



Welcome.

Passat



Launch Training Volkswagen



Welcome to the Volkswagen Passat 2006 launch training

Aim:

- ➔ To inform you of the technology of the new Volkswagen Passat 2006

Contents:

- ➔ Operation and functionality
- ➔ Technical highlights
- ➔ Using the vehicle
- ➔ Service

The time frame is approx. six hours.

In the seminar and practice rooms, please:



Marketing

Vehicle presentation

Technical innovations - Service

Service information

Using the vehicle

M

F

T

M F T

Marketing

Vehicle presentation

Technical innovations – Service

Service information

Using the vehicle

M

F

T

M F T



- ➔ History
- ➔ Vehicle production
- ➔ Market and segment
- ➔ Vehicle models
- ➔ Competitors
- ➔ Positioning
- ➔ Target groups
- ➔ Drive engines
- ➔ Equipment lines
- ➔ Dimensions
- ➔ Insurance classes
- ➔ EuroNcap

Note: The current sales literature applies!



Volkswagen Passat model year 2006

History

Marketing



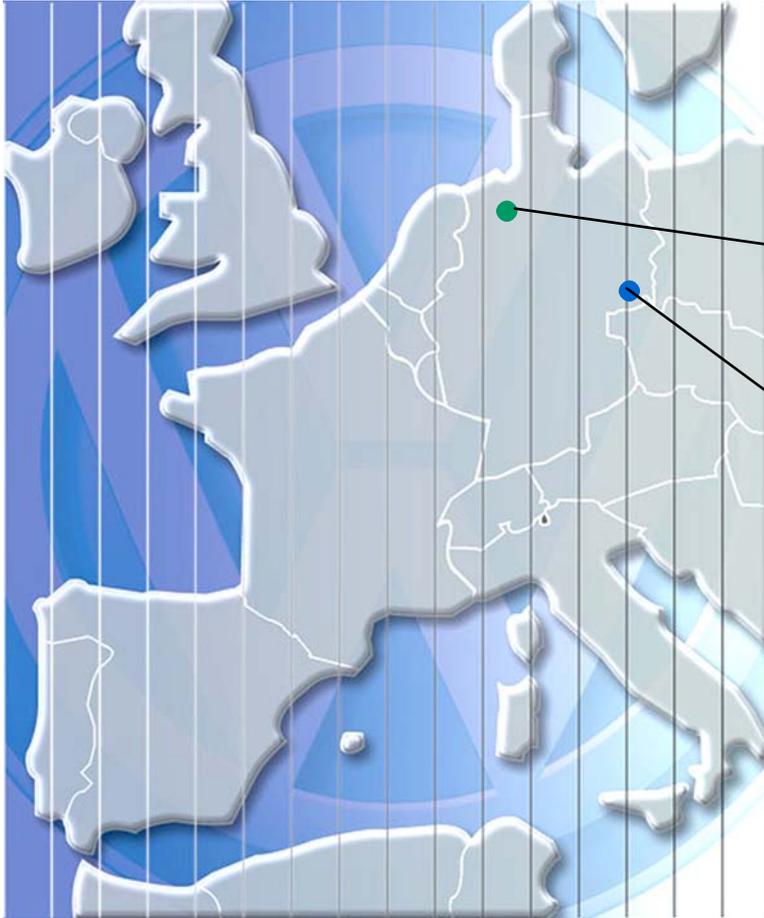
08/03/2005 6 from 85 - VK-21 _ALV Passat 2006 - last update: 29/01/2005

Service Training



Production sites

Marketing



Volkswagen plant Emden



Volkswagen plant Mosel

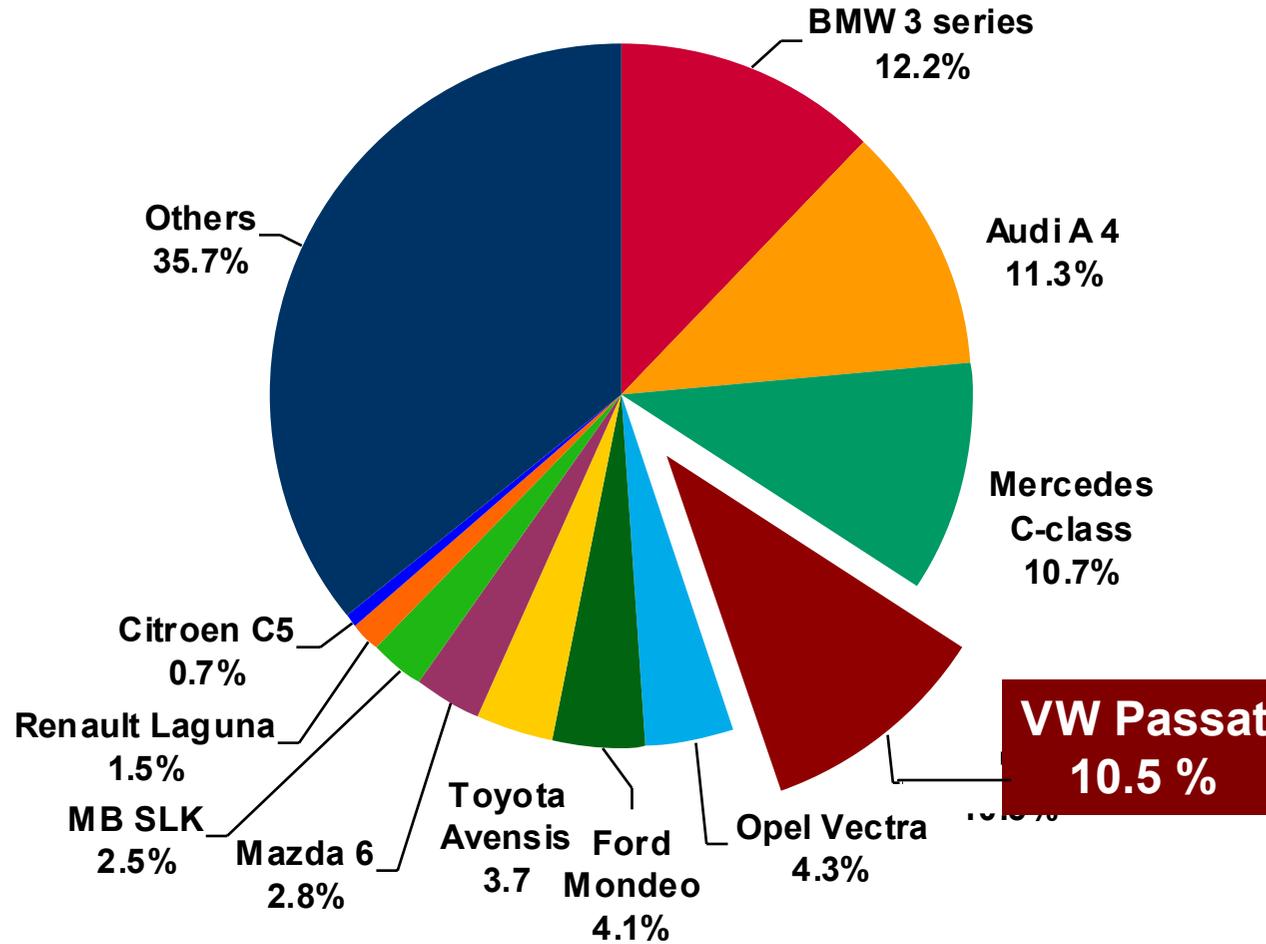
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Volkswagen Passat model year 2006

Market shares: Market and segment

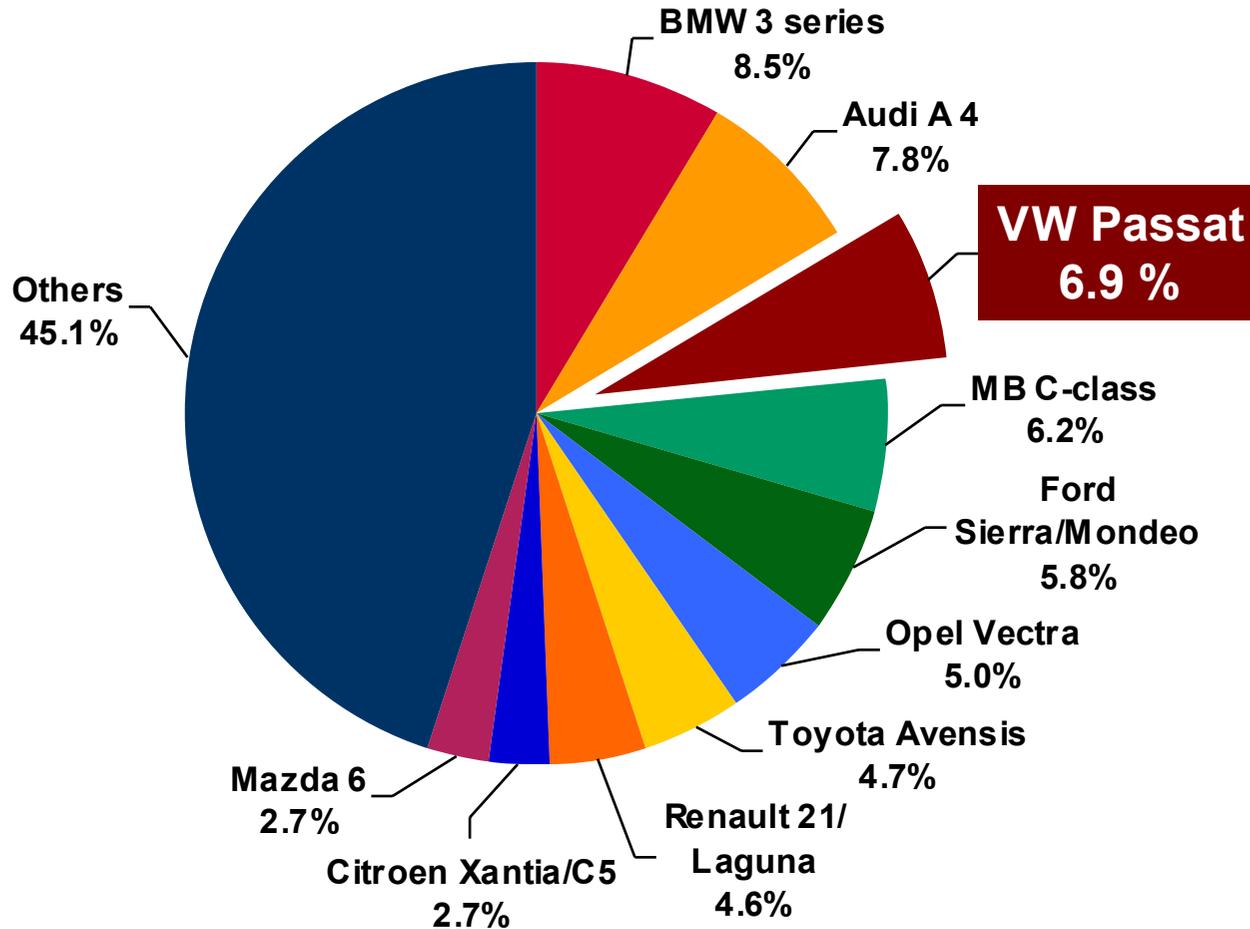
Marketing



Segment shares in the B-segment - Germany 01-06.2004

08/03/2005 8 from 85 - VK-21_ALV Passat 2006 - last update: 29/01/2005





Segment shares in the B-segment - Western Europe 01-06-2004

08/03/2005 9 from 85 - VK-21_ALV Passat 2006 - last update: 29/01/2005

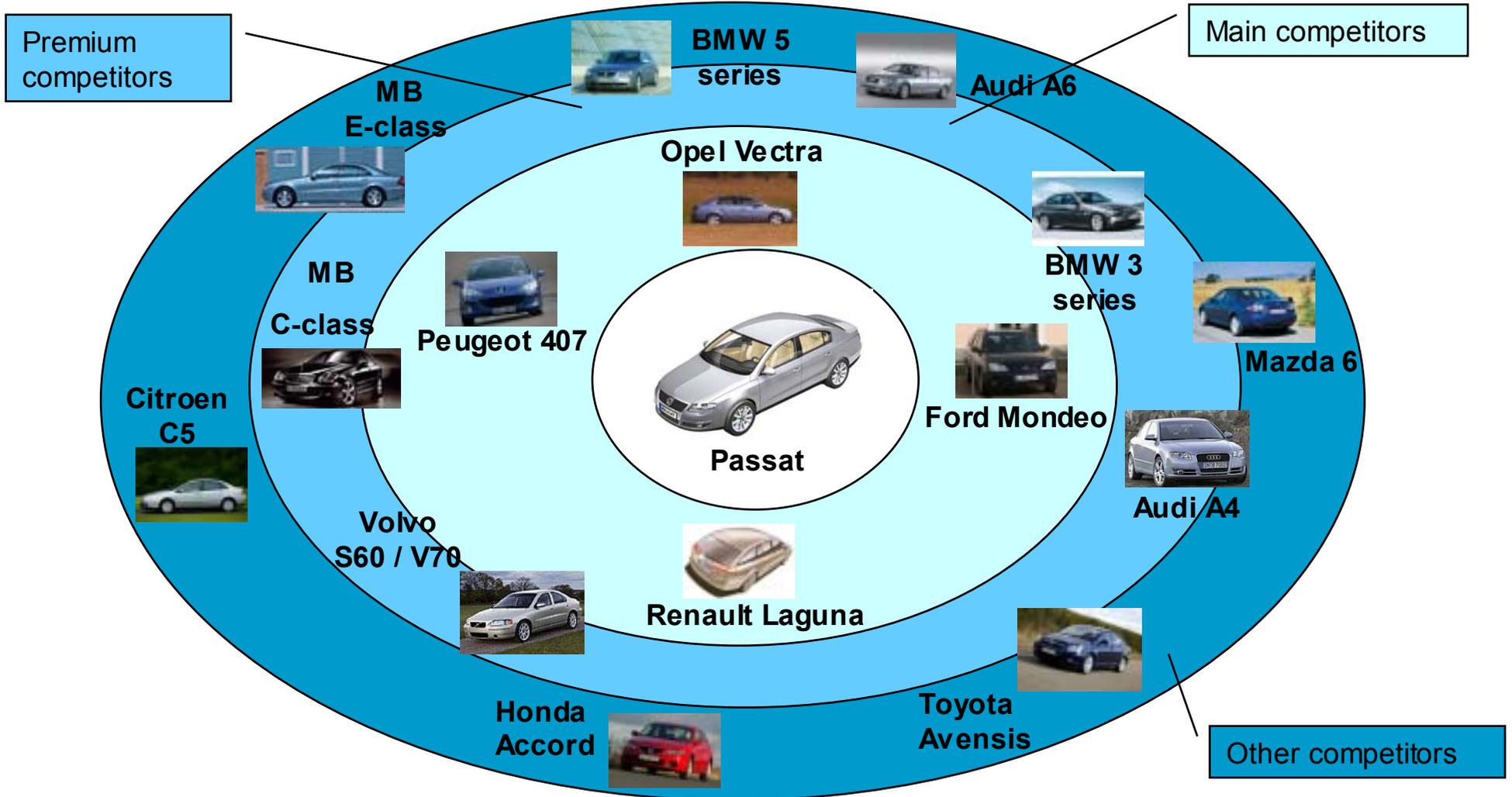


Limousine

08/03/2005 10 from 85 - VK-21_ALV Passat 2006 - lastupdate: 29/01/2005

Competitors

Marketing



08/03/2005 11 from 85 - VK-21_ALV Passat 2006 - lastupdate: 29/01/2005

PASSAT - Positioning history

Passat 1988:

Luxury class interior conditions
in a mid-size category vehicle (space mirade)



Passat 1995:

Space mirade and safety strategy
(double airbag and ABS)



Passat 1997:

Quality, safety and comfort of the luxury class,
cost efficiency of the traditional midsize category
(new measure of value in its category)

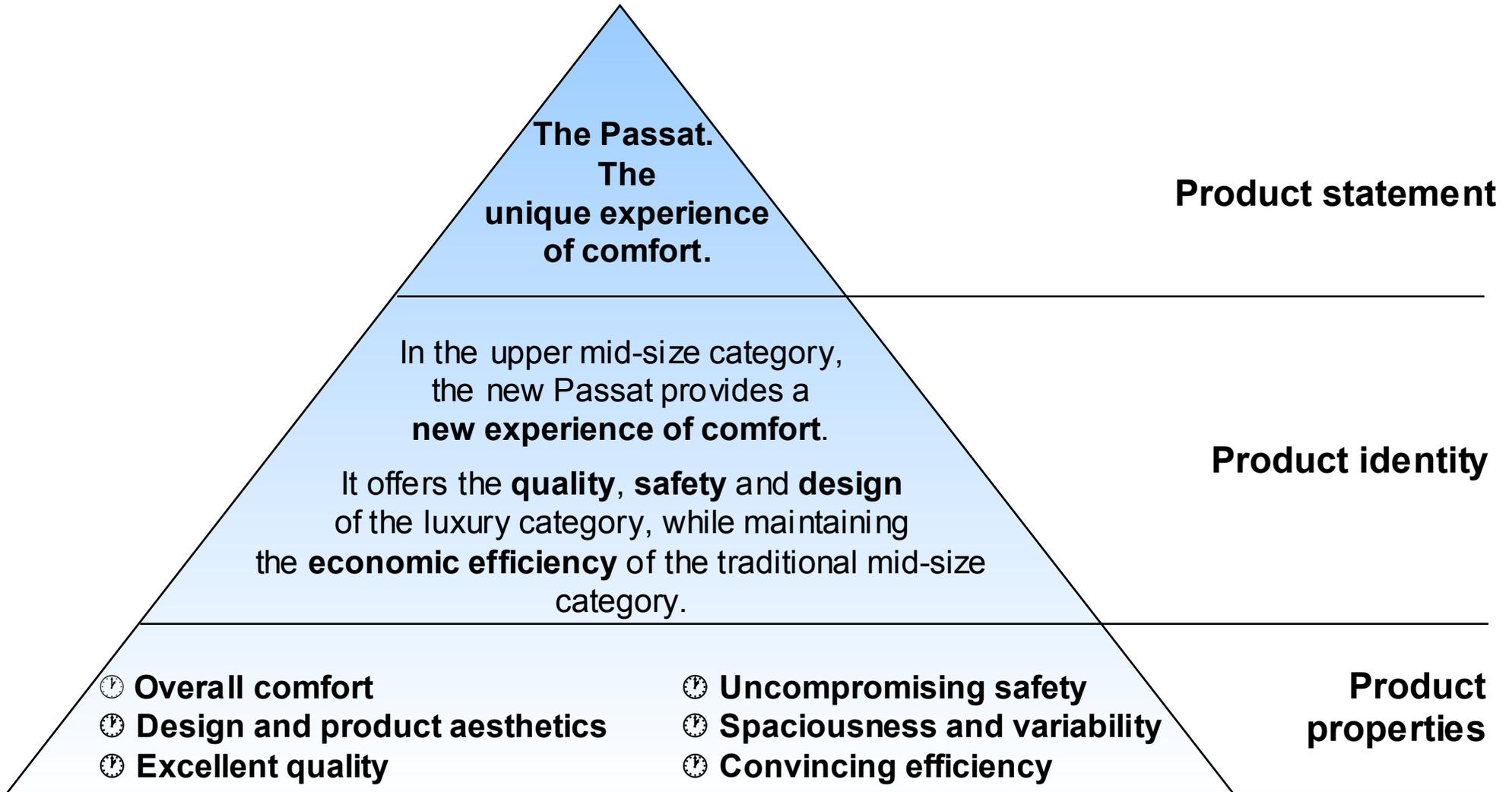




Volkswagen Passat model year 2006

Positioning pyramid

Marketing



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**The Passat.
The unique experience of comfort.**

Overall comfort	Design and product aesthetics	Quality of the luxury category
<p>New standards in all categories:</p> <ul style="list-style-type: none"> • Driving comfort • Air condition comfort • Seating comfort • Ease of operation <p>Special equipment</p> <ul style="list-style-type: none"> • Low noise output • Plenty of information 	<ul style="list-style-type: none"> • Evolution of the ageless harmonic Passat design • Measured emotionalization with striking front bonnet and radiator grille design • Individual interior design • Wheel design that matches the equipment lines 	<ul style="list-style-type: none"> • Excellent processing quality • Assertive details: "love of details" • Use of high-quality materials • Best in class with regards to required repair-work

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**The Passat.
The unique experience of comfort.**

**Uncompromising
safety**

- Fulfillment of all global safety standards
- Comprehensive airbag equipment
- More passenger safety
- More pedestrian protection
- Braking power and braking distance benchmarks
- High safety reserves of driving characteristics
- Innovative headlight and light systems

**Spaciousness
and variability**

- The space miracle: comfortable interior among the best in the midsize category
- Variable seating design
- Various storage compartments
- Variable and individual luggage compartment

**Convincing
efficiency**

- Outstanding value for money
- Price level of the traditional midsize category competitors
- Among the best in the insurance rating process
- Leading in fuel consumption of petrol and diesel engines
- Best in class with regards to repair and maintenance costs

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Volkswagen Passat model year 2006

Positioning: Comfort as special product strength

Marketing

Driving comfort

- 4-steer rear axle (independent suspension)
- Larger range (70l tank)
- Optional: advanced front lighting system (steering headlights), rain sensor/light assistant, cruise control system with automatic speed governor (optional)

Air-condition comfort

- Serial air-conditioning system (Climatic)
- Optional: Climatronic (2-zone with indirect ventilation),
- Insulating-glass, infrared reflecting windscreen,
- Auxiliary heater, electrical rear window blind

Seating comfort

- Comfortline series: electr. 6-position front seats for the driver
- Comfortline option: electr. 12-position seats for driver and
- front passenger

Low noise output

- Exterior noise: ISO drive past value 71 dB (A)
- Interior noise: best in class

Ease of operation

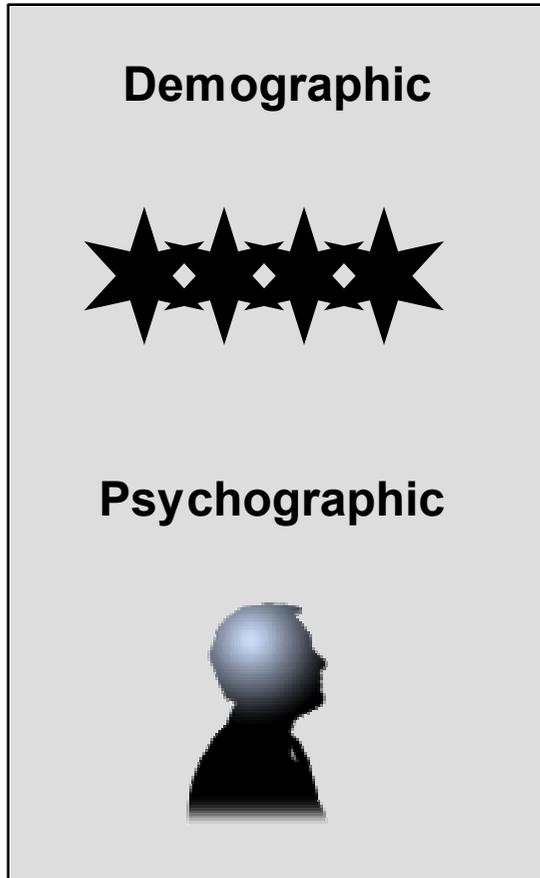
- Serial electrical parking brake
- Park pilot with distance warning, front and back

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Target groups

The Passat car line addresses a high-quality target group, compared to the competitors.



