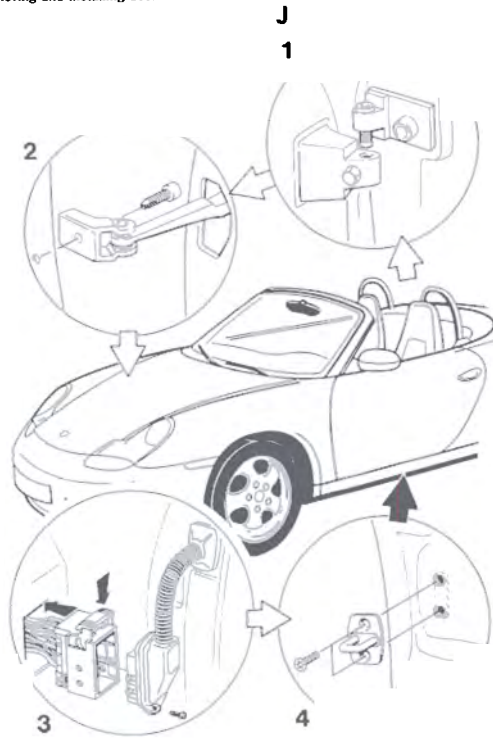
- A = Repair Group, numbers
- B = Repair Group, text
- C = Vehicle type
- D = Page number
- E = Internal Porsche number
- F = Work operation, consisting of "After-sales service number" and "Title"

- G = Imprint, supplement number, year of printing
- H = Title of exploded view
- J = Item number of exploded view, in disassembly sequence
- K = Special instructions to be followed during installation or removal

Structure of sequence description

A 57 B Door front, central locking system C Boxster

H Removing and installing door



D 57 - 2

E 986571

F 57 51 37 Removing and installing door  
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G

C Boxster B Door front, central locking system A 57

H Removing and installing door

Removing door

J No. K Procedure

L Instructions

Loosen fastening screws.

Unscrew fastening screw from door hinge.

Loosen door brake.

Unscrew hexagon socket head bolt screw on the door brake.

3 Disconnect plug connection.

Loosen hexagonal screw. Withdraw plug connection downwards and disconnect.

Pull door upwards out of the hinges.

Loosen latch striker.

Install door

No. Procedure

Instructions

Hang door.

Hang door in door hinge from above and tighten fastening screw.

2 Assemble door brake.

Screw door brake to body with hexagon socket head bolt.

Connect.

Connect plug connection, insert from below and secure with hexagon-head bolt.

4 Assemble latch striker.

Screw latch striker to the B-pillar. Adjust latch striker so that the door contour corresponds with the rear side panel.

57 51 37 Removing and installing door  
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F

E

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- A = Repair Group, numbers
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- G = Imprint, supplement number, year of printing
- H = Title of sequence description
- J = Sequence number in order of sequence
- K = Procedure in the sequence
- L = Description or explanation of the procedure

