

Maintenance

Audi A4 1995 ➤

Edition 05.2012



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Maintenance

Heading

1. Notes on servicing
2. Delivery Inspection
3. LongLife Service
4. Oil Change Service
5. Inspection Service
6. Description of work
7. Type plate, vehicle identification number
8. Lifting the vehicle
9. Tow-starting/towing
10. Vehicle tests carried out as part of inspection services and maintenance



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Technical information should always be available to the foremen and mechanics, because their careful and constant adherence to the instructions is essential to ensure vehicle road-worthiness and safety. In addition, the normal basic safety precautions for working on motor vehicles must, as a matter of course, be observed.

Contents

1	Notes on servicing	1
1.1	Overview of engines	1
2	Delivery Inspection	6
2.1	Delivery Inspection (service sticker)	7
3	LongLife Service	8
3.1	Extended servicing intervals	8
3.2	LongLife Service	9
4	Oil Change Service	13
4.1	Oil Change Service (service sticker)	13
5	Inspection Service	14
5.1	Inspection Service (service sticker)	18
6	Description of work	19
6.1	Switches, electrical equipment, displays and other driver-operated controls: checking operation	19
6.2	Windscreen wiper/washer system and headlight washer system: checking jet settings and operation	19
6.3	Wiper blades: checking park position and checking for damage	21
6.4	Electric windows: checking positions	22
6.5	Clock: setting	23
6.6	Air conditioner: checking operation and setting temperature to 22 °C	23
6.7	Radio / Navigation System Plus (chorus, concert, symphony): deactivating transport mode	23
6.8	Radio or Navigation System Plus: activating anti-theft coding by entering fixed code number	26
6.9	Self-diagnosis: interrogating fault memory with fault reader V.A.G 1551	27
6.10	Instrument cluster: setting the language	28
6.11	Service interval display: resetting	30
6.12	Service interval display: resetting LongLife Service	36
6.13	Service interval display: resetting Inspection Service (fixed interval)	42
6.14	Rear lid hinges: lubricating	44
6.15	Door hinges with arresters, lock cylinder and bonnet arrester hook: lubricating	45
6.16	Sliding/tilting sunroof: cleaning and lubricating	46
6.17	Telematics: renewing emergency backup battery	49
6.18	Steps required before disconnecting battery	50
6.19	Battery: checking electrolyte level	50
6.20	Battery: checking "no load" voltage before starting the engine for the first time (only applies to stock vehicles)	51
6.21	Battery: checking that battery cables are securely fitted (only applies to vehicles kept in stock for long periods)	52
6.22	Battery: performing load test	53
6.23	Engine cover panel: removing	54
6.24	Engine (from above and below) and engine compartment: visual check for leaks and damage	55
6.25	Crankcase pressure: checking (V6 TDI engine AFB, AKN)	56
6.26	Windscreen and headlight washer system: topping up with washer fluid	57
6.27	Cooling system: checking antifreeze and topping up with coolant if necessary	57
6.28	Air cleaner housing and snow strainer: cleaning; renewing filter element	60
6.29	Spark plugs: renewing	61
6.30	Hydraulic system: checking for leaks, checking hydraulic fluid level and topping up if necessary	65
6.31	Fuel filter: renewing (TDI engines)	66
6.32	Fuel filter: draining water (TDI engines)	68
6.33	Dust and pollen filter: renewing	70
6.34	Noise insulation: removing	71