- Male, 35 to 45 years old
- More than 90% married, most with 1 or 2 children
- High level of education
- Higher household-net income (approx. 3,800 €/month).
- Middle to upper class
- Quality conscious
- Pragmatic
- Design-oriented
- Self-confident

Engine / equipment matrix of the Limousine

Passat B6 ENGINE/EQUIPMENT MATRIX - World without NAR									
Engines	Gearboxes					Equipment lines			
	5-Speed Front	6-Speed Front	Auto-matik Front	4MOT 6-speed	4MOT Auto-matik	Trend-line	Com-fortline	Sport-line	High-line
1.6l 75 kW (102 PS) 2V SRE	x								
1.6l 85 kW (115 PS) 4V FSI									
2.0l 110 kW (150 PS) 4V FSI		x	x						
2.0l 147 kW (200 PS) 4V Turbo FSI			x						
3.2l 184 kW (250 PS) V6 4V FSI 4MOTION					x				
1.9l 77 kW (105 PS) TDI-PD 2V									
1.9l 77 kW (105 PS) TDI-PD 2V DPF									
2.0l 100 kW (136 PS) TDI-PD 4V AGW (Belg.)									
2.0l 103 kW (140 PS) TDI-PD 4V AGW									
2.0l 103 kW (140 PS) TDI-PD 2V AGW DPF									
2.0l 125 kW (170 PS) TDI-PD 4V AGW DPF									

= conventional Otto engine

= FSI engine

= Diesel engine

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Volkswagen Passat model year 2006

Equipment structure - 4 equipment lines

Marketing

Trend-line



- Entry level
- No chrome on side windows
- 16" steel wheels with full hub caps

Comfort - line



- Luxury design
- Chrome on side windows
- 16" alloy wheels
- Electrical 6-position comfort seat

Sport - line



- Sporting
- No chrome on side windows
- 16" alloy wheels
- Electrical 6-position sports seat
- Leather sports steering wheel
- Sport chassis

High - line



- Exclusive
- Chrome on side windows
- 16" alloy wheels
- Electrical 6-position sports seat
- Leather sports steering wheel
- Leather Alcantara
- Climatronic

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Volkswagen Passat model year 2006

Product: Standard equipment and lines

Marketing

Passat Trendline

Safety:

ESP with braking assistant

Head airbags for front and rear passengers

Side airbags for driver and front passenger

Front passenger airbags can be switched off manually

Crash-active front headrests

Fasten seat-belt request driver and front passenger

3-point automatic seat-belts for all seats

3 rear headrests

Exterior, interior and functionality:

Steel wheels 6.5 Jx16 (full hub cap)

green thermal protection glass black impact & side protection strips

Radiator grille with chrome edging

Painted outside mirrors and handles

electrical window-opener, front

Central locking with FFB

Electric exterior mirror

Electro-mechanical power steering

Electrical parking brake

"Climatic" air conditioning system

Windscreen antenna

Outside temperature display

Automatic luggage compartment opening

Passat Lines (Comfortline, Sportline, Highline)

Alloy wheels 7Jx16 with size 215 tires

Decorative inlays

Through-loading option in the rear bench

Heated windscreen washer nozzles

Extended center console with arm rest, storage compartment and rear socket

Side protection rails and bumpers

Electrical 6-position driver seat

Socket in the luggage compartment 1x12 V

Electric window lifters, rear

chrome-plated at rear

Passat Comfortline

Inside mirror, automatic anti-blind function with rain sensor, light assistant,

Coming & leaving home function

Cruise control system

Chrome strips on side windows

Passat Sportline

Sport chassis

Multi-function display (MFD)

Passat Highline

Inside mirror, automatic anti-blind function with rain sensor, light assistant,

Coming & leaving home function

Cruise control system

Chrome strips on side windows

Multi-function display (MFD)

Climatronic...





Volkswagen Passat model year 2006

New special equipment: Comfort and functional equipment

Marketing

- 12-position electrical comfort/sports seats for driver and front passenger (later: also with electric massage lumbar support and air condition padding)
- Automatically dimmable outside mirrors, electrical folding function, with forward lighting (including memory for electrical 12-position seats)
- Heatable windscreen
- Climatronic - two-zone with indirect ventilation
- Filter windscreen, infrared reflection
- Electric rear window blind
- Side window blinds (manual)
- High-end sound system Dynaudio
- Home link (remote control of external units, e.g. garage door)
- Inside mirror, automatic dimming function with rain sensor, light assistant, coming & leaving home function
- Multi-function steering wheels, also with Tiptronic
- Park pilot - acoustic distance warning, front and back
- Auxiliary heating with timer or remote control

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Safety, exterior and interior equipment

Safety equipment

- ADC - Cruise control system with automatic distance control
- AFS - Advanced front lighting system (steering headlight) only in combination with Bi-xenon headlights
- Tire pressure control display (direct and indirect measurement)
- Side airbags also at the rear

Exterior equipment

- 18" light metal alloy forged wheels; 19" light metal alloy wheel (individual offer via VW)

Interior equipment

- Wood pattern on instrument panel and center console (3 types of wood)
- Turnable mat for the luggage compartment floor (double-sided: rubber and fabric)



“Milwaukee”
7Jx16 ET45
215/55R 16 97 V
CN8, series
Comfortline*



“Catalunya”
7Jx16 ET45
215/55R 16 97 V
CN9, series
Sportline*



“Adelaide”
7Jx16 ET45
215/55R 16 97 V
CP0, series
Highline*



“Monza”
7Jx16 ET45
215/55R 16 97 V
CP1 /PJA
"SST wheel" , optional



“Solitude”
7½Jx17 ET47
235/45R 17 97 W
CN2, series V6*



“Monte Carlo”
7½J x17 ET47
235/45R 17 97 W
CP3, PJ5
freely selectable



“Macau”
7½J x17 ET47
235/45R 17 97 W
CP4, PJ4
freely selectable



“Le Mans”
7½J x17 ET47
235/45R 17 97 W
CA5, PJ7
freely selectable



“Westwood”
7½J x17 ET47
235/45R 17 97 W
CV5, PJ8
freely selectable

*) Wheels are bound to line and not freely selectable at the time

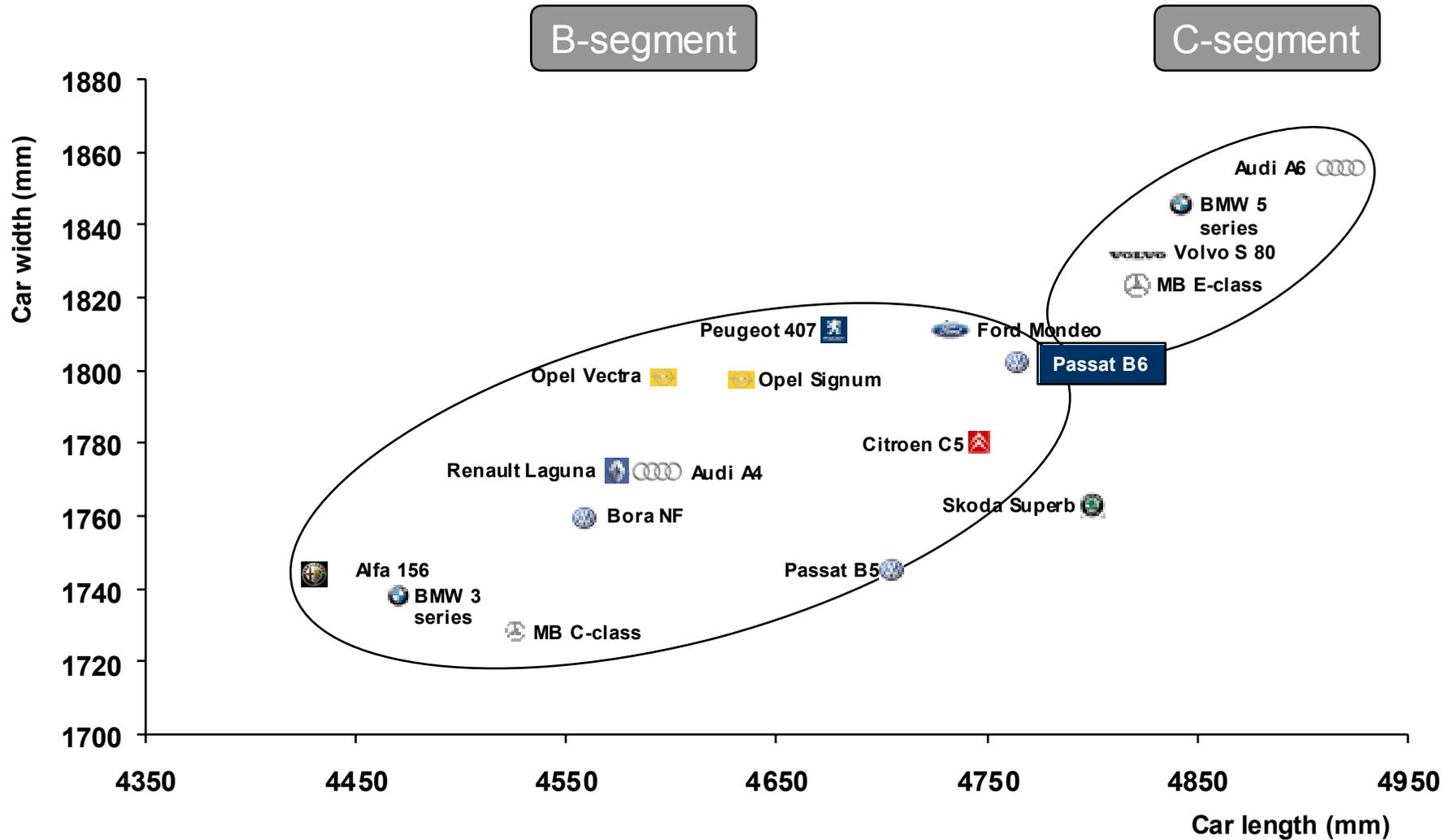
NAR tires with speed index H



Volkswagen Passat model year 2006

Package dimensions B and C limousines (length-width)

Marketing

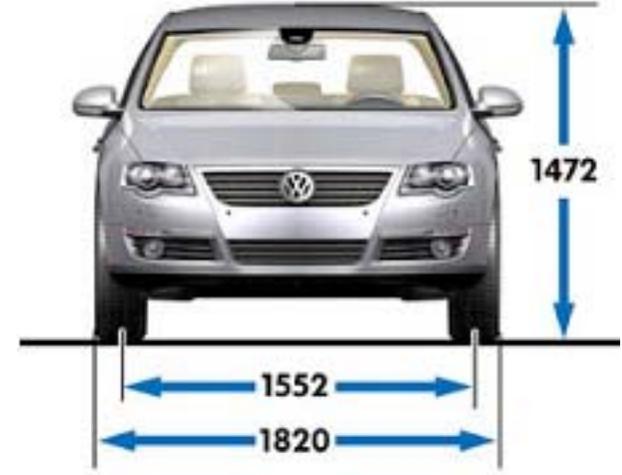
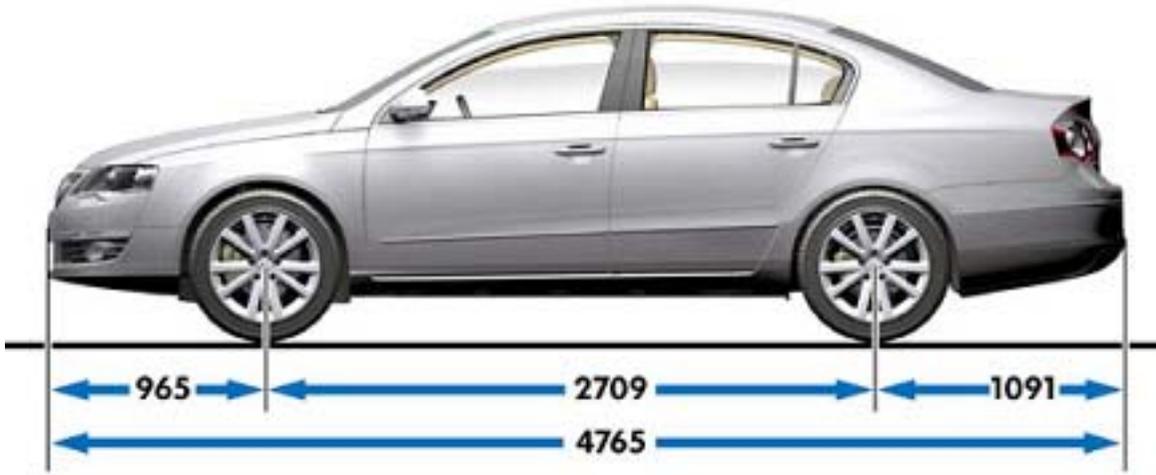


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Dimensions: Outer dimensions

Marketing



Limousine:

	B6	B5	Difference B6 / B5
• Length in mm	4,765	4,703	+ 62
• Width in mm	1,820	1,746	+ 74
• Height in mm	1,472	1,462	+ 10
• Interior length in mm	1,796	1,785	+ 11
• Luggage compartment volume in l	485	475	+ 10
• Tank in l	70	62	+ 8

Dimensions in mm

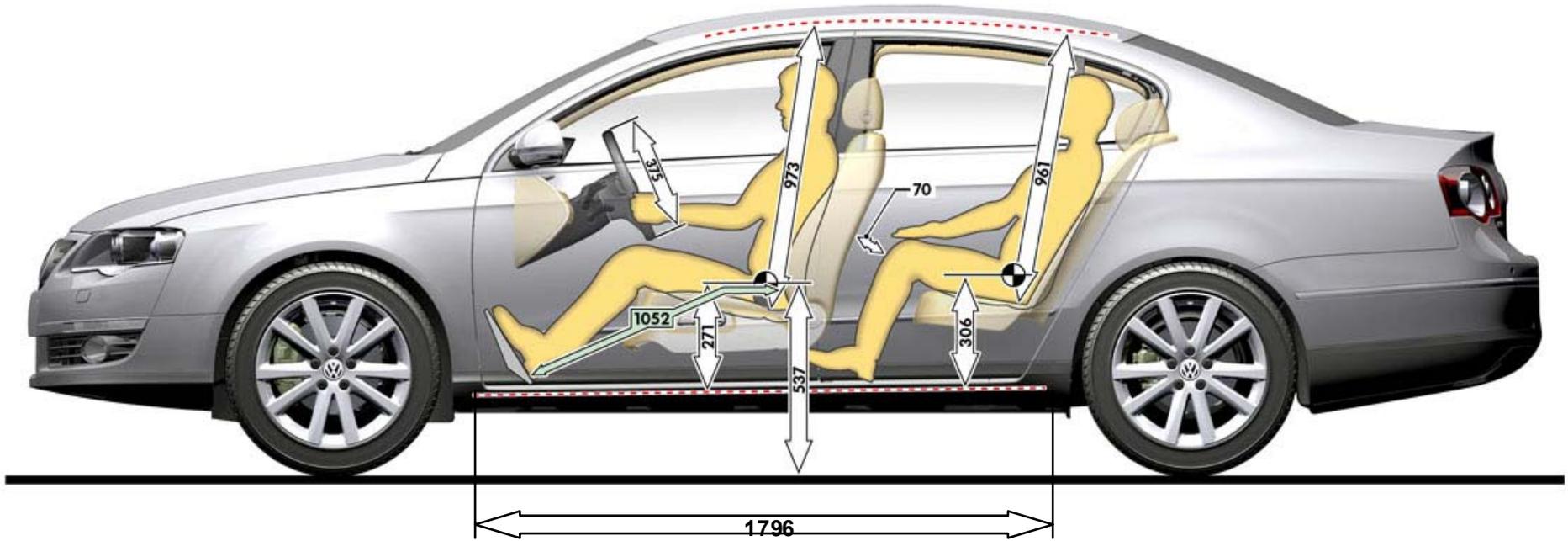
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Volkswagen Passat model year 2006

Dimensions: Internal dimensions

Marketing



Dimensions in mm



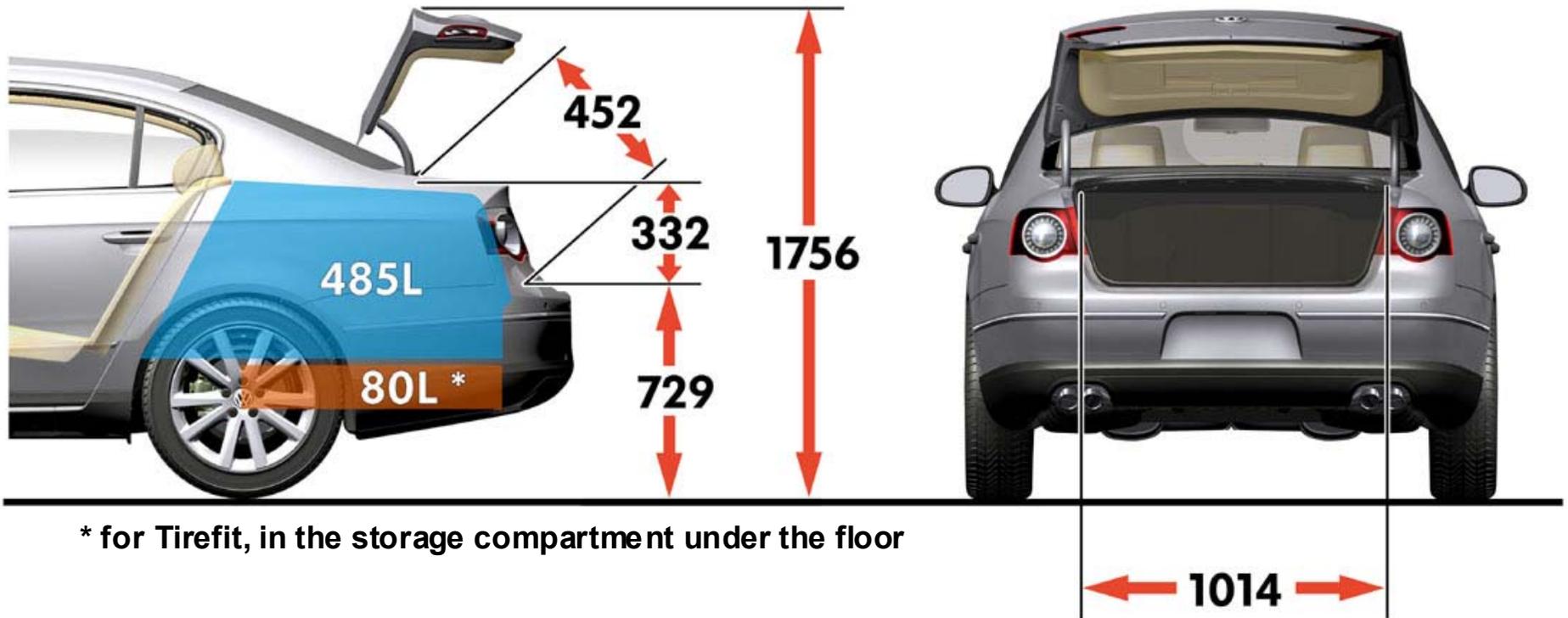
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Volkswagen Passat model year 2006

Dimensions: Luggage compartment capacity

Marketing



* for Tirefit, in the storage compartment under the floor

Dimensions in mm





Volkswagen Passat model year 2006

Insurance rating and classes

Marketing

Forecast

Newly launched engines
type class

Comprehensive insurance

Newly launched engines type class	Comprehensive insurance
1,6 I 75 kW / 102 PS	14 Starter engine
2.0 I FSI 110 kW / 150 PS	17
1.9 I TDI 77 kW / 105 PS	19
2.0 I TDI 103 kW / 140 PS	20

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- ➔ Two-level front airbags
- ➔ Serial head airbags
- ➔ Rear side airbags
- ➔ Active front headrests
- ➔ Fasten seat-belt prompt
- ➔ Interior lighting and warning light are switched on after a crash
- ➔ AFS headlights in combination with Bi-xenon
- ➔ Rear light cluster “backlight / braking light / indicator” in LED technology for maximum service life
- ➔ Towbar with trailer stabilizer via ESP and auto hold



- VW Passat B5
- Audi A4
- Skoda Superb
- Skoda Octavia
- Rover 75
- Citroen C5
- Opel Vectra
- Opel Signum
- Nissan Primera
- Ford Mondeo
- Subaru Legacy
- Volvo S40
- BMW 3 series

Europa FAMILY - Cars



- **VW Passat B6**
- Toyota Avensis
- Renault Laguna
- SAAB 9-3
- Mercedes C-class

- ➔ Technically the best offer in the B-segment
- ➔ Customer-oriented enhancement of the range of offers
- ➔ Expansion of standard and market launch in the B-segment

**Launch in Germany:
March 2005**





Marketing

Vehicle presentation

Technical innovations - Service

Service information

Using the vehicle

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F

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M F



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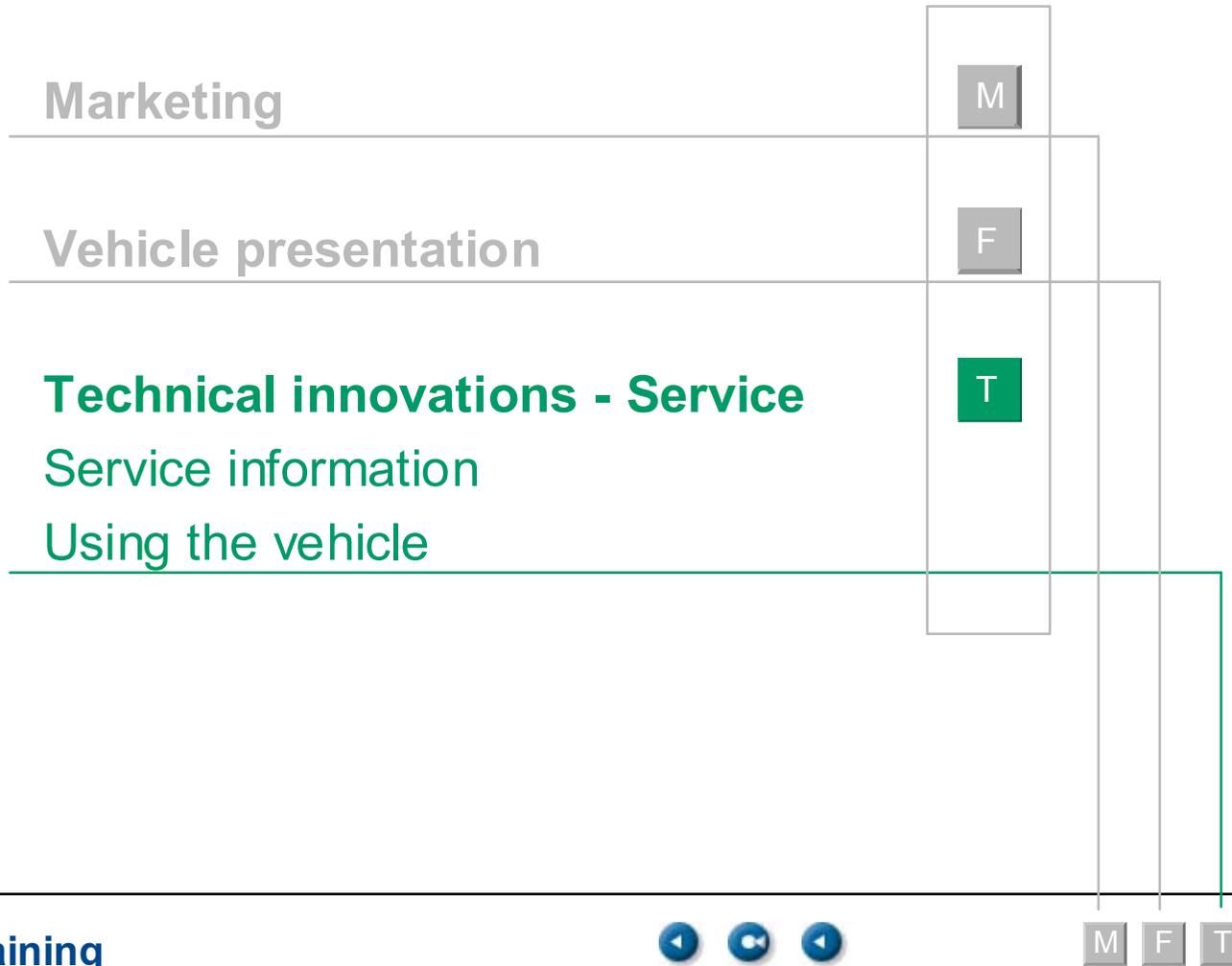
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Vehicle presentation



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- ➔ Body
- ➔ Passenger protection
- ➔ Drive units/engines
- ➔ Power transmission/gearbox
- ➔ Chassis
- ➔ Electrical system
- ➔ Comfort and safety electronics
- ➔ Radio, telephone, navigation
- ➔ Heating and air-conditioning system
- ➔ Service