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**01 Sales check**

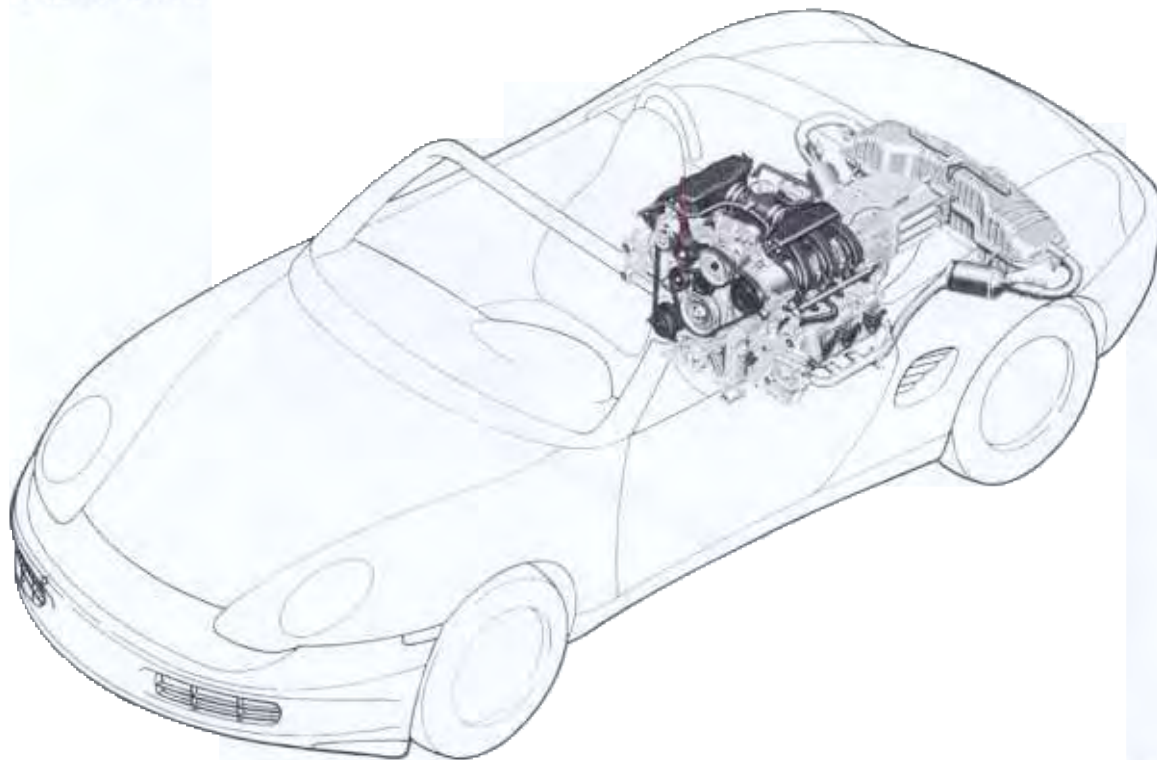
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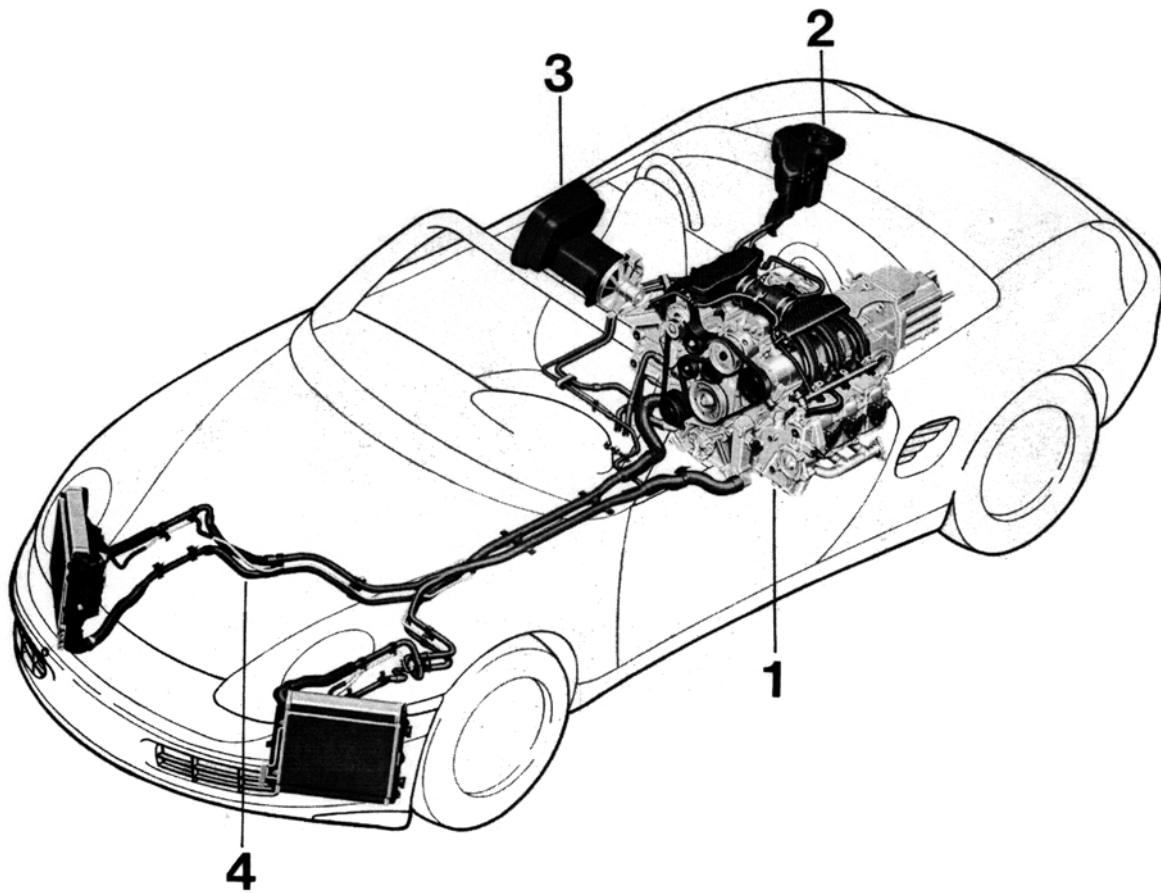
## 0 Power unit - general