6.35	Lock carrier: moving into service position	71
6.36	V-belt and poly V-belt: renewing (4-cyl. petrol engines ADP, ADR, AEB, AFY, AJL, ANB, APT, APU, ARG)	74
6.37	Poly V-belt: renewing (4-cyl. petrol engines AHL, ARM, ANA)	77
6.38	Poly V-belt: renewing (V6 petrol engines)	79
6.39	Toothed belt for camshaft drive: checking for damage (2.6 ltr. 2V engines and 2.8 ltr. 2V engines)	79
6.40	Toothed belt for camshaft drive: checking for damage, measuring width of toothed belt (4-cyl. TDI engines up to and including model year 1999 X)	80
6.41	Toothed belt for camshaft drive: checking condition and tension (V6 TDI engines)	80
6.42	Toothed belt for injection pump: checking condition and tension (V6 TDI engines), tensioning toothed belt	81
6.43	Toothed belt: renewing	81
6.44	Bearing bushes for poly V-belt tensioner: checking	83
6.45	Transport locks: removing locking elements for front suspension struts	84
6.46	Manual gearbox/final drive: checking oil level, topping up with oil if necessary	84
6.47	Final drive (automatic gearbox): checking oil level, topping up with oil if necessary	90
6.48	Engine oil: draining or extracting, changing oil filter	92
6.49	Brake system: visual check for leaks and damage	94
6.50	Brake pads: checking thickness	95
6.51	Underseal: visual check for damage	95
6.52	Track rod ball joints: checking play, security and boots	95
6.53	Tyres: checking condition, wear pattern, tread depth and correcting inflation pressures.	97
6.54	Winter tyres (factory-fitted)	98
6.55	Wheel bolts: tightening to specified torque	98
6.56	Engine oil: filling up	100
6.57	Engine: checking oil level	101
6.58	Brake fluid level (depends on brake pad wear): checking	102
6.59	Brake fluid: changing (every 2 years)	103
6.60	Headlights: checking settings and adjusting if necessary	107
6.61	Road test	112
7	Type plate, vehicle identification number	114
7.1	Information encoded in vehicle identification number:	114
7.2	Vehicle data sticker	114
7.3	Engine code and engine number	114
8	Lifting the vehicle	117
8.1	Trolley jack	117
8.2	Lifting platform	117
8.3	Lifting points for lifting platform and trolley jack	117
9	Tow-starting/towing	118
9.1	Towing eyes	118
9.2	Notes on towing and tow-starting	119
10	Vehicle tests carried out as part of inspection services and maintenance	121

1 Notes on servicing

The order of the individual servicing operations is optimised as a result of long-standing experience. It is therefore essential to comply with the stated order to avoid unnecessary delays.

The order in which operations are described here is based on that specified for the Inspection Service, which is the type of service performed most frequently.

Please inform the customer if any faults or defects which need repairing are identified during an Inspection Service.

1.1 Overview of engines

1.1.1 Petrol engines

Engine code	ADP	AHL, ARM, ANA	ADR, APT, ARG	AFY	AEB, APU, ANB	AJL	ADW
Exhaust emissions standard		AHL/ARM EU II+D3 ANA EU II +D4	APT-EU II, ADR/ARG EU II + D3		APU-EU II AEB EU II+D3 ANB EU II+D4	EU II + D3	
No. of cylinders / valves per cylinder	4/2	4/2	4/5	4/5	4/5	4/5	4/2
Capacity ltr.	1.6	1.6	1.8	1.8	1.8	1.8	2.0
Power output kW at rpm	74/5300	74/5600	92/5800	88/5800	110/5700	132/6000	79/5300
Torque Nm at rpm	140/3800	145/3800	168/3500	164/3500	210/1750 ... 4600	235/2000 ... 4600	160/3200
Bore Ø mm	81.0	81.0	81.0	81.0	81.0	81.0	82.5
Stroke mm	77.4	77.4	86.4	86.4	86.4	86.4	92.8
Compression ratio	10.3	10.2	10.3	9.2	9.5	9.5	9.0
Fuel injection / ignition	Bosch Motronic	Simos	Bosch Motronic	Bosch Motronic	Bosch Motronic	Bosch Motronic	Digifant
RON min.	95 ¹⁾ (unleaded)	95 ¹⁾ (unleaded)	95 ¹⁾ (unleaded)	88 (unleaded or leaded)	95 ¹⁾ (unleaded)	95 ¹⁾ (unleaded)	88 (unleaded or leaded)
Electronic throttle	-	ANA	APT ARG	-	APU ANB	-	-
Self-diagnosis	X	X	X	X	X	X	X
Catalytic converter	X	X	X	-	X	X	-
Lambda control	X	X	X	X	X	X	X
Exhaust gas recirculation	-	-	-	-	-	-	-
Secondary air system	-	-	-	-	-	-	-
Exhaust gas turbocharging	-	-	-	-	X	X	-



Engine code	ADP	AHL, ARM, ANA	ADR, APT, ARG	AFY	AEB, APU, ANB	AJL	ADW
Exhaust emissions test after 3, 5, 7, 9...years	X	X	X	X	X	X	X

1) Unleaded RON 91 can also be used, but will result in a slight loss of power.