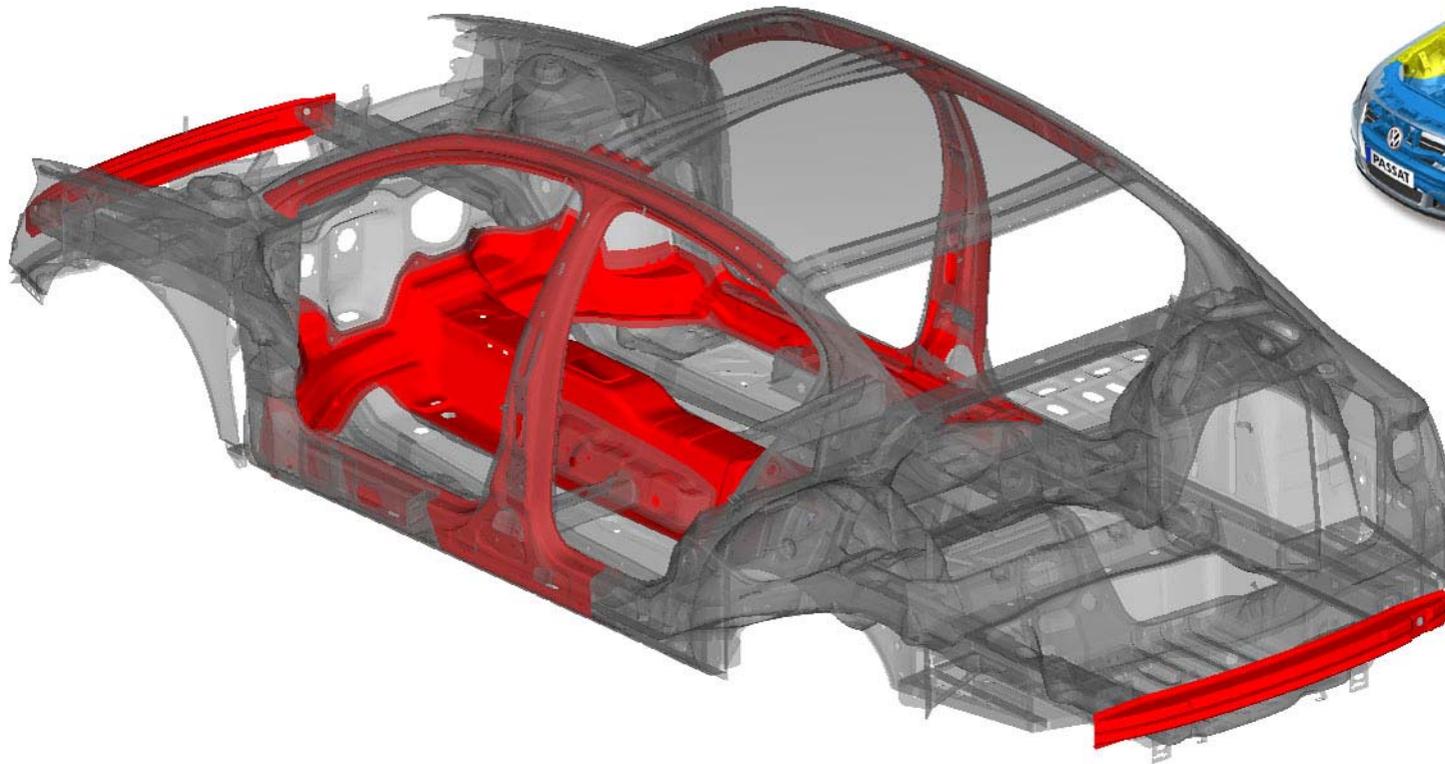




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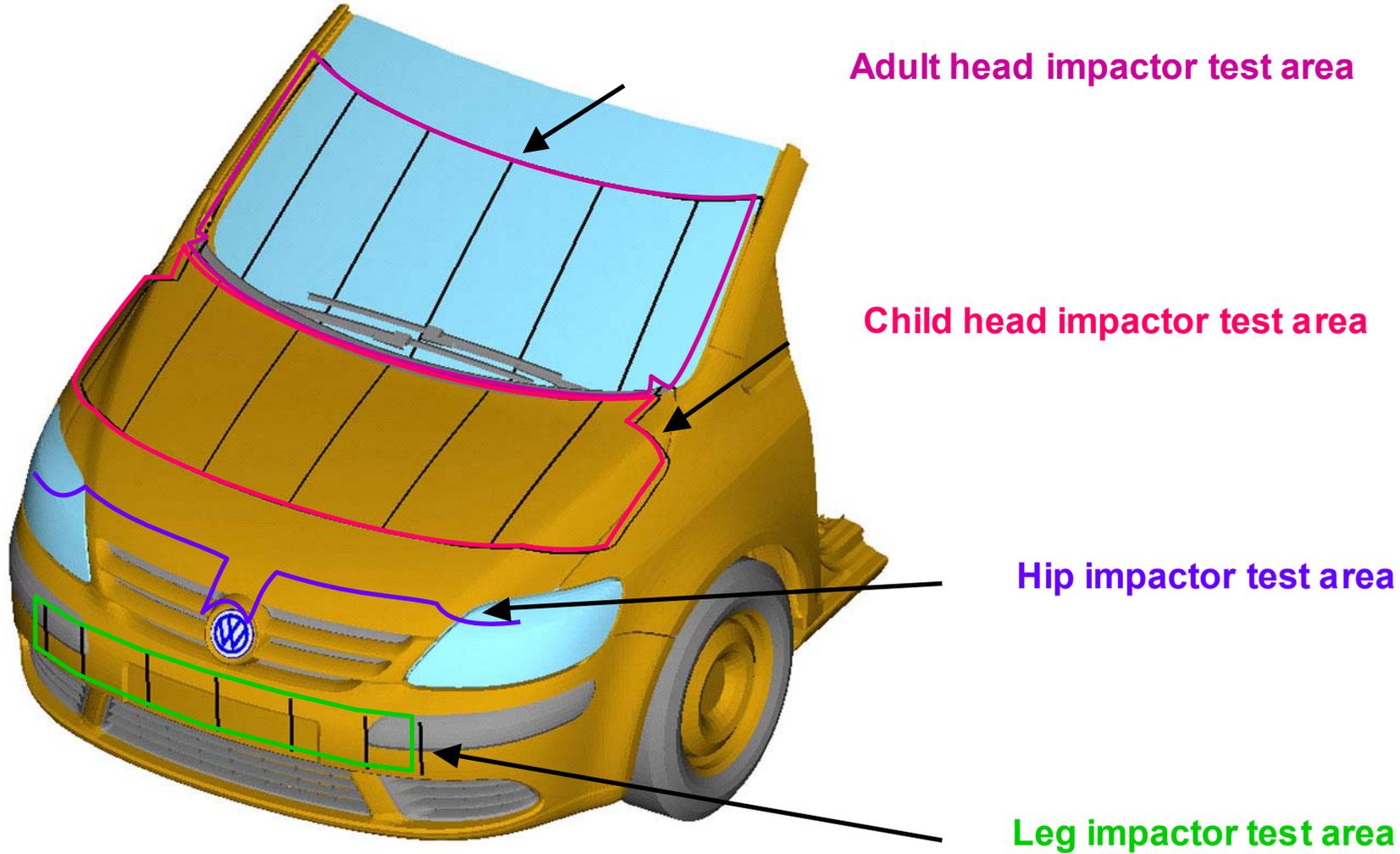
Use of thermo-formed steel

Technical innovations



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Bumper design

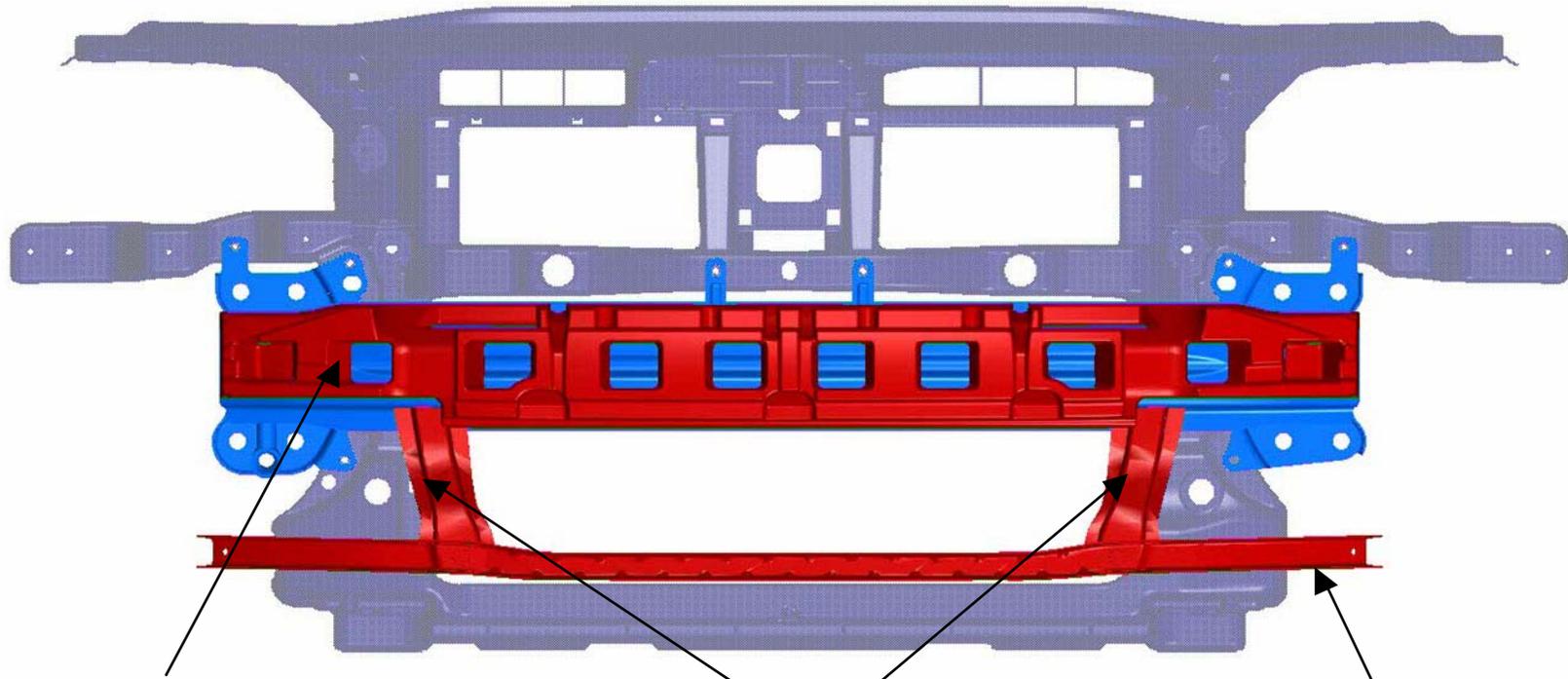
Technical innovations 



Front

Back

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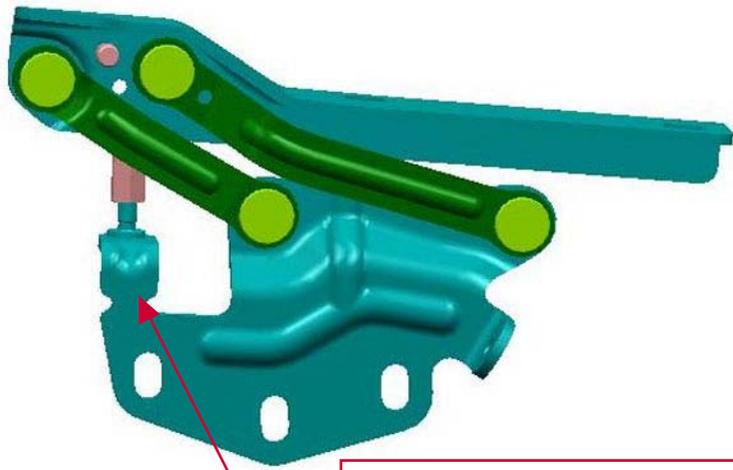


(1) Chassis foam part (PP particle foam) on assembly front bumper carrier

Retaining brackets (steel) on front carrier assembly for supporting the chassis cross member

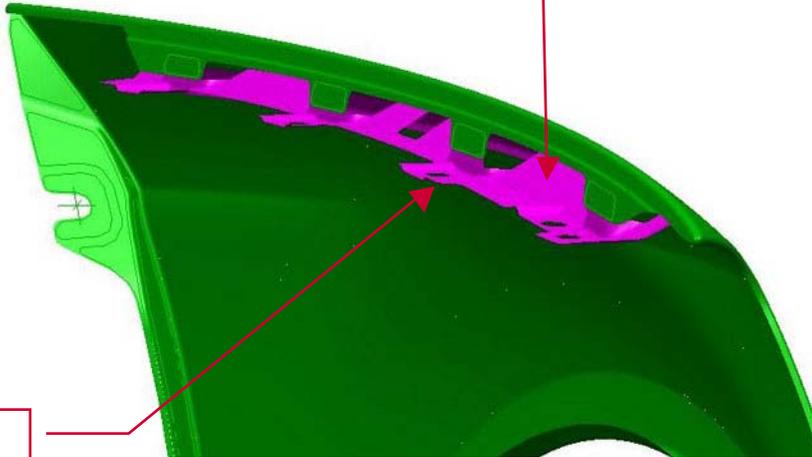
(2) Chassis cross member (steel) to spoiler support

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with deformation flaps

Deformation element



Screw point on upper longitudinal member

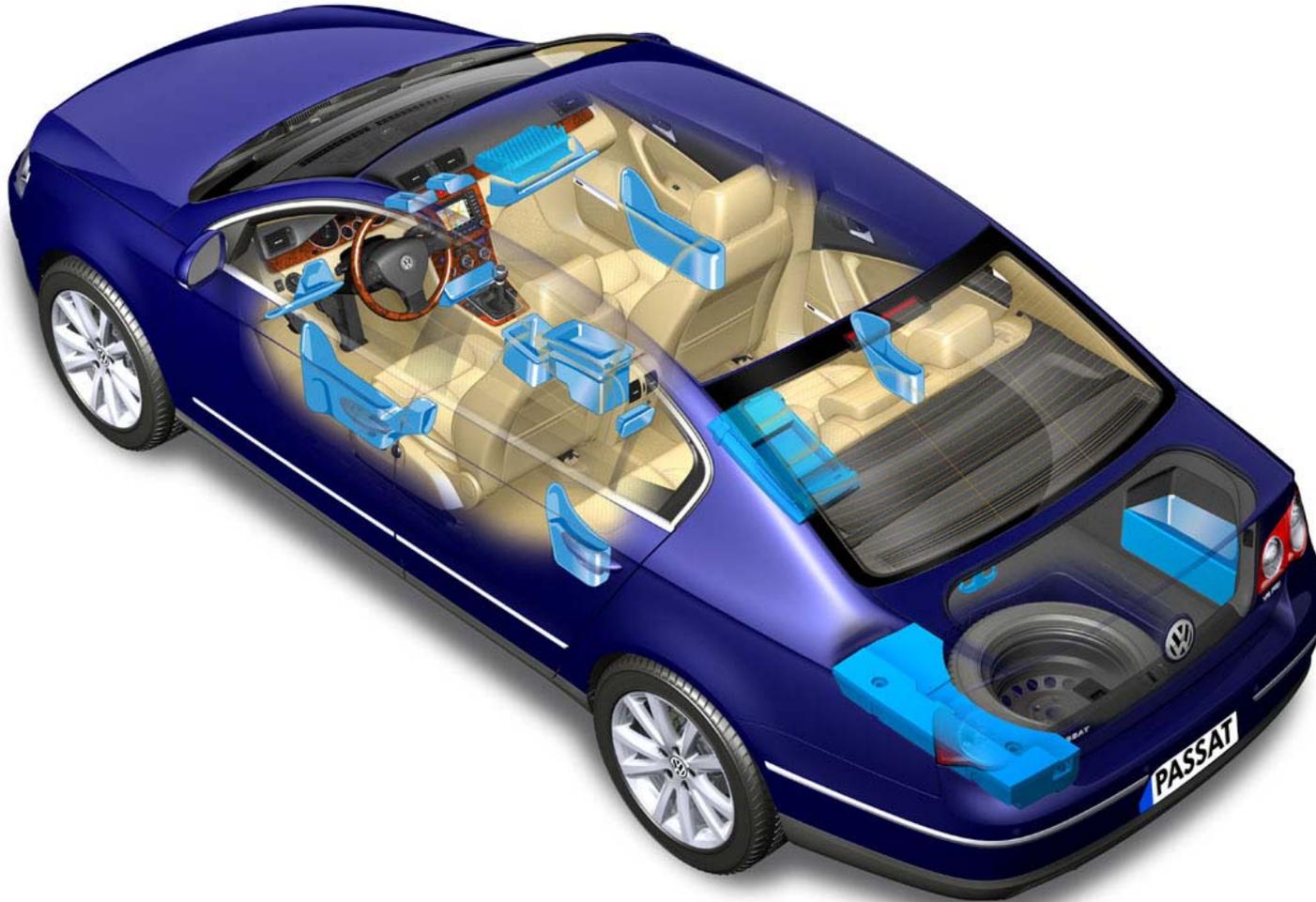
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Volkswagen Passat model year 2006

Storage concept

Technical innovations



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Instrument panel with drawers for Comfortline



Optional telephone block for premium mobile phone integration in the instrument panel



Instrument panel with opened drawer on driver's side



Swiveling logbook receiver, optional CD changer

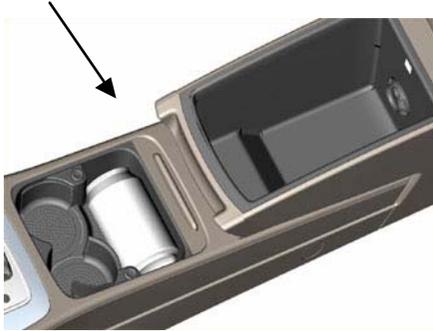


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Center consoles

Technical innovations

Center console with XXL storage compartment with "light / ashtray"



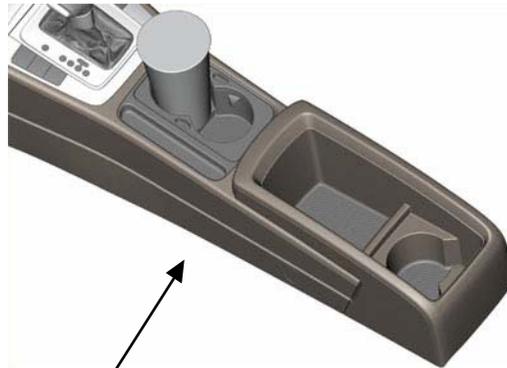
Trendline center console



Center console for Comfortline



Trendline center console with drink holder



Telephone receiver for premium mobile phone integration

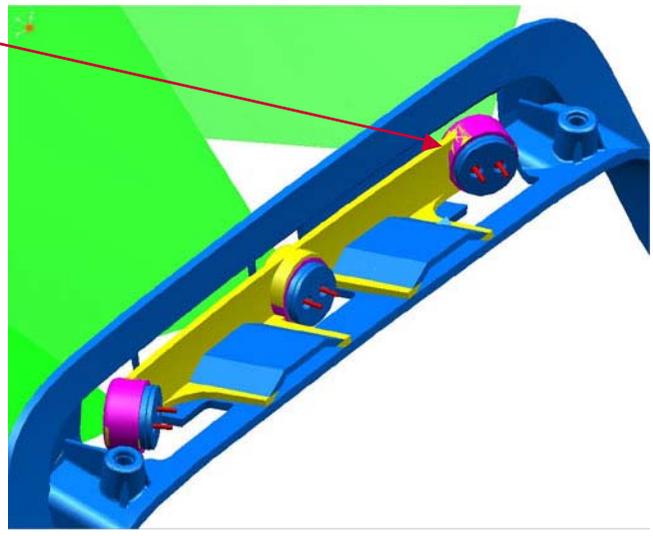
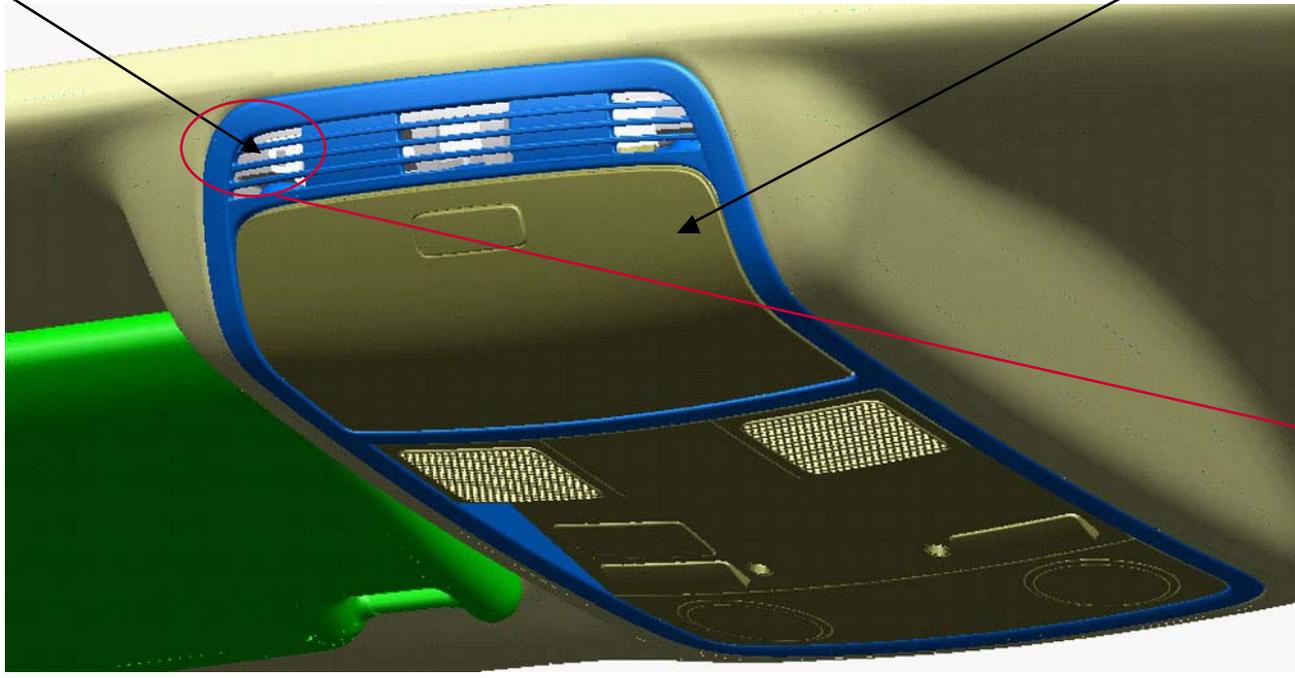


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Roof console

Sensors for interior monitoring

Spectacles compartment



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Umbrella and bottle up to 1 liter



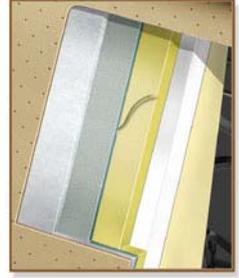
Rear door sun blind



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Comfortline front seats

Technical innovations



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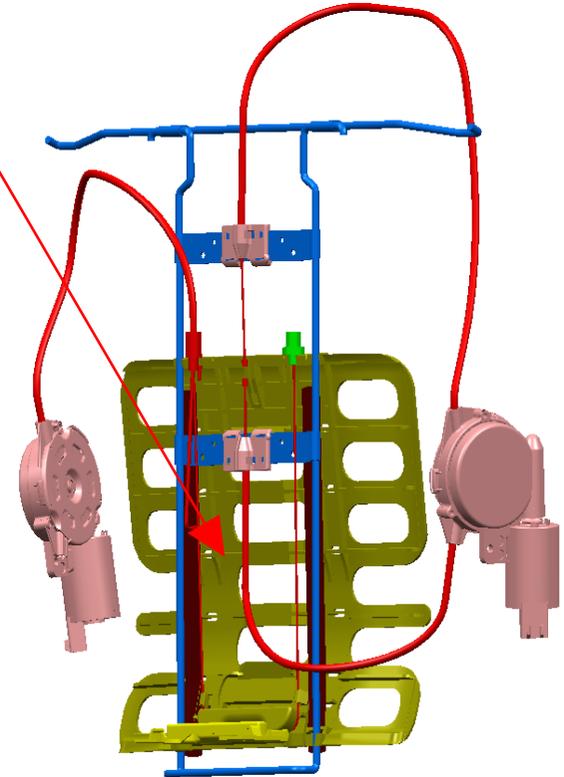
Extended function: if the massage switch is used, the lumbar support sign moves to max. arch and then returns to its original position when the program is completed.