### Engine M 96/20



638 - 96

Type	6-cylinder aluminium opposed-cylinder engine, water-cooled	
Bore / stroke	mm	85.5 / 72
Displacement (actual)	cm <sup>3</sup>	2480
Compression ratio		11.0 : 1
Max. engine power	kW/HP	150 / 204
at engine speed	rpm	6000
Max. torque	Nm (ftlb.)	245 (181)
at engine speed	rpm	4500
Engine control	Bosch M5.2 with static high-voltage distribution, sequential injection, cylinder-specific knock control, stereo oxygen-sensor control and diagnostic system.	
Cylinder head	2 overhead camshafts with hydraulic valve clearance compensation	
Camshaft drive	Porsche VarioCam	
Type of fuel	RON 98 premium unleaded	

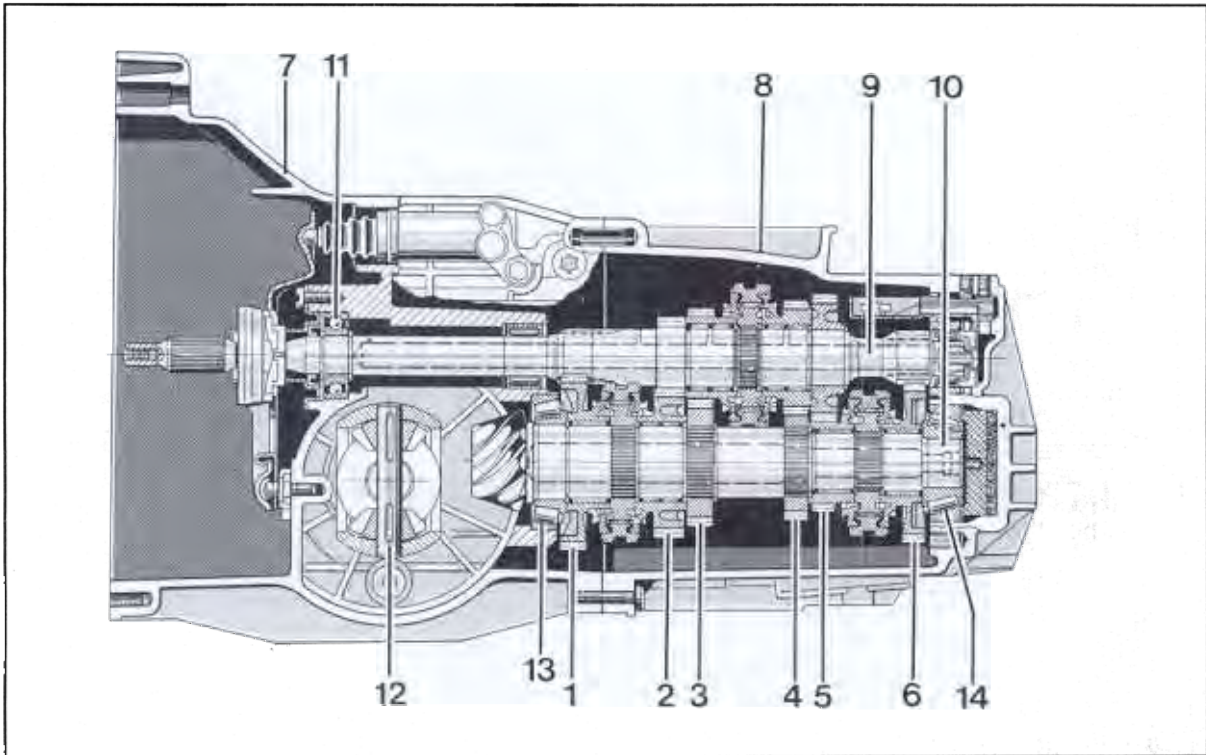
**Engine-cooling diagram**

- 1 - Opposed-cylinder engine, water-cooled
- 2 - Expansion tank
- 3 - Fan for engine-compartment cooling
- 4 - Water circuit