Engine code	AFM	AGA	AJG	ALF	APS	ARJ
Exhaust emissions standard		EU II	EU II	EU II + D3	EU II	EU II + D3
No. of cylinders / valves per cylinder	6/2	6/5	6/5	6/5	6/5	6/5
Capacity ltr.	2.4	2.4	2.4	2.4	2.4	2.4
Power output kW at rpm	110/5800	121/6000	120/6000	121/6000	121/6000	121/6000
Torque Nm at rpm	210/3300	230/3200	230/3200	230/3200	230/3200	230/3200
Bore Ø mm	81.0	81.0	81.0	81.0	81.0	81.0
Stroke mm	77.4	77.4	77.4	77.4	77.4	77.4
Compression ratio	10.0	10.5	10.5	10.5	10.5	10.5
Fuel injection / ignition	Multi Point Fuel Injection	Bosch Motronic	Bosch Motronic	Bosch Motronic	Bosch Motronic	Bosch Motronic
RON min.	95 (unleaded)	95 ²⁾ (unleaded)	95 ²⁾ (unleaded)	95 ²⁾ (unleaded)	95 ²⁾ (unleaded)	95 ²⁾ (unleaded)
Electronic throttle	-	-	-	-	X	X
Self-diagnosis	X	X	X	X	X	X
Catalytic converter	X	X	X	X	X	X
Lambda control	X	X	X	X	X	X
Intake manifold change-over	-	-	-	-	X	X
Variable valve timing	-	-	-	-	X	X
Exhaust gas recirculation	-	-	-	-	-	-
Secondary air system	-	-	-	X	-	X
Exhaust gas turbocharging	-	-	-	-	-	-

Engine code	AFM	AGA	AJG	ALF	APS	ARJ
Exhaust emissions test after 3, 5, 7, 9...years	X	X	X	X	X	X

2) Unleaded RON 91 can also be used, but will result in a slight loss of power.

Engine code	ABC	ACZ	AGB	ASJ, AZR
Exhaust emissions standard			EU II + D3	ASJ EU II ARZ EU III
No. of cylinders / valves per cylinder	6/2	6/2	6/5	6/5
Capacity ltr.	2.6	2.6	2.7	2.7
Power output kW at rpm	110/5500	102/5750	195/6000	280/6100
Torque Nm at rpm	225/3500	210/3500	280/3200	440 2500-6000
Bore Ø mm	82.5	82.5	81.0	81.0
Stroke mm	81.0	81.0	86.4	86.4
Compression ratio	10.6	9.2	9.3	9.5
Fuel injection / ignition	Multi Point Fuel Injection	Multi Point Injection	Bosch Motronic	Bosch Motronic
RON min.	95 ³⁾ (unleaded)	88 (unleaded or leaded)	98 ⁴⁾ (unleaded)	98 ⁴⁾ (unleaded)
Electronic throttle	-	-	X	X
Self-diagnosis	X	X	X	X
Catalytic converter	X	-	X	X
Lambda control	X	X	X	X
Intake manifold change-over	-	-	X	X
Variable valve timing	-	-	-	X
Exhaust gas recirculation	-	-	-	-
Secondary air system	-	-	-	ASJ - AZR X
Exhaust gas turbocharging	-	-	X	X
Exhaust emissions test after 3, 5, 7, 9...years	X	X	X	X

3) Unleaded RON 91 can also be used, but will result in a slight loss of power.

4) Unleaded RON 95 can also be used, but will result in a slight loss of power.