Operation:
Press switch 1x:
Press switch 1x again:



massage on
massage off



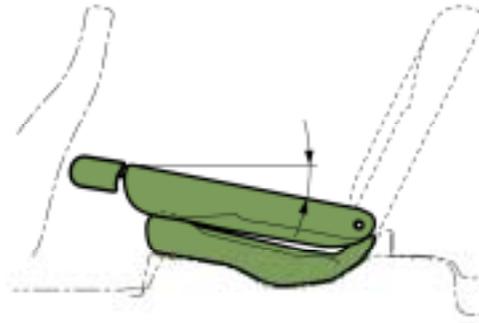


Division 60:40



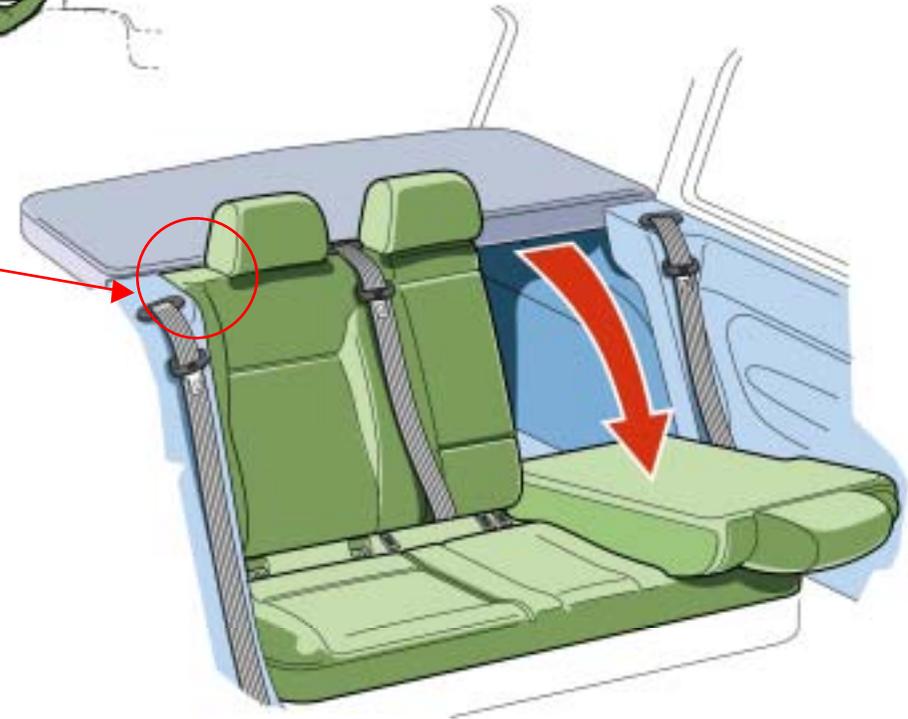
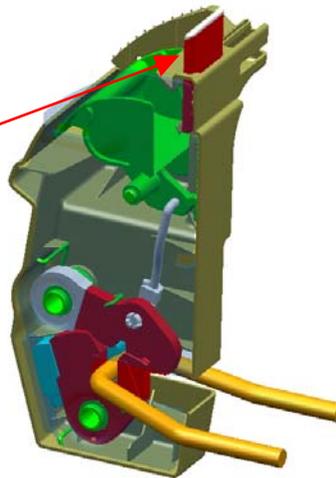
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- ➔ Standard 1/3 – 2/3 divided rear seat system with one-piece seat area



View C

- ➔ Indication of backrest lock via red analog indicator Golf 5





Volkswagen Passat model year 2006

Center arm rest

Technical innovations

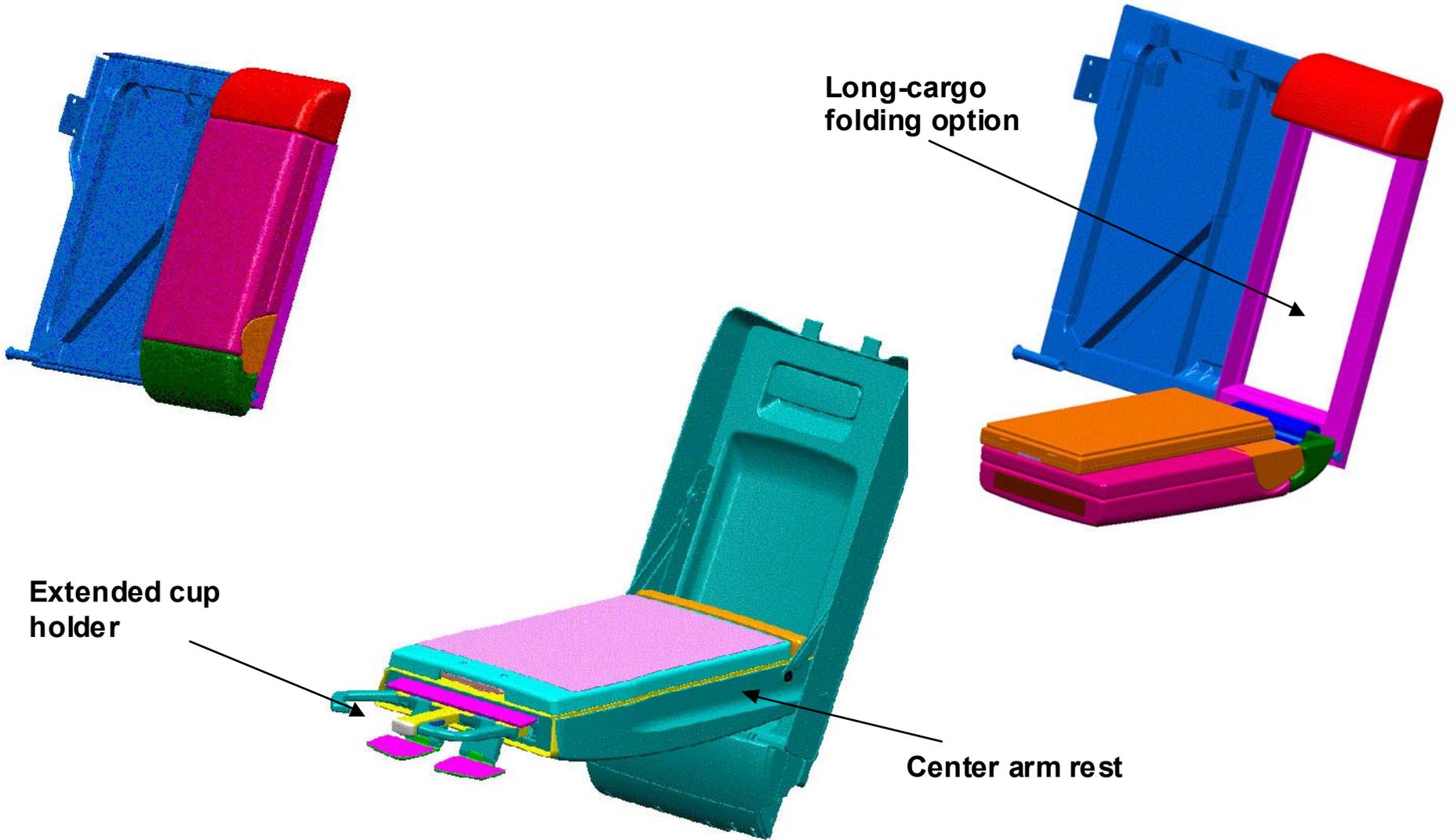


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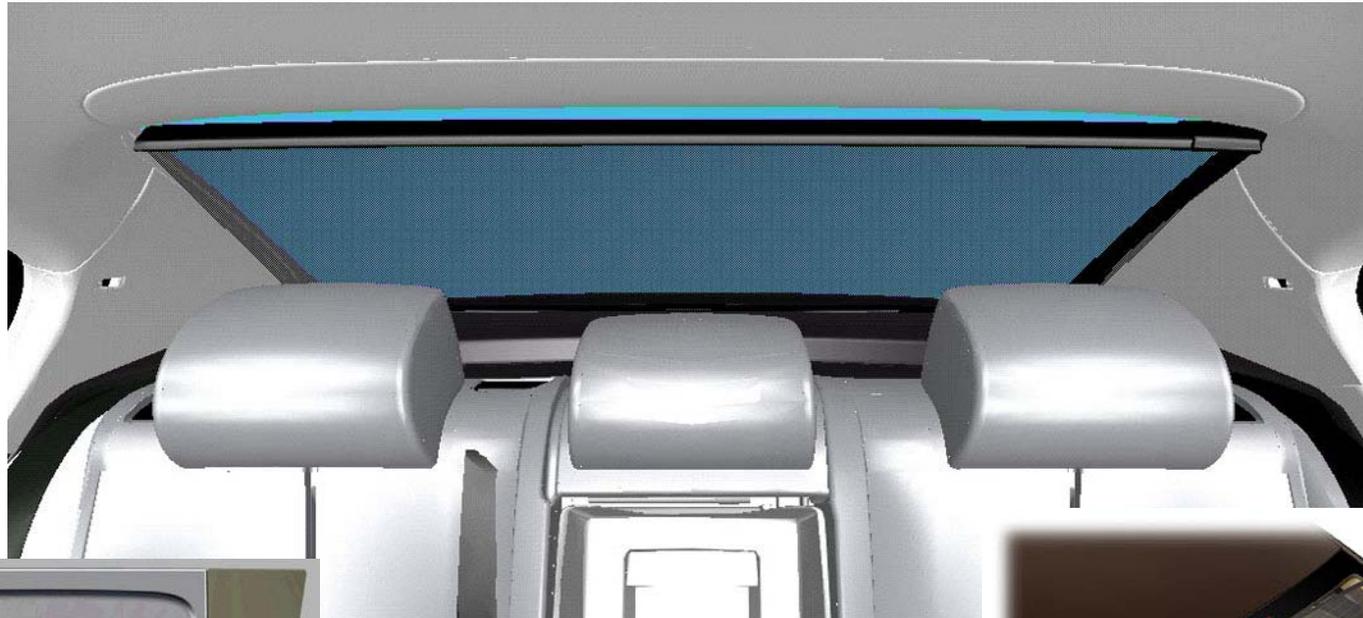


Center arm rest

Technical innovations 



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Sun blind button



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Luggage compartment



Bag hook and protective cloth

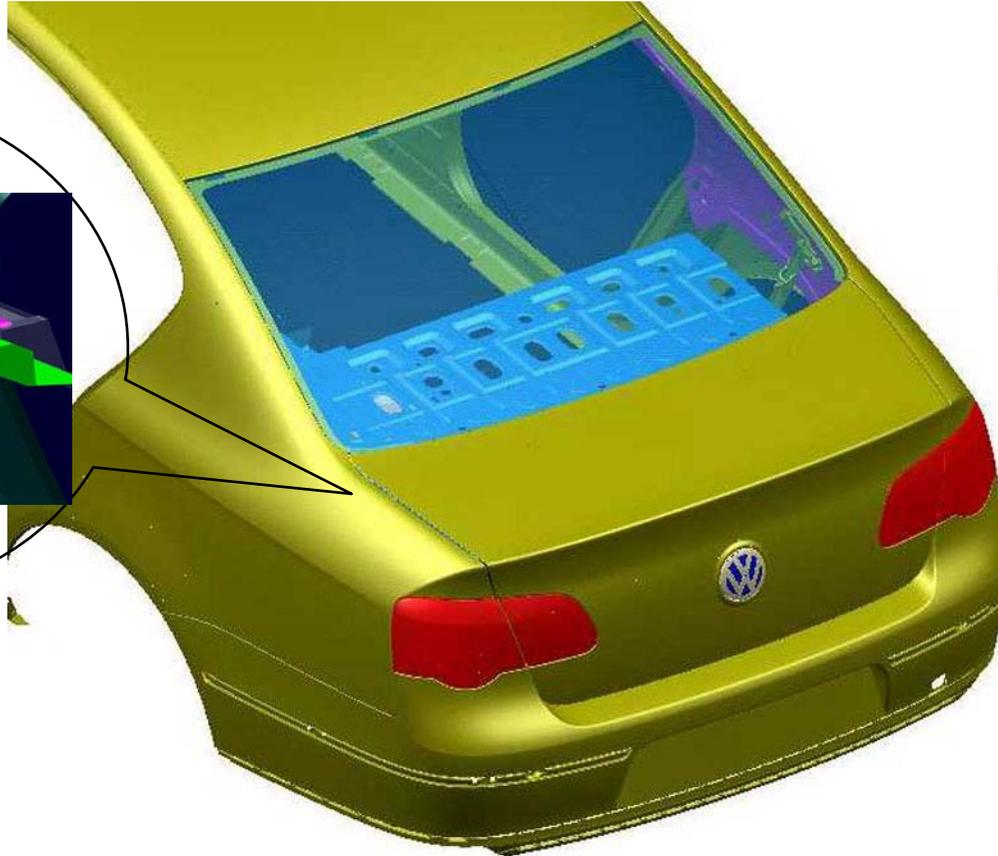
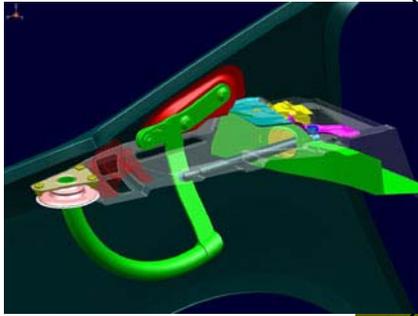


Luggage compartment net



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Operating the tailgate



Tailgate, closed

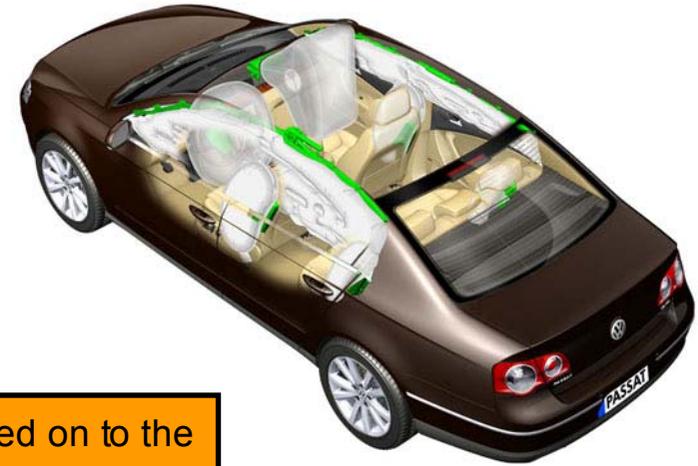


The tailgate opens automatically when the radio key is used

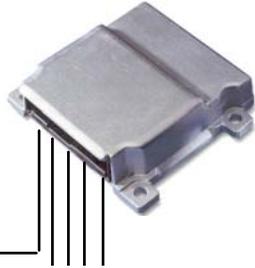
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External airbag sensors

Technical innovations



Upfront sensor



Airbag control unit screwed on to the center tunnel



Front door side crash sensor pressure sensors

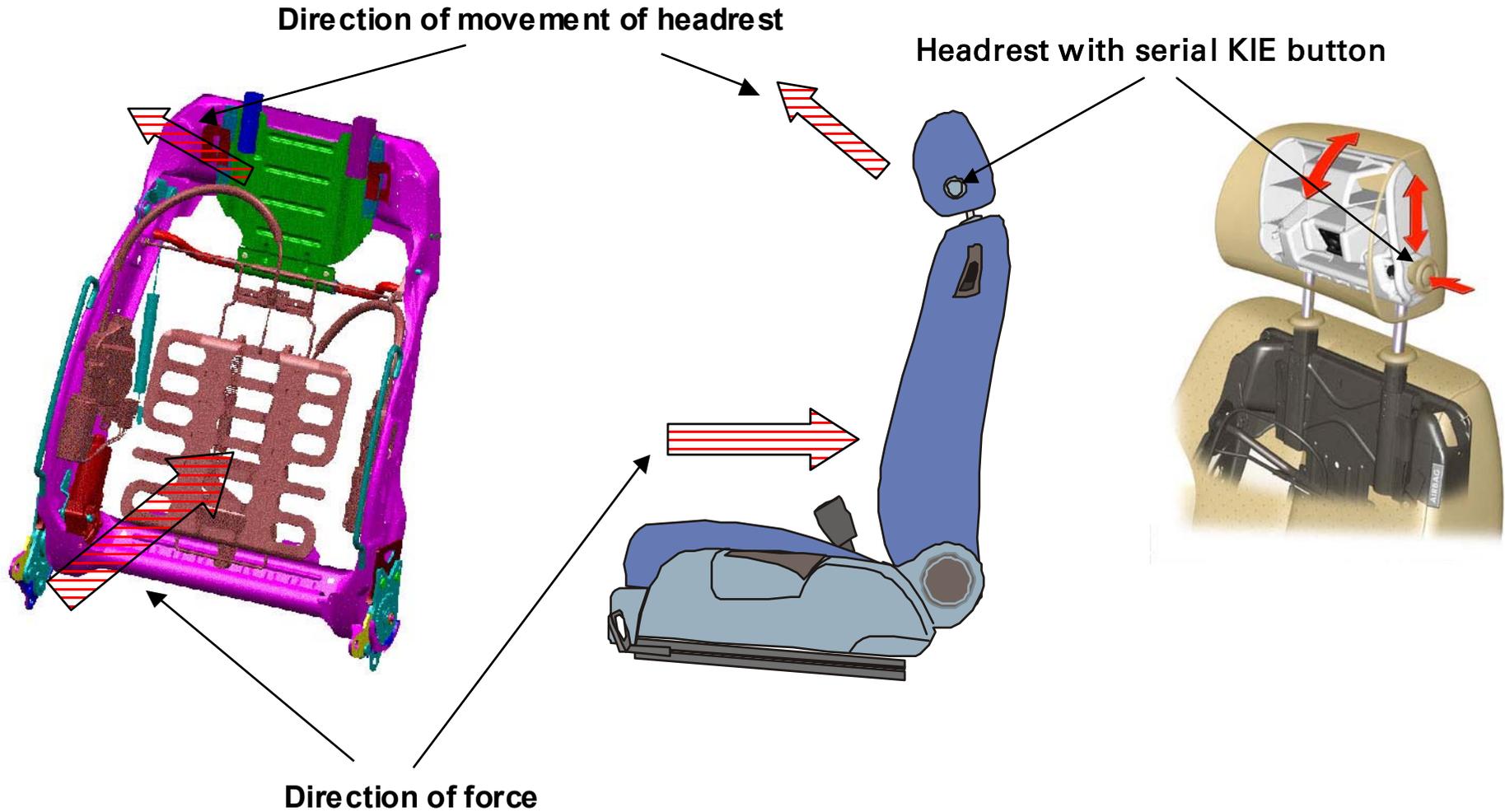


Rear side crash sensor acceleration sensors



Key-operated switch

08/03/2005 55 from 85 - VK-21_ALV Passat 2006 - last update: 29/01/2005



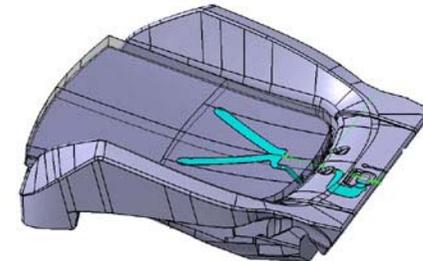
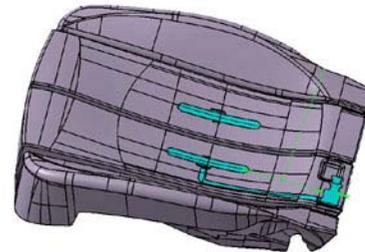
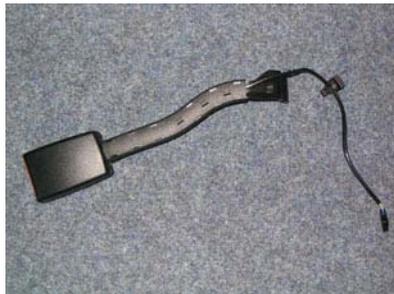
08/03/2005 56 from 85 - VK-21_ALV Passat 2006 - lastupdate: 29/01/2005

Passenger detection (PD)

Technical innovations



Driver's side:

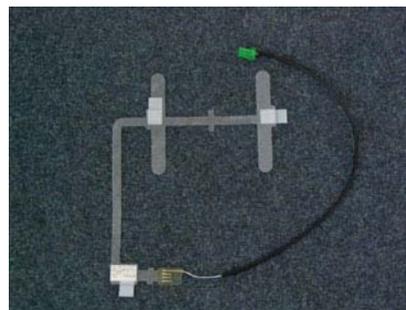


Belt lock with belt lock switch

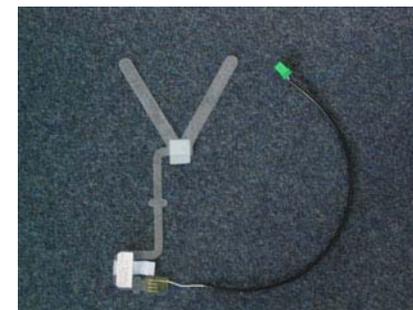
Passenger's side:



+



or



Belt lock with belt lock switch

Passenger seat detection sensor for Trendline and Comfortline

Passenger seat detection sensor for Sportline

08/03/2005 57 from 85 - VK-21_ALV Passat 2006 - lastupdate: 29/01/2005



Otto engines

Conventional engines

	Cyl.	Nm
1.6 l / 75kW (102PS) 2V-RSH	R4	148

FSI engines

1.6 l / 85 kW (115 PS) 4 V FSI	R4	155
2.0 l / 110 kW (150 PS) 4 V FSI	R4	200
2.0 l / 110 kW (150 PS) 4 V FSI *	R4	200
2.0 l / 147 kW (200 PS) 4 V TFSI *	R4	280
2.0 l / 147 kW (200 PS) 4 V TFSI *	R4	280
3.2 l / 184 kW (250 PS) 4 V FSI *	VR6	330
3.2 l / 184 kW (250 PS) 4 V FSI *	VR6	330

NAR engines

2.0 l / 147 kW (200 PS) 4 V TFSI *	R4	280
3.6 l / 206 kW (280 PS) 4 V FSI *	VR6	360

Exhaust

EU-4
EU-2

EU-4
EU-4
EU-2
EU-4
EU-2
EU-4
EU-2

ULEV2
LEV2

Gearbox in B6

Manual gearbox	Automatic gearbox
02Q	-

02Q	09G
-	09G
-	02E
-	02E

02Q	09G
-	09M

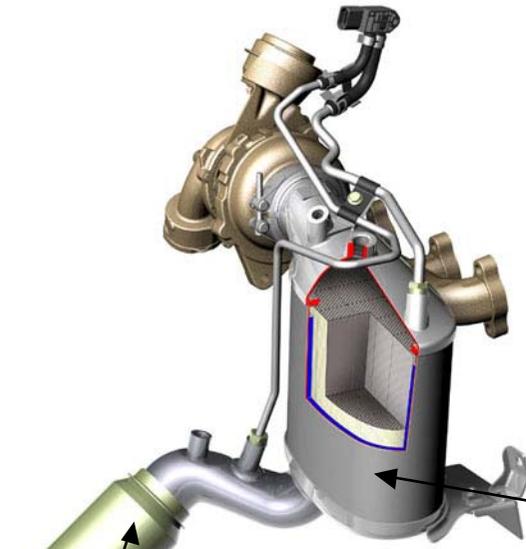
08/03/2005 58 from 85 - VK-21_ALV Passat 2006 - last update: 29/01/2005





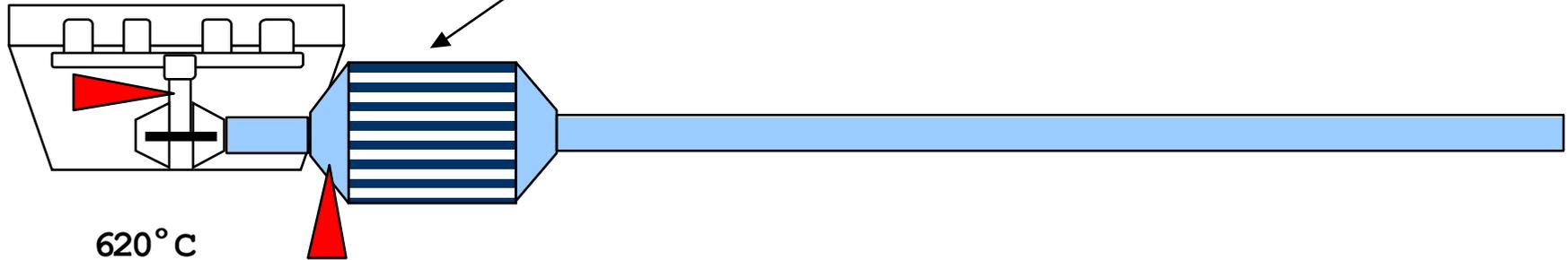
Diesel engines			Exhaust	Gearbox in B6	
Diesel engines Europe	Cyl.	Nm		Manual gearbox	Automatic gearbox
1.9 I / 77 kW (105 PS) TDI-PD 2V	R4	250	EU-4	02Q	
1.9 I / 77 kW (105 PS) TDI-PD 2V with DPF	R4	250	EU-4	02Q	
2.0 I / 100 kW (136 PS) TDI-PD 4 V *	R4	320	EU-4	02Q	02E
2.0 I / 103 kW (140 PS) TDI-PD 4 V	R4	320	EU-4	02Q	02E
2.0 I / 103 kW (140 PS) TDI-PD 2 V with DPF	R4	320	EU-4	02Q	02E
2.0 I / 118 kW (160 PS) TDI-PD 4 V with DPF	R4	350	EU-4	02Q	02E

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Oxidation catalytic converter