## 0 Transmission - general

### Manual transmission (G 86)



1 - 1st gear

2 - 2nd gear

3 - 3rd gear

4 - 4th gear

5 - 5th gear

6 - Reverse gear

7 - Transmission housing

8 - Transmission case cover

9 - Input shaft

10 - Output shaft

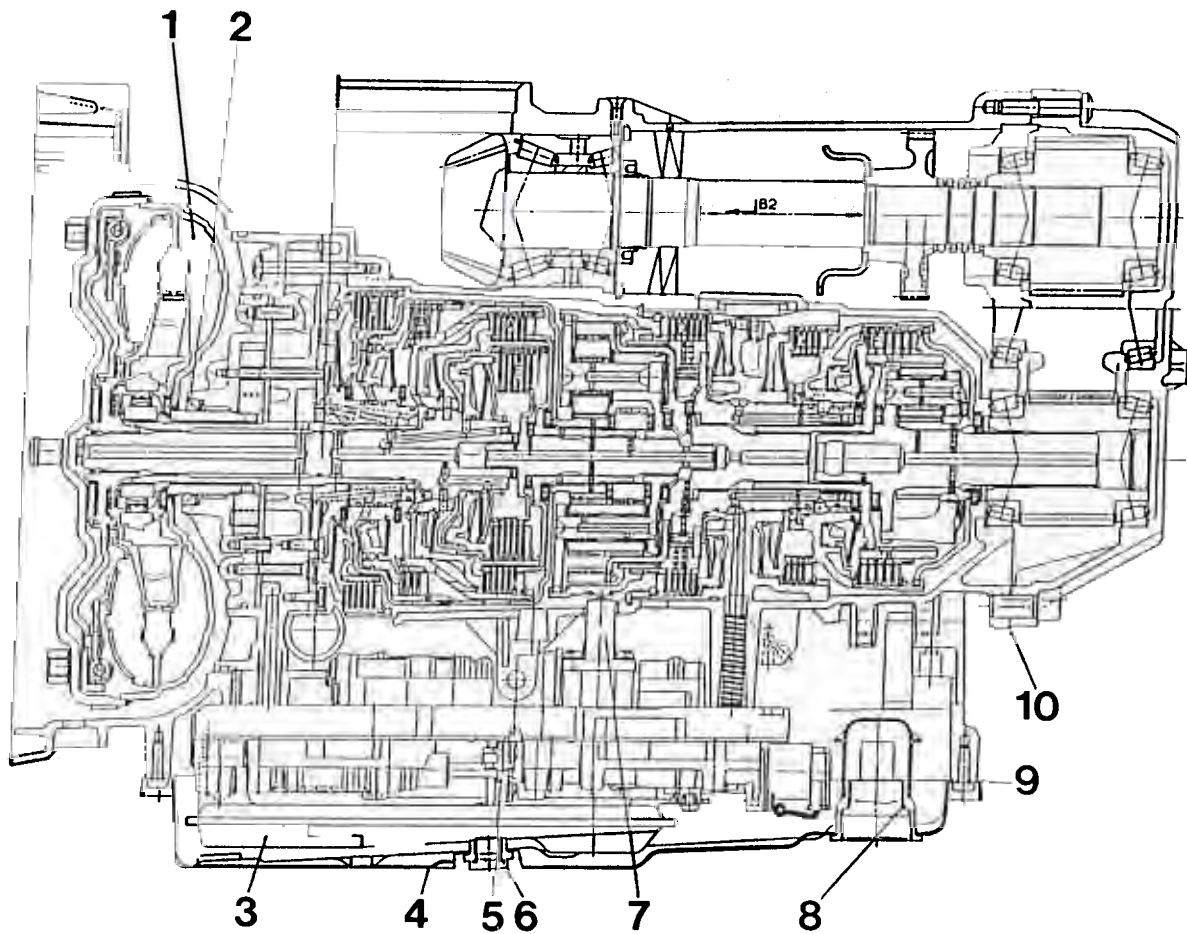
11 - Ball bearing

12 - Differential

13 - Tapered roller bearing

14 - Tapered roller bearing

## Tiptronic transmission (A86)



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- |                                       |                                     |
|---------------------------------------|-------------------------------------|