This document is not to be used for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Engine code	AAH	ACK	ALG	APR	AQD
Exhaust emissions standard		EU II	EU II + D3	EU II	EU II + D3
No. of cylinders / valves per cylinder	6/2	6/5	6/5	6/5	6/5



Engine code	AAH	ACK	ALG	APR	AQD
Capacity ltr.	2.8	2.8	2.8	2.8	2.8
Power output kW at rpm	128/5500	142/6000	142/6000	142/6000	142/6000
Torque Nm at rpm	250 ⁵⁾ /3000	280/3200	280/3200	280/3200	280/3200
Bore Ø mm	82.5	82.5	82.5	82.5	82.5
Stroke mm	86.4	86.4	86.4	86.4	86.4
Compression ratio	10.6	10.3	10.3	10.1	10.1
Fuel injection / ignition	Multi Point Injection	Bosch Motronic	Bosch Motronic	Bosch Motronic	Bosch Motronic
RON min.	98 ⁵⁾ (unleaded)	98 ⁶⁾ (unleaded)	98 ⁶⁾ (unleaded)	98 ⁶⁾ (unleaded)	98 ⁶⁾ (unleaded)
Electronic throttle	-	-	-	X	X
Self-diagnosis	X	X	X	X	X
Catalytic converter	X	X	X	X	X
Lambda control	X	X	X	X	X
Intake manifold change-over	-	-	X	X	X
Variable valve timing	-	-	X	X	X
Exhaust gas recirculation	-	-	-	-	-
Secondary air system	-	-	X	-	X
Exhaust gas turbocharging	-	-	-	-	-
Exhaust emissions test after 3, 5, 7, 9...years	X	X	X	X	X

5) Unleaded RON 95 can also be used, but will result in a slight loss of power (245 Nm at 3000 rpm)

6) Unleaded RON 95 can also be used, but will result in a slight loss of power.

1.1.2 Diesel engines

Engine code	AFF	1Z	AHU	AHH
Exhaust emissions standard	EU II	EU II	EU II	EU II + D3
No. of cylinders / valves per cylinder	4/2	4/2	4/2	4/2
Capacity ltr.	1.9	1.9	1.9	1.9
Power output kW at rpm	55/4000	66/4000	66/4000	66/4000
Torque Nm at rpm	150/ 1500 ... 3200	202/1900	202/1900	202/1900
Bore Ø mm	79.5	79.5	79.5	79.5
Stroke mm	95.5	95.5	95.5	95.5
Compression ratio	19.5	19.5	19.5	19.5

Engine code	AFF	1Z	AHU	AHH
Fuel injection / ignition	Diesel (direct injection)	Diesel (direct injection)	Diesel (direct injection)	Diesel (direct injection)
CN min.	45	45	45	45
Electronic throttle	X	X	X	X
Self-diagnosis	X	X	X	X
Catalytic converter	Oxidizing catalytic converter	Oxidizing catalytic converter	Oxidizing catalytic converter	Oxidizing catalytic converter
Lambda control	-	-	-	-
Exhaust gas recirculation	X	X	X	X
Charge air cooler	-	X	X	X
Exhaust gas turbocharging	X	X	X	X
Exhaust emissions test after 3, 5, 7, 9...years	X	X	X	X

Engine code	AFN, AVG	AJM, ATJ	AFB	AKN
Exhaust emissions standard	EU II	EU III	EU II	EU II + D3
No. of cylinders / valves per cylinder	4/2	4/2	6/4	6/4
Capacity ltr.	1.9	1.9	2.5	2.5
Power output kW at rpm	81/4000	85/4000	110/4000	110/4000
Torque Nm at rpm	225/1700 ... 3000	AMJ: 285/1900 ATJ: 310/1900	310/1500 ... 3200	310/1500 ... 3200
Bore Ø mm	79.5	79.5	78.3	78.3
Stroke mm	95.5	95.5	86.4	86.4
Compression ratio	19.5	18.0	19.5	19.5
Fuel injection / ignition	Diesel (direct injection)	Diesel (direct injection)	Diesel (direct injection)	Diesel (direct injection)
CN min.	45	49	49	49
Electronic throttle	X	X	X	X
Self-diagnosis	X	X	X	X
Catalytic converter	Oxidizing catalytic converter	Oxidizing catalytic converter	Oxidizing catalytic converter	Oxidizing catalytic converter
Lambda control	-	-	-	-
Exhaust gas recirculation	X	X	X	X
Charge air cooler	X	X	X	X
Exhaust gas turbocharging	X	X	X	X
Exhaust emissions test after 3, 5, 7, 9...years	X	X	X	X