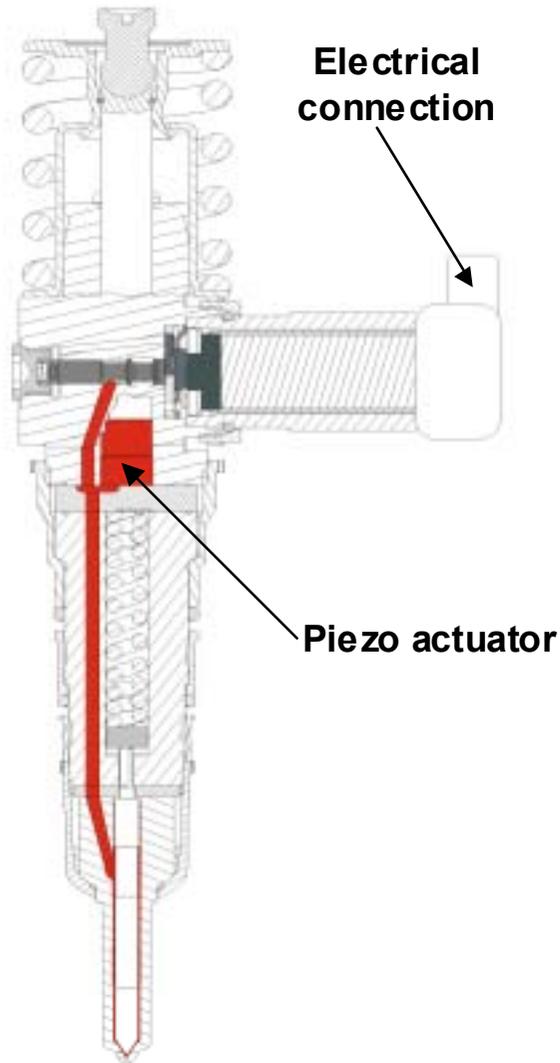
DPF fitted near the engine



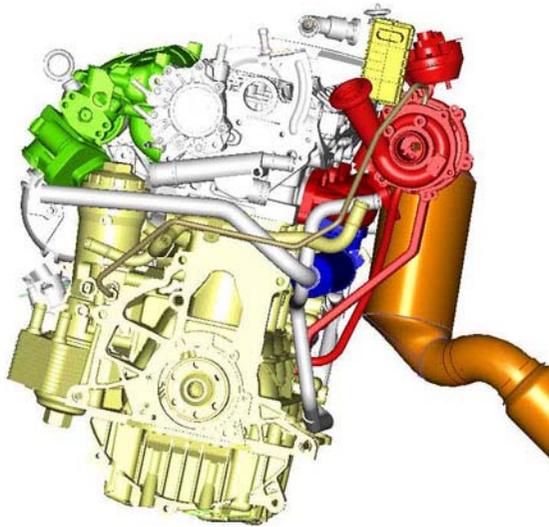
08/03/2006 60 from 85 - VK-21_ALV Passat 2006 - lastupdate: 29/01/2005

The new Piezo pump jet elements (PPJ)

Technical innovations



- More power
- Less injection noise
- Less emissions
- Reduction of fuel consumption
- Modified cabling (power consumption PPJ 220 V instead of 12 V)
- Rest adopted from 2.0 l 4 V TDI series



- ➔ Scope of changes due to diesel particle filter (DPF) and Piezo pump jet element (PPJ)
- ➔ Exhaust turbocharger with path report, improvement of reaction and material
- ➔ Forged steel crankshaft instead of cast metal
- ➔ Variable intake manifold instead of rigid intake manifold
- ➔ Electrical exhaust gas recirculation regulation instead of pneumatic regulation



Volkswagen Passat model year 2006

The new VR6 FSI 3.2 I EU4 and 3.6 I ULEV2

Technical innovations



Cylinder capacity increased to 3.6 l (206 KW, 360 Nm)

Low pressure reservoir integrated in variable intake manifold

Direct injection

Performance-optimized water pump

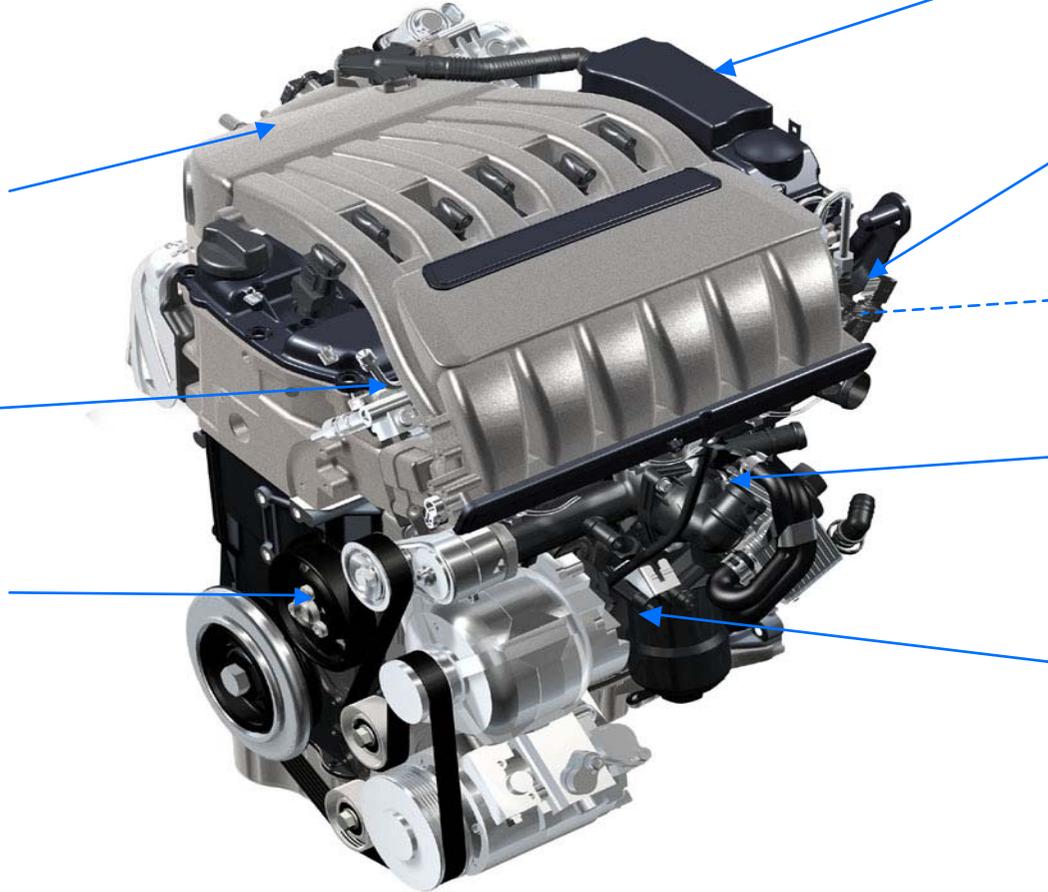
Plastic cylinder head cover with cyclone cutter

High pressure pump

Oil pump in high position

Cooling water regulator new (item)

Weight-optimized main crankcase



08/03/2005 63 from 65 - VK-21_ALV Passat 2006 - lastupdate: 29/01/2005



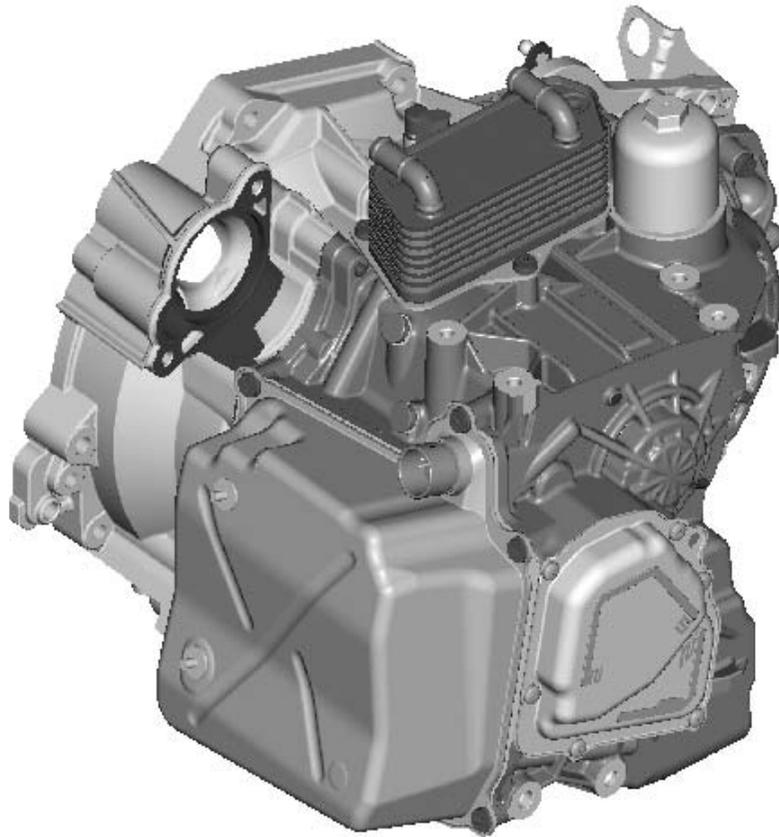


- ➔ Increased efficiency due to smooth running bearing
- ➔ Lifetime oil filling

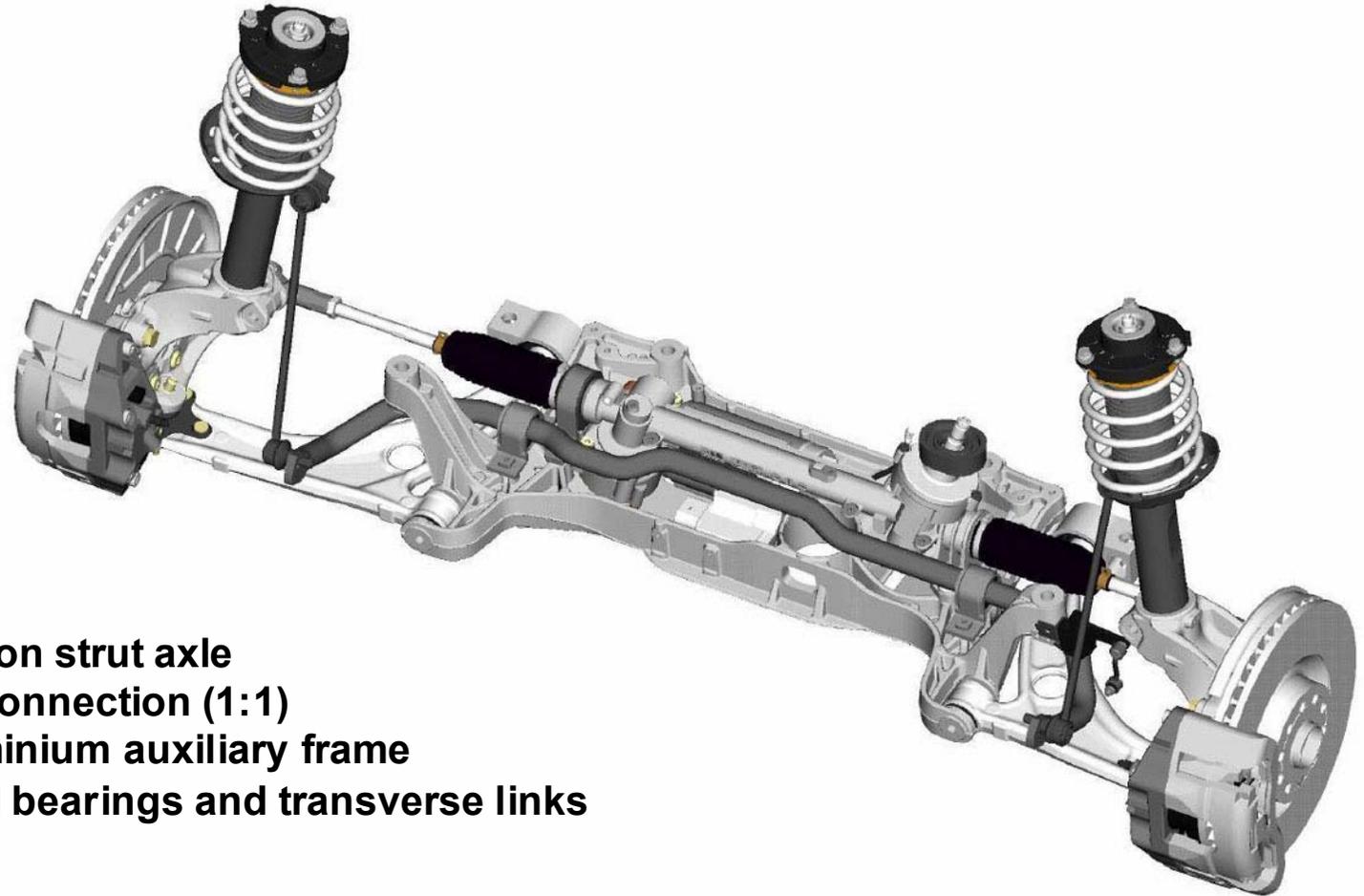




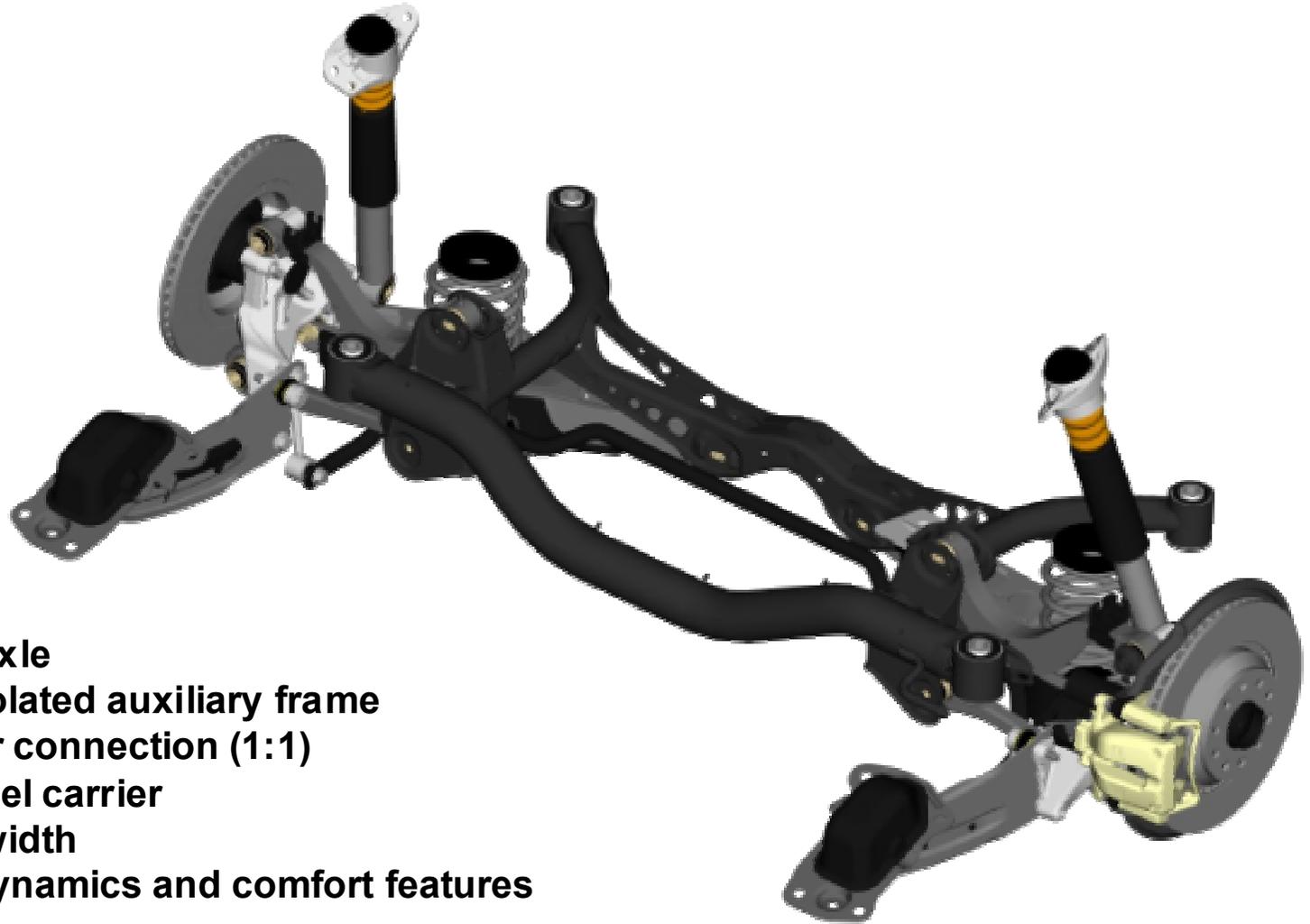
- Low weight
- High overall spread
- Compact gearbox dimensions
- High switching speed
- High gearshift comfort
- High transmission-ratio spread for flexible use
- Switching elements only for changing gears
- Compact, light and high-performance
- Sports program and manual gear selection using Tiptronic
- Initial acceleration in 2nd gear in Tiptronic mode



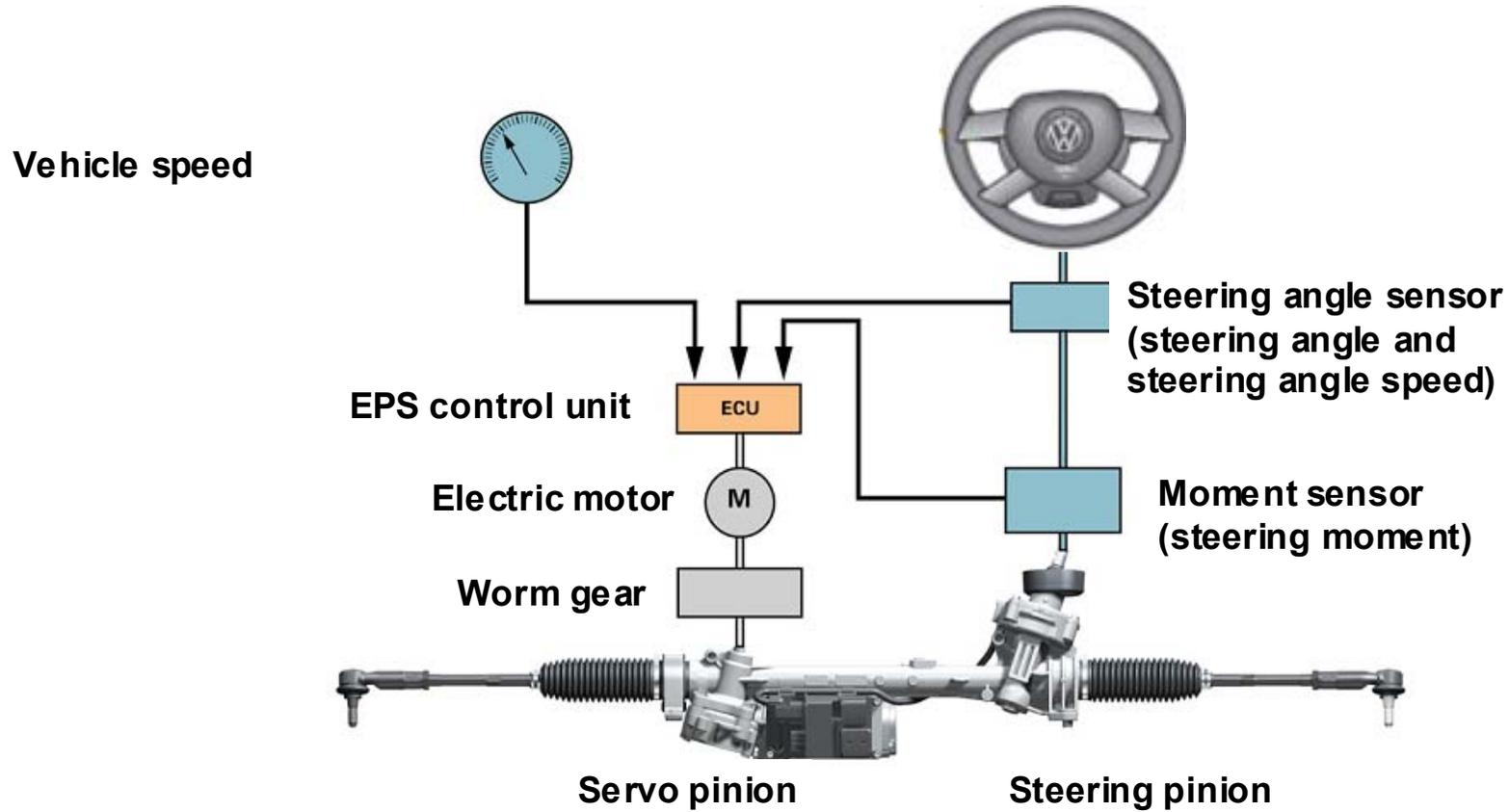
- ➔ 6 gears
- ➔ Gear change without interruption of traction force
- ➔ Reduced fuel consumption
- ➔ 3 shift programs (normal, sport, Tiptronic)
- ➔ Optional:
Sports gear shift at steering wheel



- Modern suspension strut axle
- Direct stabilizer connection (1:1)
- Single-piece aluminium auxiliary frame
- Aluminium swivel bearings and transverse links



- Multi link rear axle
- Acoustically isolated auxiliary frame
- Direct stabilizer connection (1:1)
- Aluminium wheel carrier
- Large loading width
- Good driving dynamics and comfort features



- ➔ Electromechanical steering
- ➔ Servotronic function (speed-dependent power-assisted steering)
- ➔ Active return, forward driving correction function
- ➔ Fuel saving, less noise, no hydraulic liquid

Electromechanical power steering (EPS)