| 1 – Torque converter                  | 6 – ATF drain plug                  |
| 2 – Sealing ring for torque converter | 7 – Transmission input speed sensor |
| 3 – ATF filter                        | 8 – ATF filler screw                |
| 4 – ATF pan                           | 9 – Gasket for ATF pan              |
| 5 – Hydraulic control unit            | 10 – Gasket for spur gear           |

## 0 Running gear - general

### Running gear - overview

#### Front axle / steering

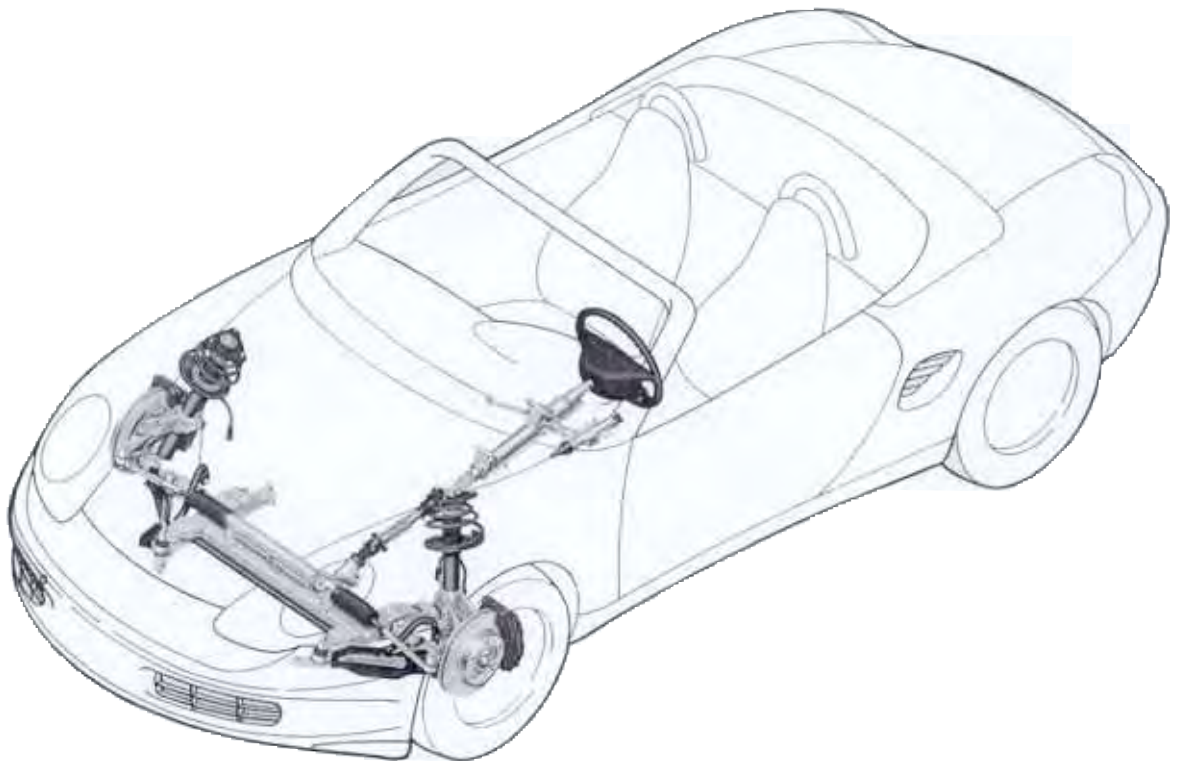
McPherson wheel suspension with offset spring. Twin-tube gas pressure shock absorbers in standard or sports model.