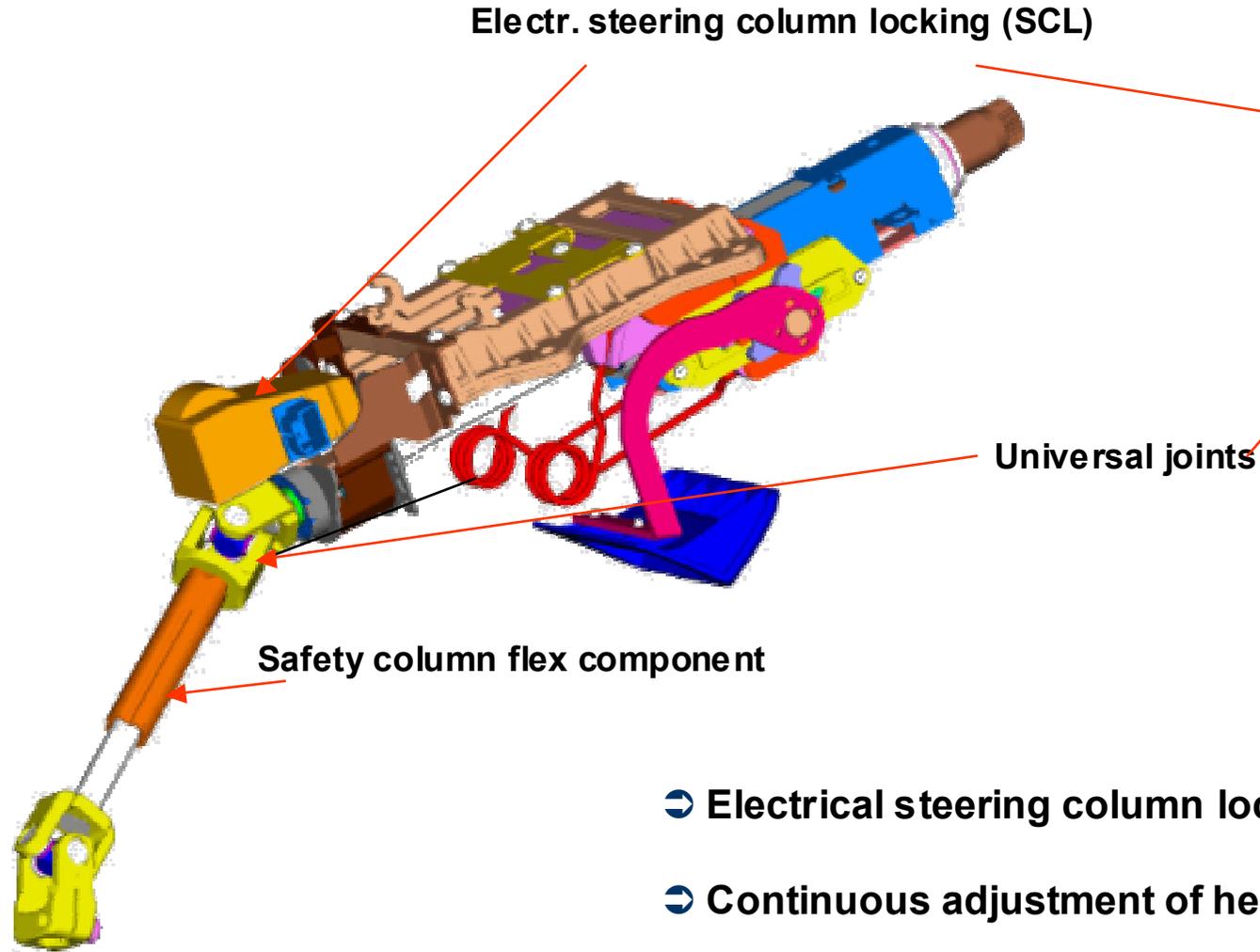
Technical innovations



Dash panel area - control lamp



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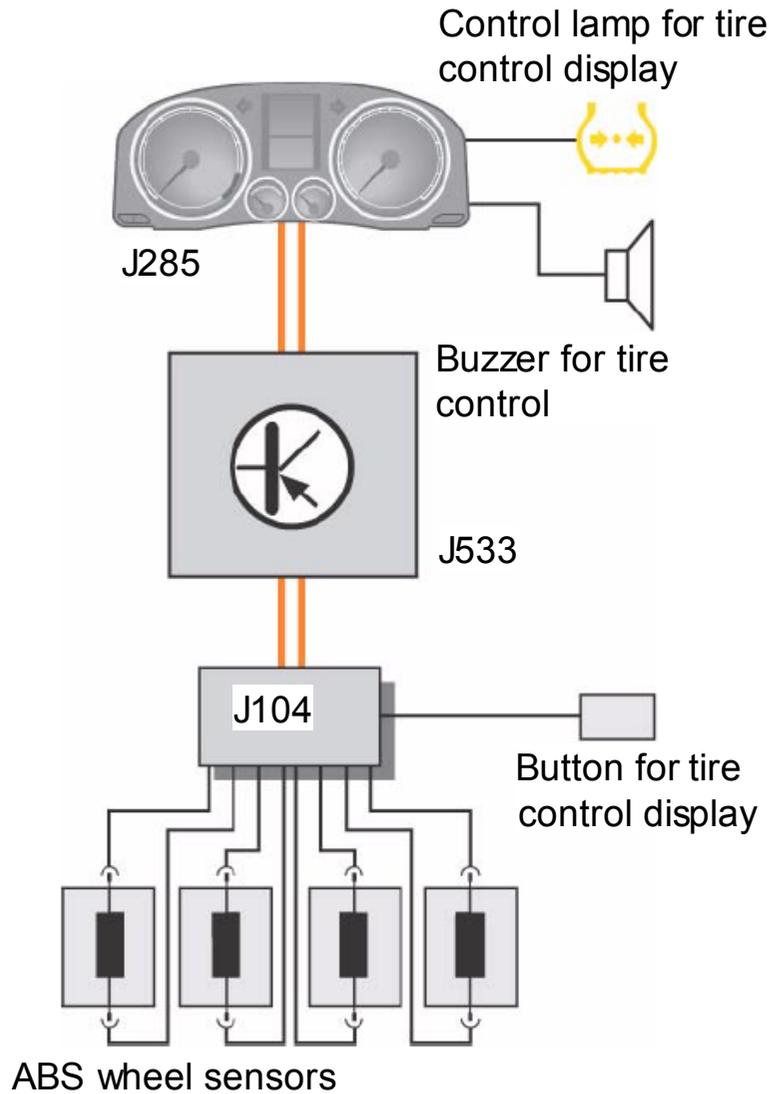


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Tire pressure control display



Pressure loss

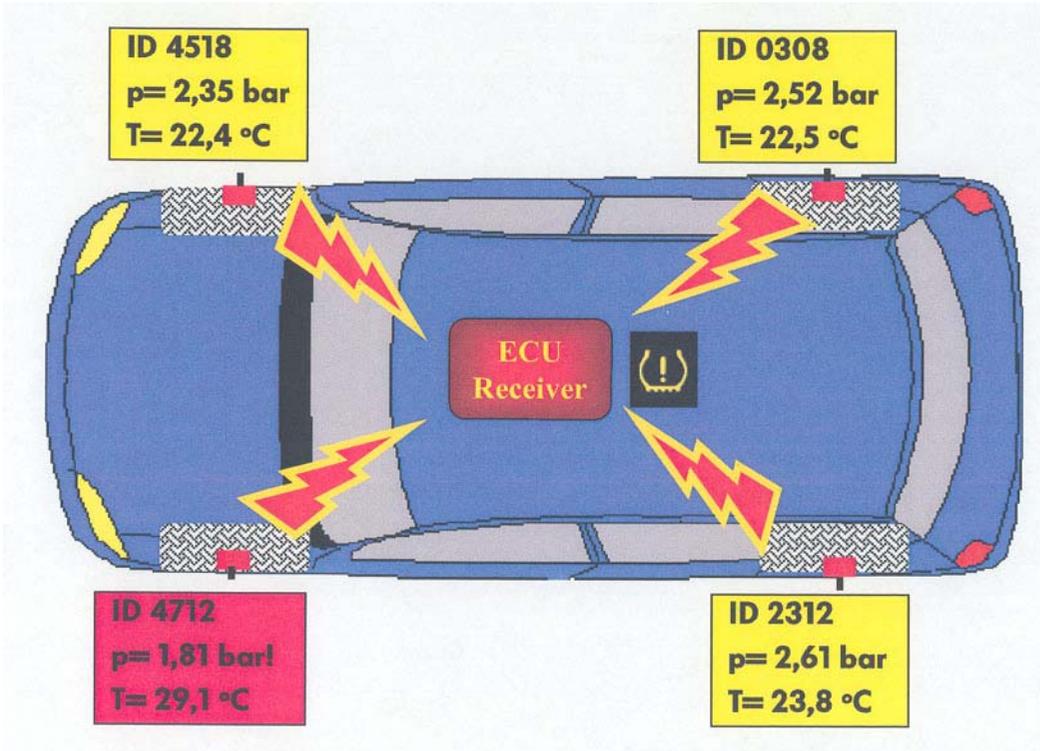


Key

- J104 ABS control unit with EDL
- J285 Control unit in dash panel insert
- J533 Diagnostics interface for databus

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Tire pressure control system (TPCS)



Consists of:

- ➔ 4 / 5 electronic wheel units
- ➔ Control unit with receiver
- ➔ Receiving antenna
- ➔ Transmission path
- ➔ Display in the combi-instrument

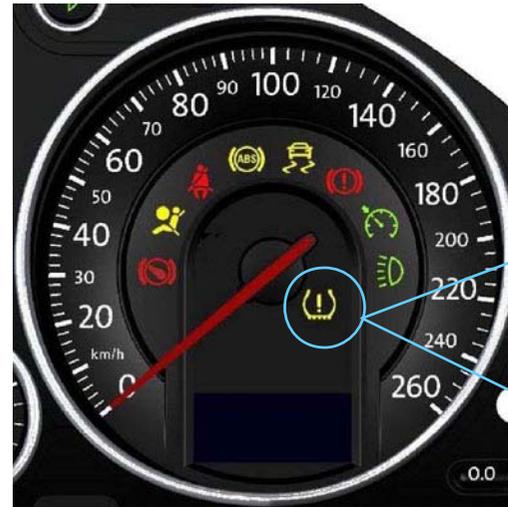


Pressure loss

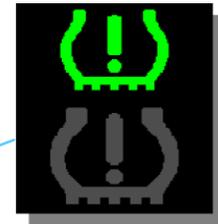


Keys

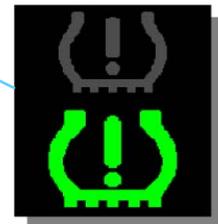
Center console



Warning light



Partial load air pressure selected



Total load air pressure selected

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Sensor



Wheel electronics

Technical data:

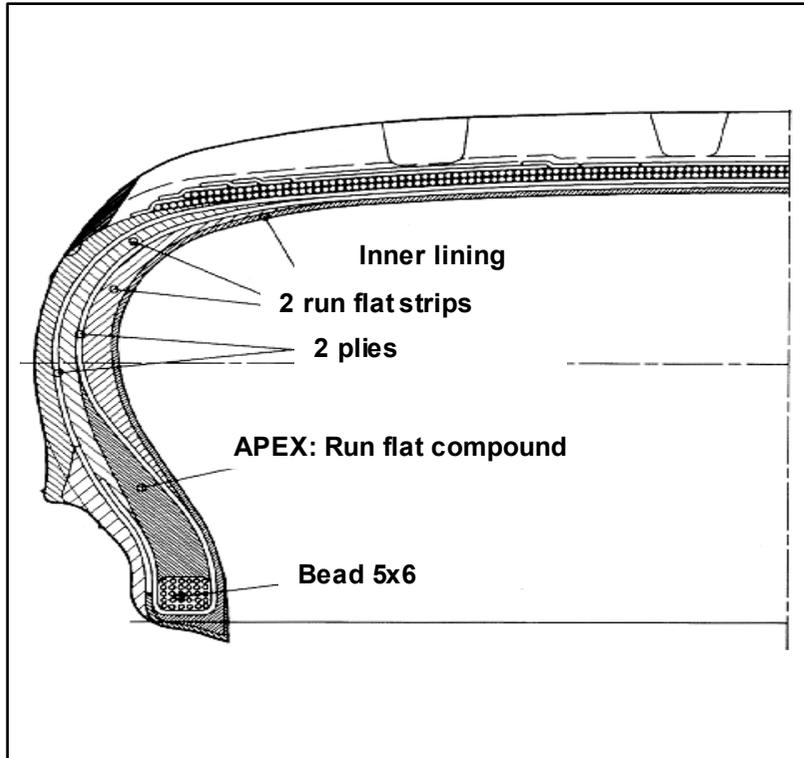
- Separate power supply
- 10 years service life
- Acceleration up to 2000 g
- Weight approx. 45 g with valve
- Temperature range: -40 °C to +150 °C
- Transmission frequency 434 and 315 MHz
- Various transmission modes (own intelligence)
- Integrated pressure, temperature and acceleration sensor

Self-supporting tires (SST)



Self supporting tire (SST)

**Self-supporting tire
due to strengthened sides**



Self-supporting tire

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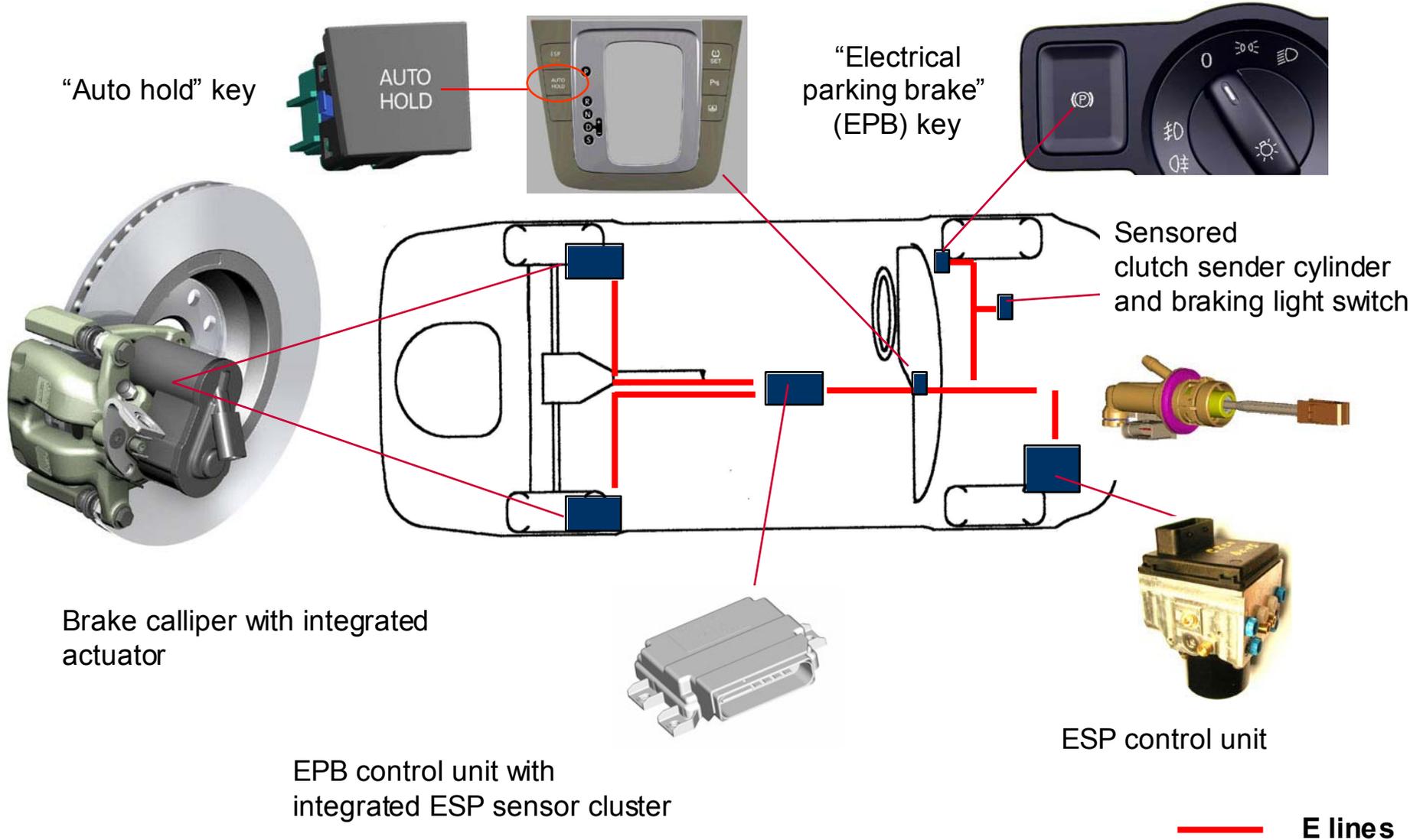


“Electrical parking brake (EPB)” button

Basic functions:

- ➔ Open and close using the button
- ➔ Automatic opening while starting to drive
- ➔ Emergency braking function by pressing the button: hydraulically via ESP

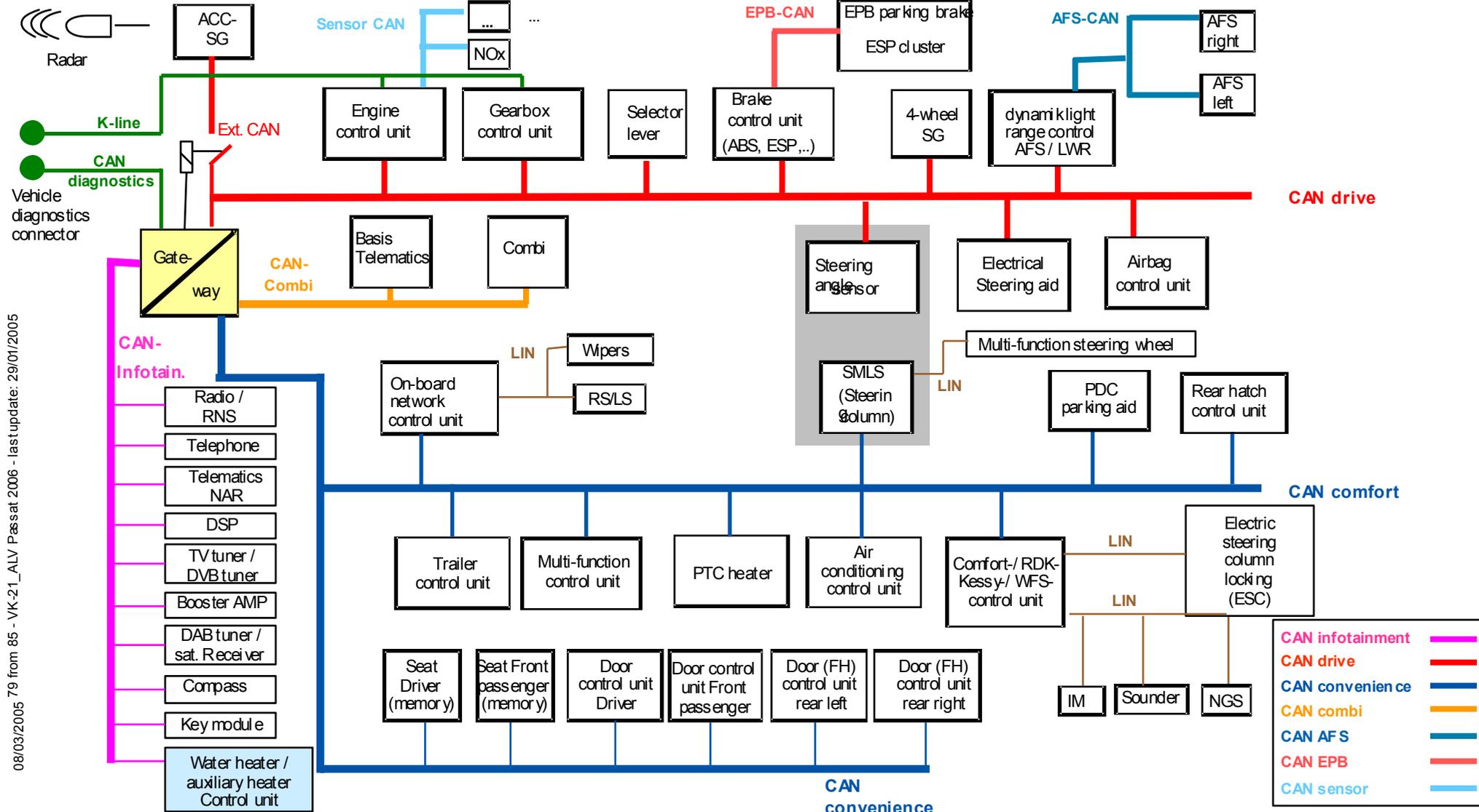
Auto hold function



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Network design

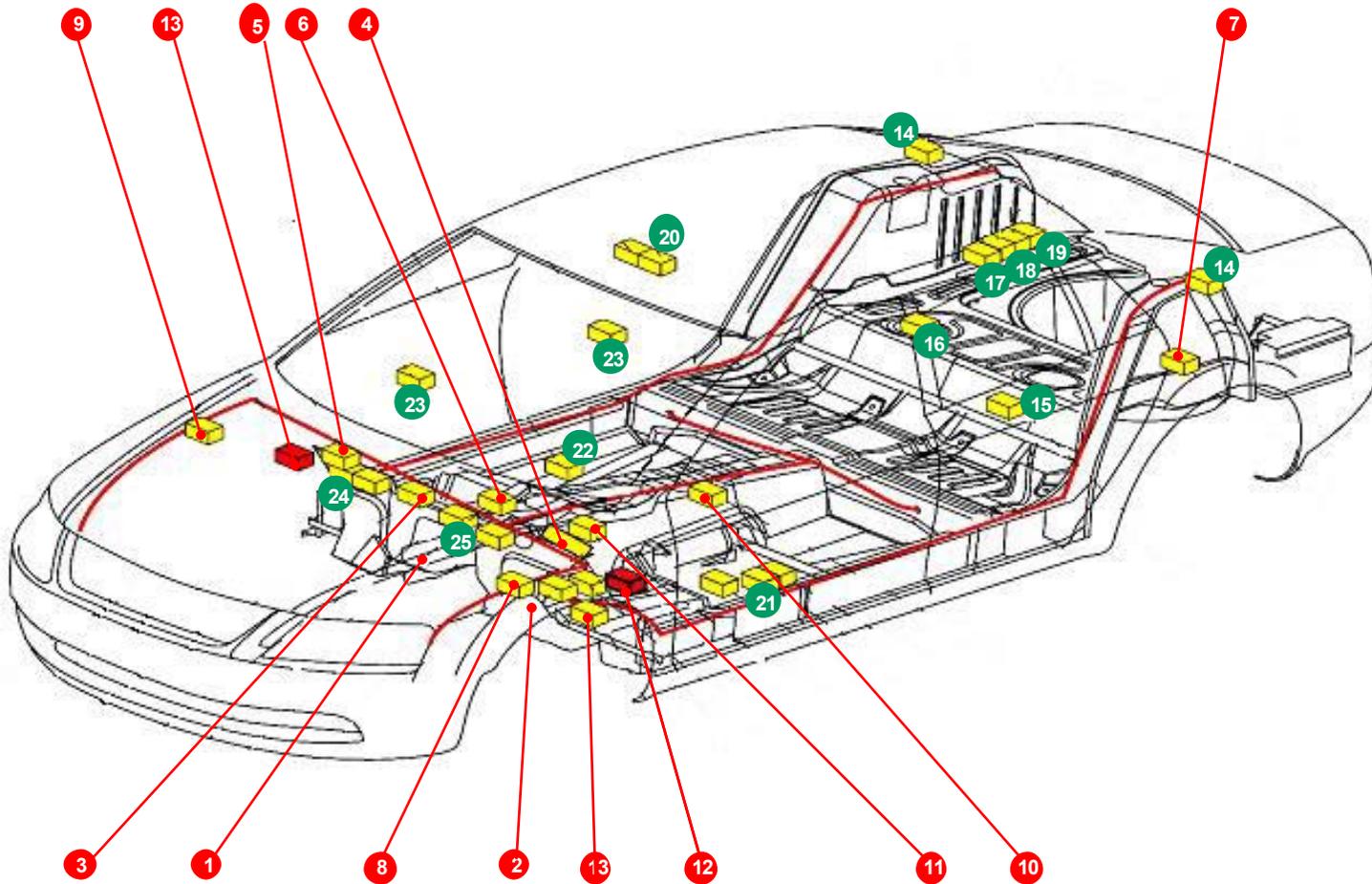
Technical innovations



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Control unit layout

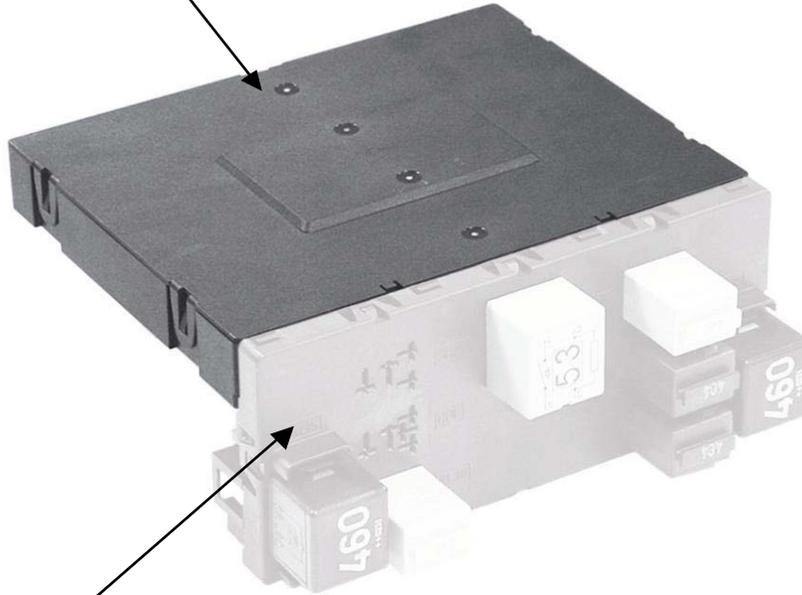
Technical innovations 



- ① Gateway control unit
- ② On-board network control unit
- ③ Engine control unit
- ④ Gearbox control unit
- ⑤ Comfort control unit
- ⑥ Air conditioning control unit
- ⑦ Trailer control unit
- ⑧ AFS / LWR control unit
- ⑨ ESP control unit
- ⑩ Electrical parking brake control unit
- ⑪ Airbag control unit
- ⑫ Fuse holder 1
- ⑬ Fuse holder 2



Control unit for on-board network J519



Relay holder on control unit for on-board network

Tasks

- ➔ Exterior lighting control
- ➔ Comfort lighting
- ➔ Wipers
- ➔ Wash pumps
- ➔ Indicator control
- ➔ Load management
- ➔ Interior lighting control
- ➔ Heatable rear window
- ➔ Terminal control
- ➔ Fuel pump preliminary run



Fitting location

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Low-Line



Mid-Line



High-Line

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Setting in the combi-instrument



- Setting the current speed
- Deleting the set speed limit
- Operation via MFA lever or MFL

Warning trigger



- Gong sound in the combi
- Display of the warning screen
- Operation at MFA lever/MFL

Electronic ignition switch (EIS)



1. Insert ID sender (ignition key) in EIS to pre-lock position.
2. Apply the clutch.
3. Press ID sender right up to the stop - the engine starts.
4. Engine is running and ID sender is at cl. 15 driving
5. Engine off ---> press ID sender and remove fingers from ID sender, the ID sender is br to the remove position by the EIS.
6. Remove ID sender from the EIS. Intermediate levels between pre-locking an engine start can be activated.



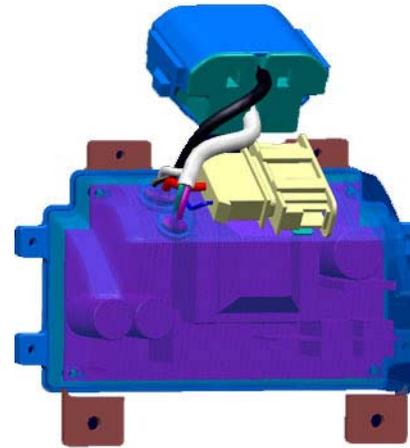
Ignition switch (IS)



ID sender



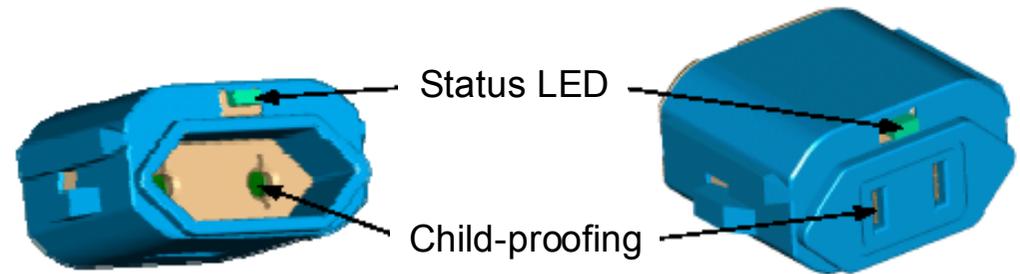
- ➔ 230V Euro socket
- ➔ 150W constant power level
- ➔ 300W top performance
- ➔ LED function display: **red flashlight:** fault
green permanent light: converter supplies voltage
- ➔ Integrated child-proofing
- ➔ Excess current and excess temperature shutdown



fault
converter supplies voltage

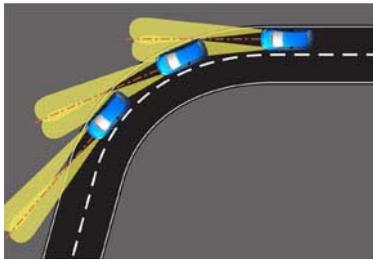
Euro socket
230 V/50 Hz

US socket
115 V/60 Hz

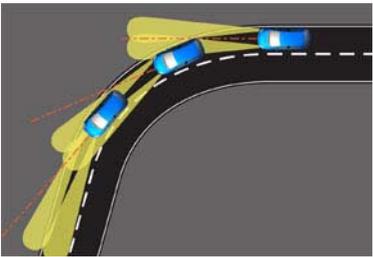




- Use of the “steered headlights”
- Steered headlight only available in combination Bi-xenon headlights
- Optional extra equipment



- conventional lighting concept



- AFS steered headlights only in combination with Bi-Xenon

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Exterior ring:

Combined indicator/brake light with 2-color LEDs

Backlight:
Interior and exterior ring

Rear fog light and reversing lights using conventional light bulb technology



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Additional 3rd lever

Main operating elements:

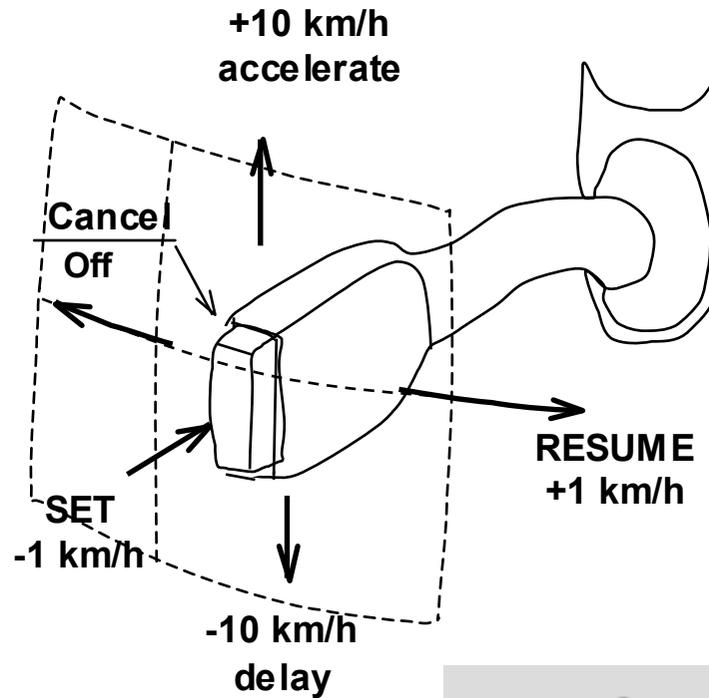
1. On/Off
2. Set
3. Cancel
4. Resume
5. +/- Speed
6. +/- Distance

Other operating elements:

7. Pedals
8. Gear selection lever
9. ESP on/off

Driver information:

1. System state
2. Nominal speed
3. Object detected
4. Target/actual distance
5. Take over prompt
6. System condition transitions





Volkswagen Passat model year 2006

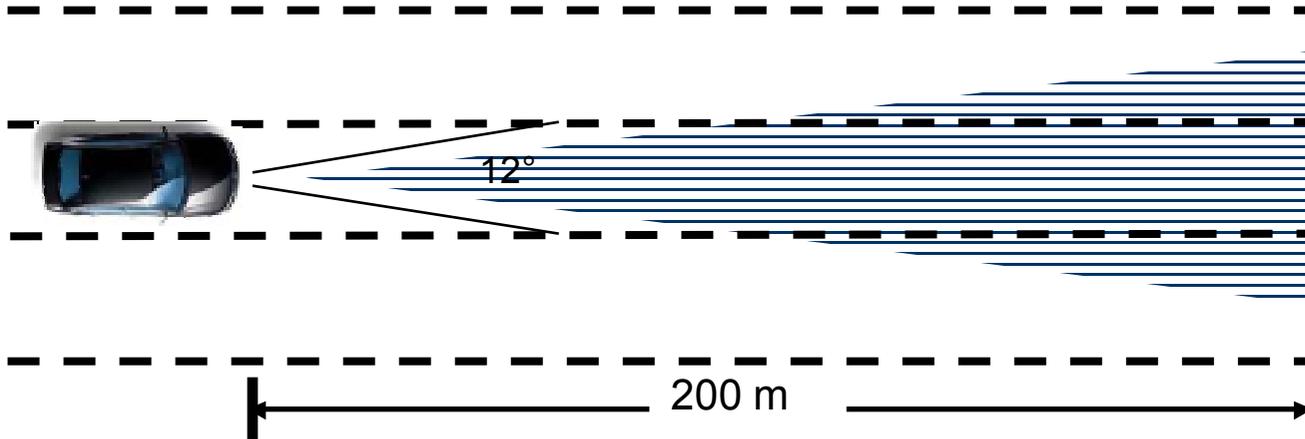
Adaptive distance control (ADC)

Technical innovations



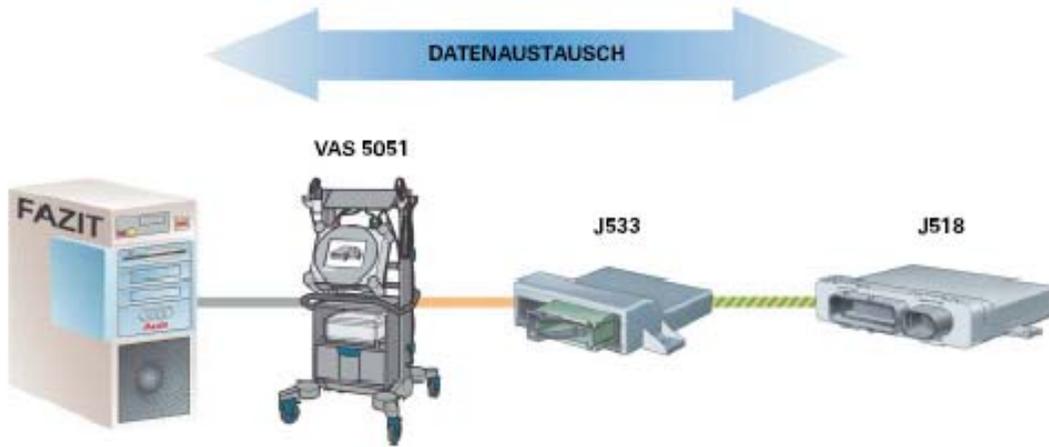
Technical requirements

- Control range: 200 m
- Minimum opening angle: 12°
- Accuracy of relative speed indication: 0.1 m/s



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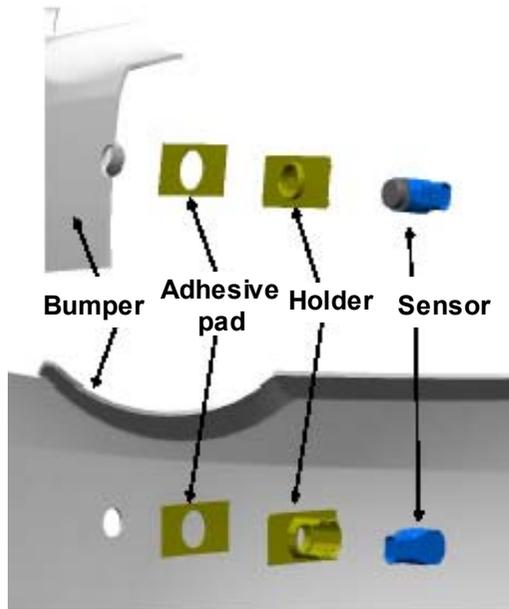


- For the launch of the Passat 2006, the online connection of the immobilizer 4 is used in the same way as in Audi A8, A6 and A3.
- The process in the workshops is identical for Volkswagen and Audi.
- Technologically, there are differences between the vehicles, just like Audi

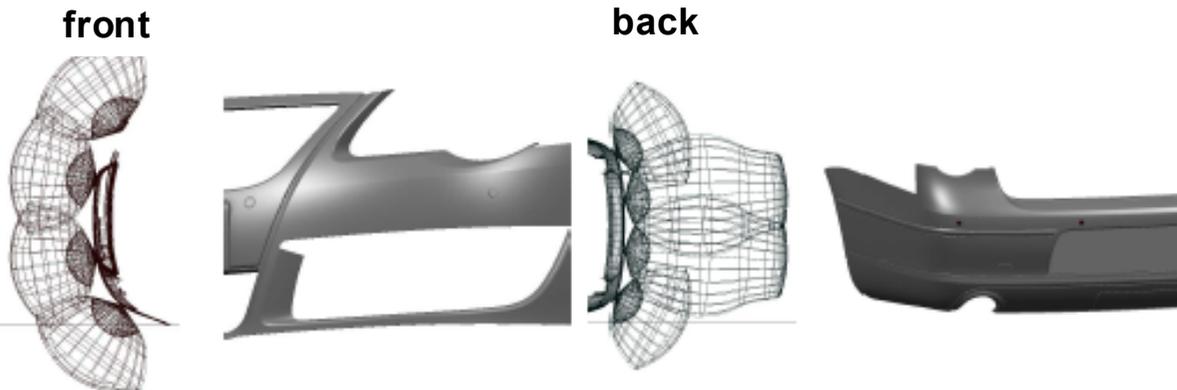


Conclusion: the database for VW is in Wolfsburg !

Park distance control (PDC)



- ➔ Manufacturer: Valeo
- ➔ Sensors front (4) and back (4)
- ➔ New sensors for pedestrian protection (shorter)
- ➔ Chrome-plated sensors at front center in the radiator grill
- ➔ Holes punched in bumper after painting
- ➔ Control unit same part T5



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Volkswagen Passat model year 2006

Multi-function steering wheel

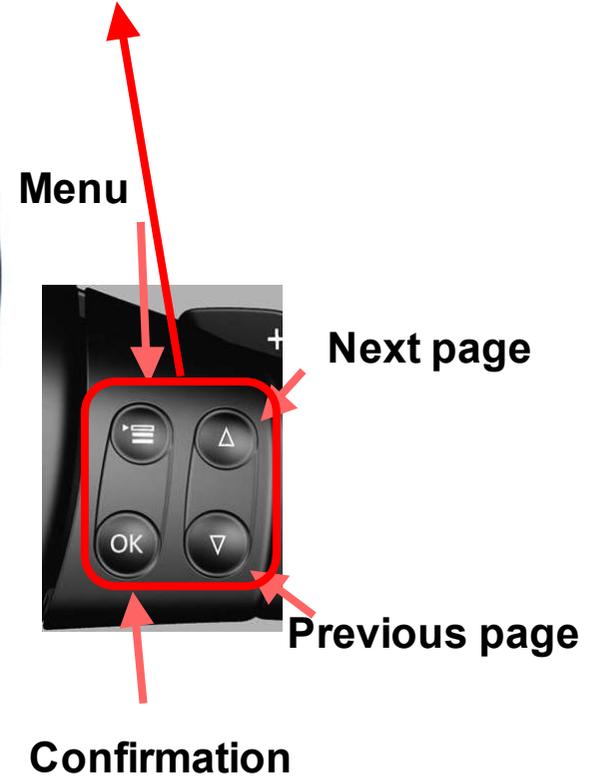
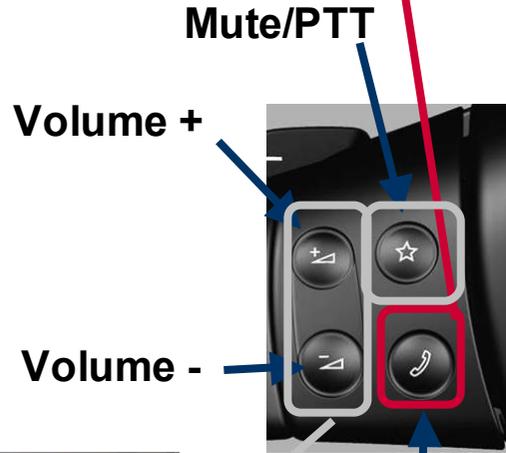
Technical innovations



**Radio/
telephone**



**Multifunctional
display**



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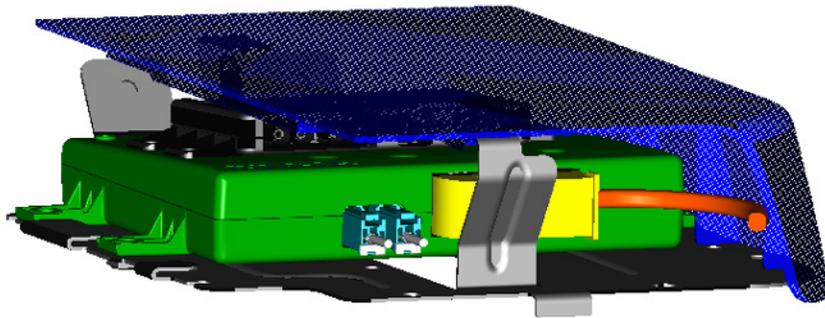


Mobile phone holder

Manufacturer: Nokia

Antenna diagnosis

- Mobile phones are supported without system plug via Bluetooth
- Improved hands-free call quality (DSP on board)
- Universal mobile phone fitting various manufacturers



Control unit attachment under passenger seat

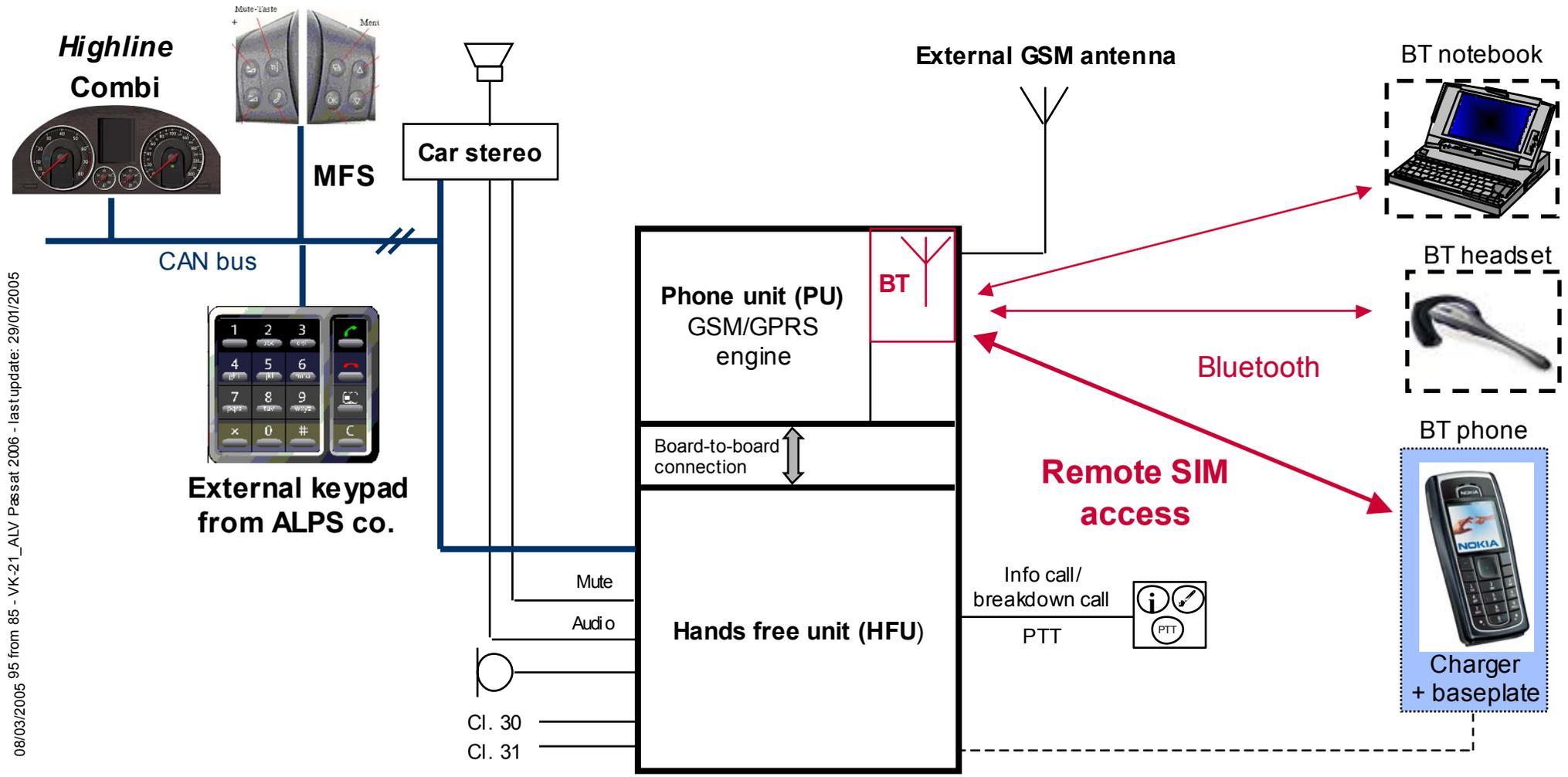


Extendable keypad



Telephone receiver in XXL storage compartment

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Radio systems (RS)

Technical innovations



- Front loudspeakers
- Telephone control
- Small display
- CD changer control
- RDS FM/AM radio

Entry-level radio



- Sound, optional
- Rear loudspeakers
- Front loudspeakers
- Telephone control
- CD drive with MP3
(only Panasonic)
- Large display
- CD changer
- Vehicle-specific
sound correction
- TIM
- Diversity double tuner
- RDS FM/AM radio

Radio RCD 500



- Optional 4x20 watts with
rear loudspeakers
- Front loudspeakers
- Telephone control
- CD drive
- Large display
- CD changer control
- Diversity double tuner
- RDS FM/AM radio

Radio RCD 300

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TV optional
DAB optional
2nd CD music drive
Voice control
Navi and telephone
Address/tel. no. administration
GSM/GPRS module
E-Mail reception+read out
Emergency and breakdown call
VW portal/Internet/WAP
Dynamic navigation with high quality map display
DVD drive
6.5" color display
TOP radio/CD/MP3

Voice control telephone
Address/tel. no. administration
GSM/GPRS module
E-Mail reception+read out
Emergency and breakdown call
VW portal/Internet/WAP
Corridor function
Dynamic navigation with simple map display
CD drive
3.8" color display
Base radio/CD/MP3

Dynamic navigation with arrow display
CD drive
Monochrome display (3.8")
Base radio/CD

RNS base

RNS top including network package

RNS base including network package

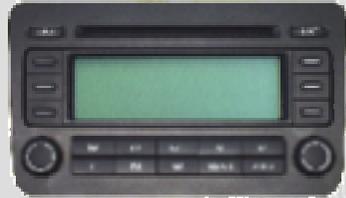
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Volkswagen Passat model year 2006

10-channel sound system

Technical innovations



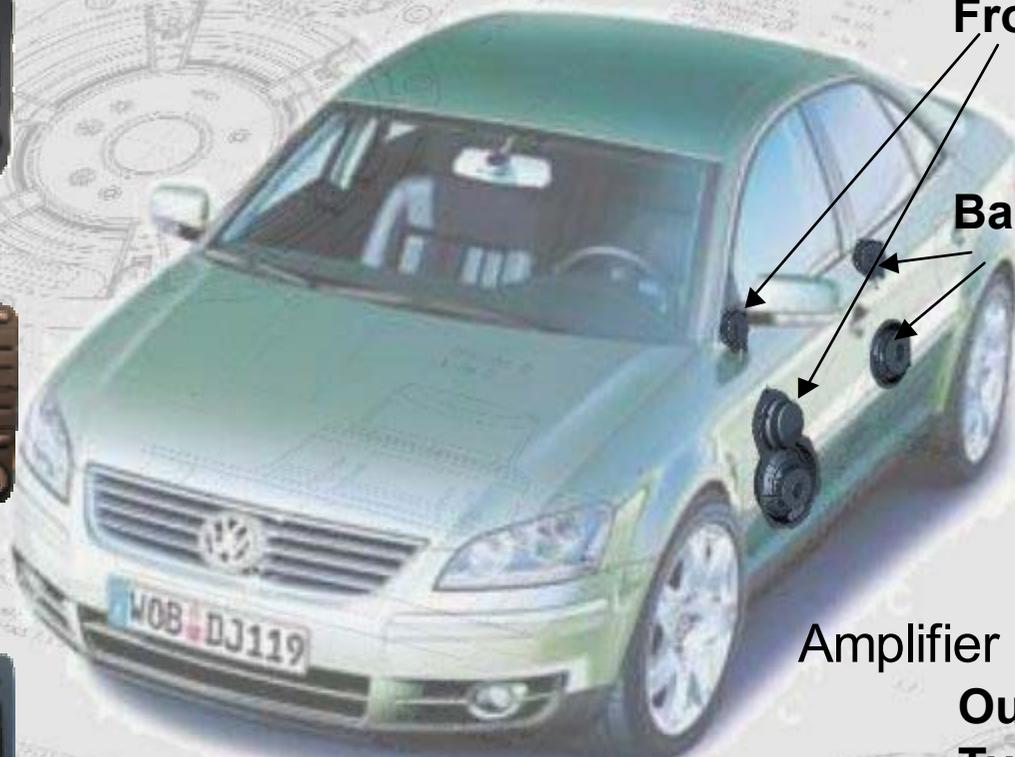
RCD 500



RNS-DVD

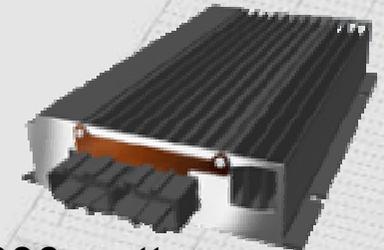


Premium7



Loud speaker system

- Front:** 3-way
 - 50 mm tweeter
 - 80 mm midrange
 - 200 mm bass
- Back:** 2-way
 - 46 mm tweeter
 - 168 mm bass