In order to obtain greater stiffness with reduced intrinsic weight as compared with steel, the following components have been made from aluminium:

Control arms, diagonal brace, track rod, wheel carriers and cross members / side member.

Rack-and-pinion steering gear ( $i = 16.9 : 1$ ) with hydraulic assistance.

**Steering wheel longitudinally adjustable (40 mm).**



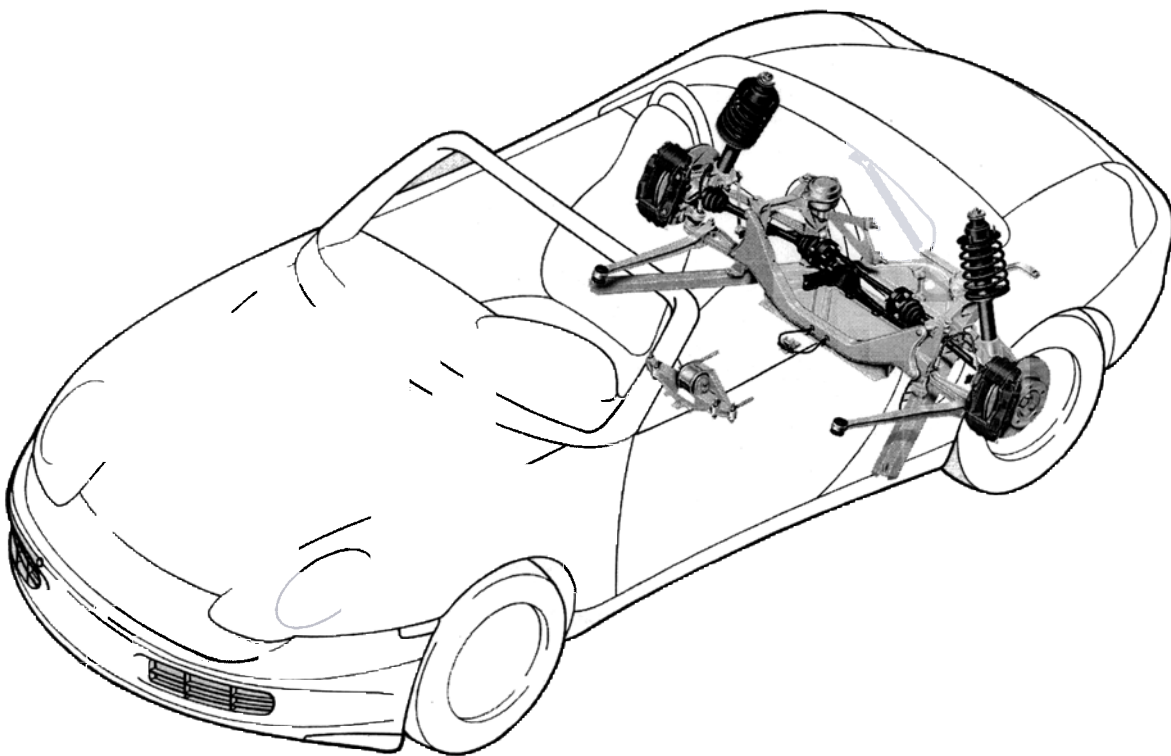
**Rear axle**

McPherson wheel suspension with offset spring.

Twin-tube gas-filled shock absorbers in standard or sports model.

In order to obtain greater stiffness with reduced intrinsic weight as compared with steel, the following components have been made from aluminium:

Control arms, diagonal brace, track rod, wheel carriers and side members.



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**Wheels and tyres**

	Front	Rear
<b>Standard</b>		
Wheels:	6J X 16	7J X 16
Tyres:	205/55 R 16	225/50 R 16

**On special request**

Wheels:	7J X 17	8.5J X 17
Tyres:	205/50 R 17	255/40 R 17

**Brakes**

Hydraulic dual-circuit brake system with front-axle / rear-axle brake-circuit distribution.  
Vacuum brake booster, internally ventilated brake disks with four-piston fixed caliper at front and rear axles.

ABS 5.3 (3-channel system) standard.  
ABS/TC 5.3 (4-channel system) on special request.

TC = Traction Control, consisting of ASR (anti-slip control) and ABD (Automatic Brake Differential).

Parking brake (handbrake):

Drum brake acting mechanically on both rear wheels.