Amplifier

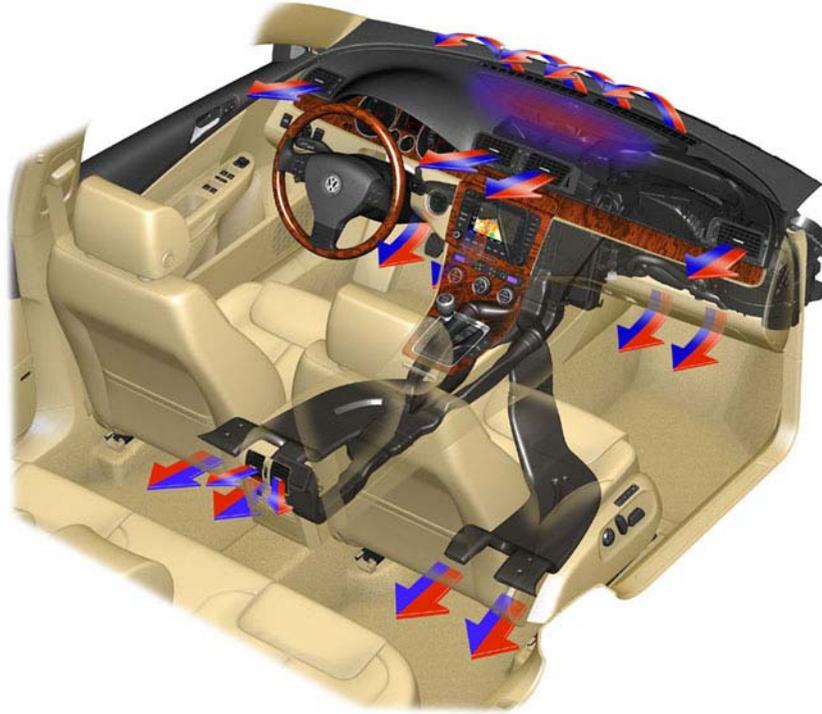
- Output:** 600 watts
- Type:** 10 channel-class D
- Installation location:** under driver's seat

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- Map on DVD-ROM (Europe DVD)
- Improved computing performance
- Improved diagnosis
- Improved graphics
- Improved radio reception (tuner diversity like RCD 500)
- Combination with sound possible
- Drive cannot play music CDs



- ➔ Improved air quality due to larger air channel cross-sections
- ➔ Improved ventilation of rear due to larger cross-sections of the footwell air outlets
- ➔ Only Climatronic has indirect ventilation
- ➔ Air outlets individually adjustable



Climatic

- Air circulation when driving backwards
- Automatic temperature control
- Manual preselection of air distribution





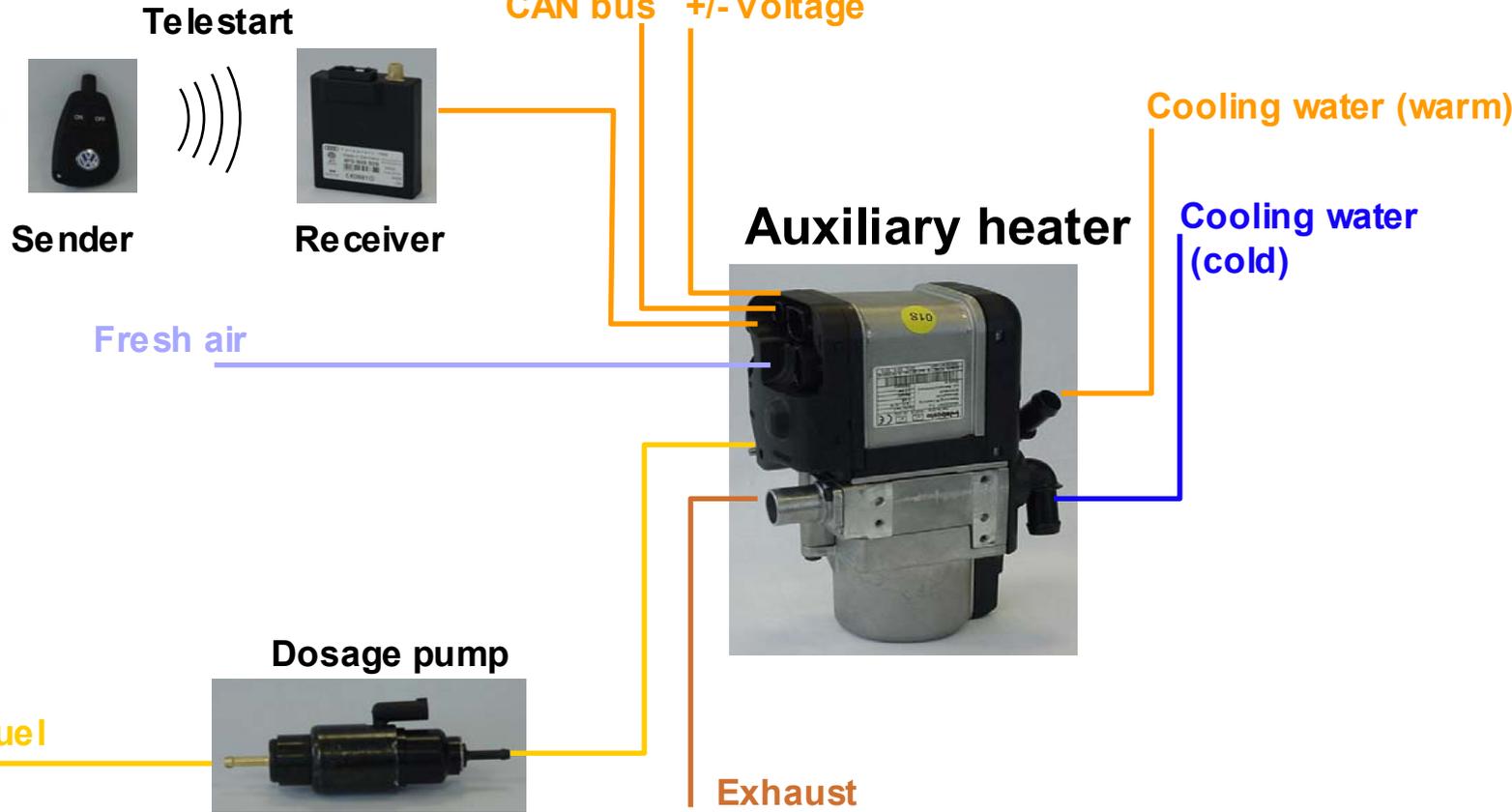
Climatronic

- Air circulation when driving backwards
- Two zones with individual temperature selection for driver and passenger
- No readjustment





Auxiliary heater



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System as in Passat 2005

- Coiled tungsten wires
- Relay in plenum chamber
- Connection via “Kapton tapes”

New in the Passat 2006

- Is switched on via Climatic/Climatronic
- Control using on-board network control unit

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- ➔ Chassis number
- ➔ Launch supervision
- ➔ Maintenance ranges
- ➔ Transport mode
- ➔ Special tools / operational equipment





Location of chassis number



Chassis number

- ➔ Vision window in windscreen
- ➔ Service brochure
- ➔ Spare tire recess
- ➔ Front right mudguard area
- ➔ B-pillar driver's side

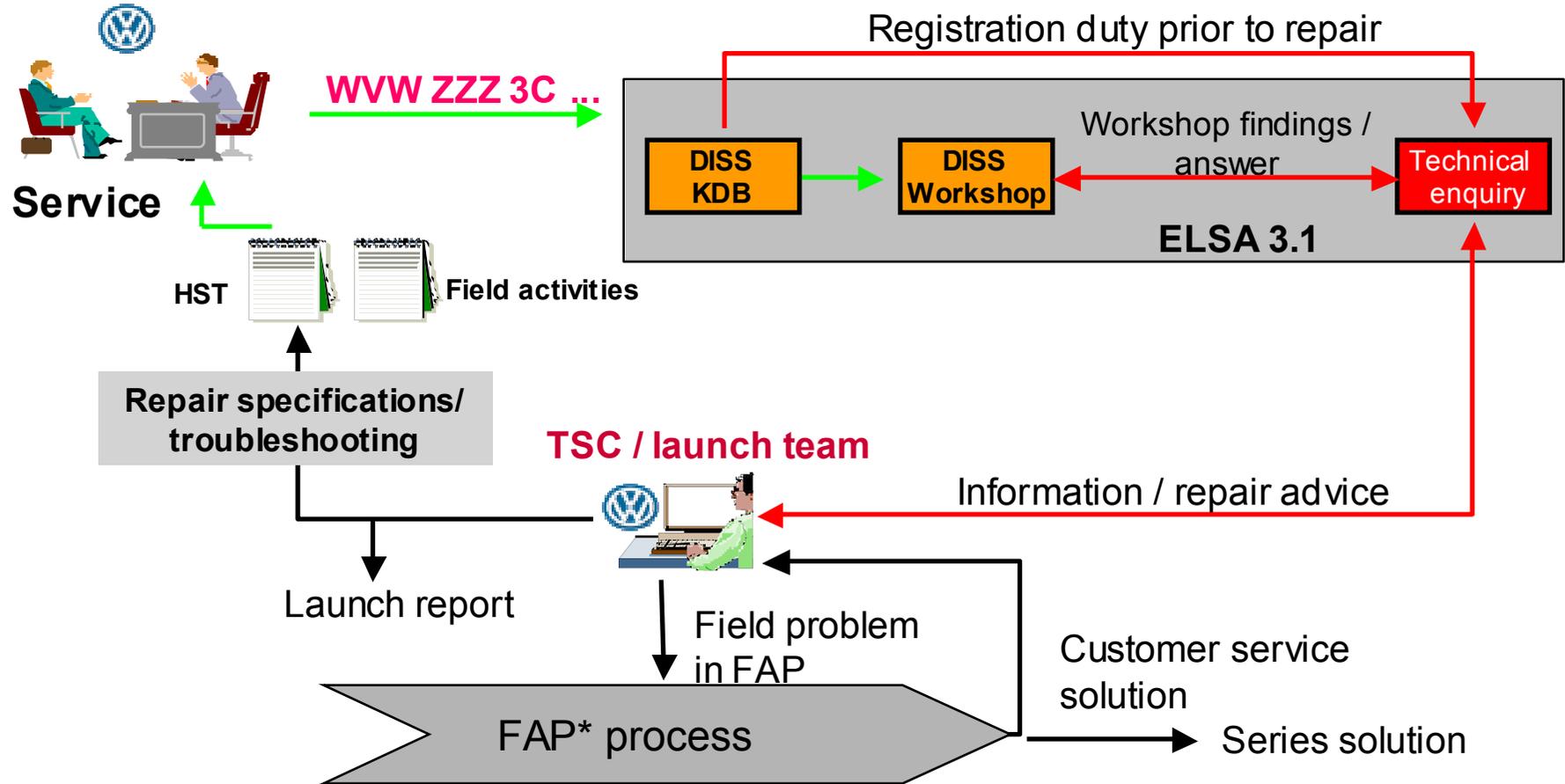


Launch of VW Passat 2006

Start as of 00.00.2005

- ➔ Launch team TSC / KD / QS / FE / production
- ➔ Registration duty for all complaints (all German and export partners)
- ➔ Registration duty before repair for all complaints (SC areas 123, technical area of responsibility 124) tow-ins / cases of fires (all partners in Germany)
- ➔ On-site task force assignments upon consultation
- ➔ Sending of damaged part to parts dispatch control (TVS)
Reports via hotline channel, only in exceptional cases via fax
Service: 8:00 am to 4:00 pm, answer within 2 hours

Detailed information can be found in the technical service manual as well as at ServiceNet and PartnerNet



* Fault rectification process

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Modified service sequence

- ➔ Delete the error memory and deactivate transport mode
- ➔ For special equipment: “Spare wheel package”:
Check condition and inflation pressure of the spare wheel
- ➔ For Passat with sports chassis:
Remove transportation lock (channels) from the front axle springs
- ➔ Check number of keys and their function

Note: The current service literature applies!



Oil change service

- ➔ Every 15,000 km / annually (without WIV QG0/QG2)
- ➔ Every 7,500 km / annually (for diesel fuel with increased sulphur proportion)
- ➔ Drain fuel filter

Interval service: Inspection

- ➔ Every 60,000 km / 4 years



Interval service

- ➔ According to flexible service display, no later than after 30,000 km / two years (Golf with petrol engine)
- ➔ According to flexible service display, no later than after 30,000 km / two years (Golf with diesel engine)
- ➔ Tire mobility set:
check durability limit, replace expired and used tire sealing agent



Deactivated systems in transport mode

- ➔ Radio
- ➔ Radio remote control
- ➔ Interior monitoring
- ➔ Receiver auxiliary heater for telestart
- ➔ Inclination sensor
- ➔ Interior light active for only 30 s
- ➔ Save LED on door panel on driver and passenger sides

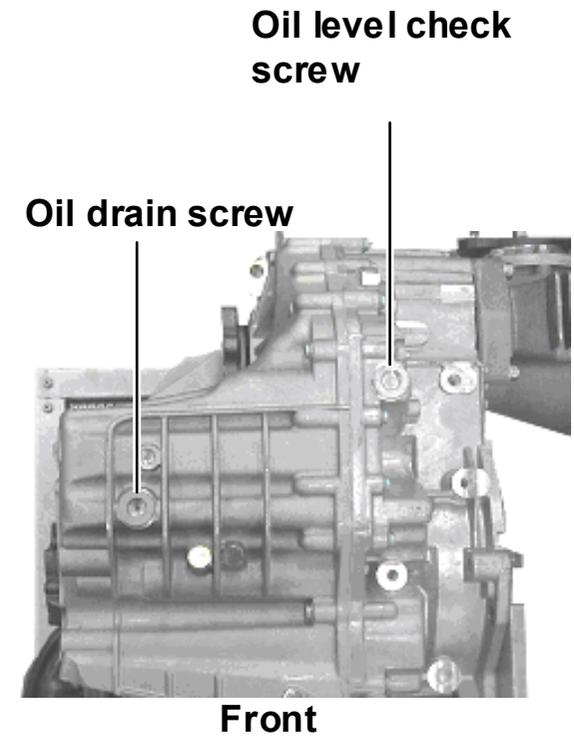
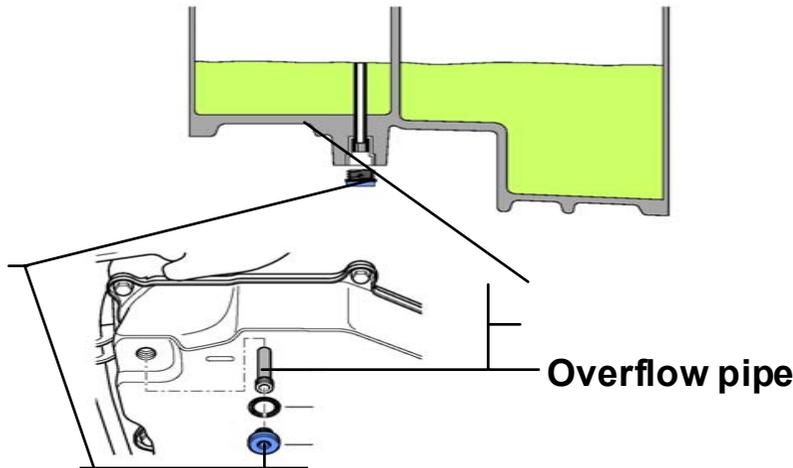


Transport mode (TrA) is deactivated using the diagnosis tester.

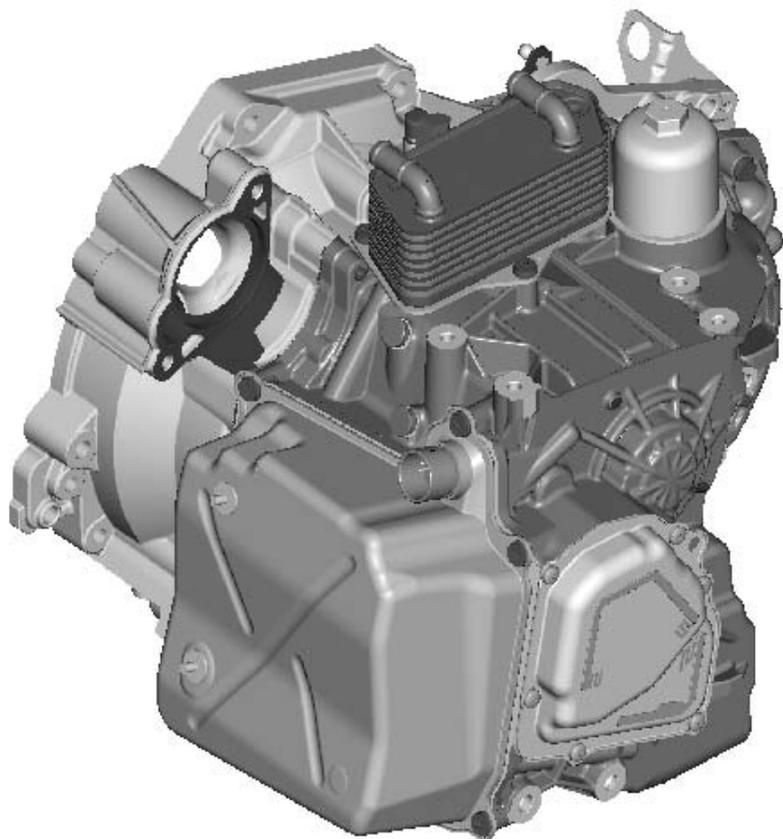


Direct manual gearbox service

- The direct manual gearbox requires a special type of oil.
- An oil change is necessary after a certain running time.
- The oil level check is done in the same way as for the automatic gearbox AG4 01M / 01N

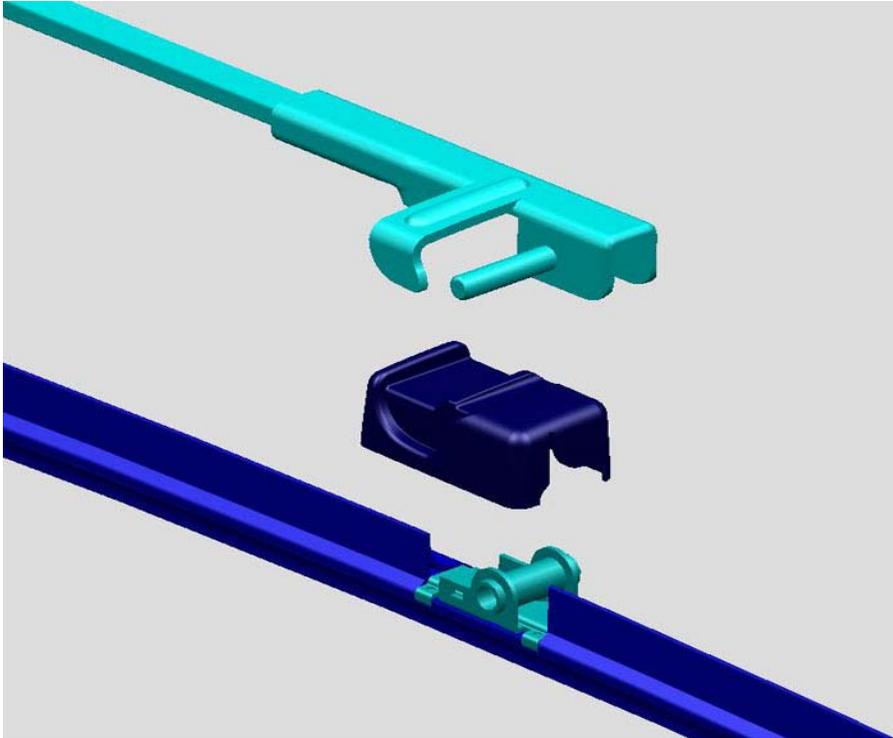


Please take note of the current service literature!

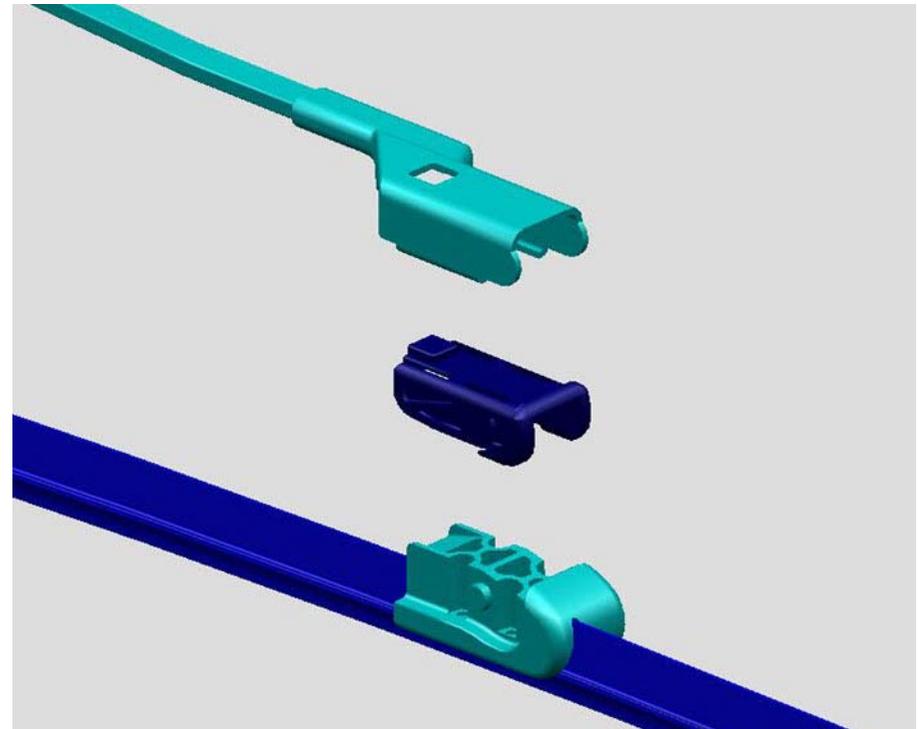


- ➔ Towing should only be done in compliance with the operating manual
- ➔ It is not possible to start the engine by towing the vehicle (couplings are depressurized). This prevents damage to the gearbox

Previous side-lock adaptation system



New top-lock adaptation system

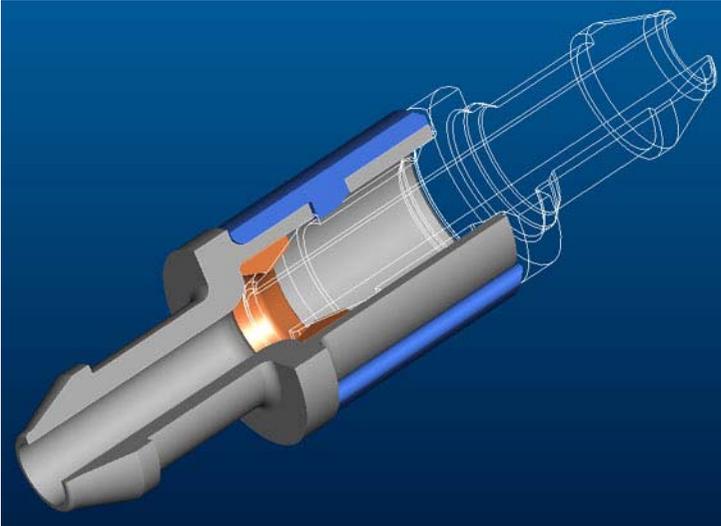


- ➔ More rigid and stable connection
- ➔ Improved handling stability
- ➔ Reduced number of versions (from 3 incompatible versions to 1 in the corporate group)
- ➔ Module agreed upon within the corporate group

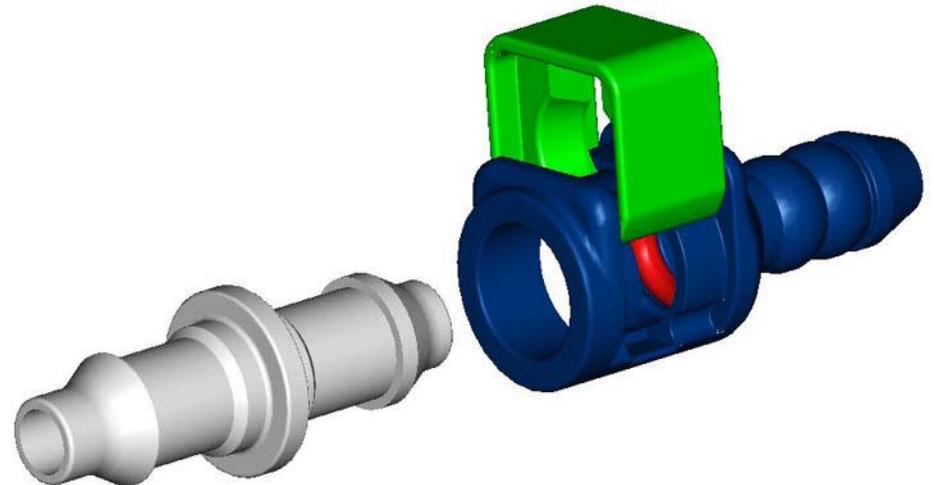
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Old coupling



New coupling



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- ➔ Volkswagen iTV
iTV training
- ➔ Private study programs:
“The Passat 2006”, “The Passat 2006 – Electrical system”
- ➔ VW/Audi TV
- ➔ Training modules
TTT, EX102, EX105, EX110, EX158 and EX1Z5





Volkswagen Passat model year 2006

Technical innovations



As of March 2005
in your car dealership.



www.volkswagen.de





Thank you for your interest!



Service Training

Goodbye and have a nice journey!





Break.