2 Delivery Inspection

Work to be completed	Page
In the case of stock vehicles: perform steps specified in Technical Service Handbook; „Inspection and Maintenance“; Chapter 6	
Battery: checking that battery cables are securely fitted	⇒ page 52
Battery: performing load test	⇒ page 53
Engine (from above) and engine compartment: visual check for leaks and damage	⇒ page 55
Cooling system: coolant must be filled to max. level	⇒ page 57
Windscreen and headlight washer system: must be filled to max. level	⇒ page 57
Engine oil level: checking and topping up with engine oil if necessary	⇒ page 101
Brake system: brake fluid must be filled to max. level	⇒ page 102
Hydraulic system: checking fluid level	⇒ page 65
Transport locks: removing locking elements for front suspension struts	⇒ page 84
Underside of vehicle, mechanical units, steering, boots, brake system, hoses, fluid reservoirs: visual check for leaks and damage (without dismantling noise insulation)	
Underside of vehicle (underbody): visual check for damage	⇒ page 95
Tyre pressure on all 4 wheels and spare wheel: check (note: 3.5 bar when car leaves factory)	⇒ page 98
Wheel bolts: tightening to specified torque	⇒ page 98
Fit fuses No. 14 (10 A), No. 15 (10 A) and No. 37 (20 A)	
Fit fuse No. 14 (and No. 15 (10 A) (on vehicles built from week 18, model year 01 onwards - gradual introduction)	
Switches, electrical equipment, displays and other driver-operated controls: checking operation	⇒ page 19
Electric windows: checking positions	⇒ page 22
Clock: setting	⇒ page 23
Air conditioner: checking operation and setting temperature to 22 °C	⇒ page 23
Radio or Radio/Navigation System Plus (chorus, concert, symphony): switching off transport mode (on vehicles built from week 18, model year 01 onwards - gradual introduction)	⇒ page 23
Radio or Navigation System Plus: sticking label with serial number and fixed code number (see vehicle data sticker) onto radio card or onto device information card included in operating instructions for Navigation System Plus.	
Radio or Navigation System Plus: activating anti-theft coding by entering fixed code number	⇒ page 26
Radio or Navigation System Plus: storing local radio stations on station buttons (on RDS radios, do not store until station name appears on display)	
Telephone: sticking label with serial number in telephone operating instructions	
Telematics: sticking label with serial number in telematics operating instructions	
Telematics: initialising telematics services (Workshop manual for Radio, Telephone and Navigation System)	
Instrument cluster: setting the language	⇒ page 28

Work to be completed	Page
Service interval display: resetting on models up to and including model year 1999 -X-	⇒ page 30
Service interval display: resetting Inspection Service from model year 2000 onwards -Y-	⇒ page 42
Service interval display: resetting LongLife Service from model year 2000 onwards -Y-	⇒ page 36
Passenger's airbag: checking key switch on / off, must be set to „on“ (see Owner's Manual).	
All control units: interrogating fault memory (enter „00“ for address word „Automatic test sequence“)	
Windscreen washer jets: setting direction of spray	⇒ page 19
Protective seat covers and plastic sheeting for carpet: removing	
Floor mats: fitting	
Cleanliness of vehicle interior: checking front and rear seats, interior trim, carpeting/mats, windows	
Fitting wheel covers/hub trim caps, roof aerial, telephone aerial (components stored in luggage compartment)	
Transport protection: removing protective edge strips on doors	
Cleanliness of vehicle exterior: checking paintwork, trims, windows, wiper blades	
Sticker for key number / ID number for electronic immobiliser on key tag: checking that numbers are legible and complete	
Audi sticker: entering next service (and date for brake fluid change). Affixing sticker to left side of dash panel or to door post (B-pillar)	⇒ page 7
Service Schedule: removing vehicle data sticker from spare wheel well or luggage compartment floor and sticking into Service Schedule under „Warranty entitlement record“. Entering Delivery Inspection.	
Owner's literature: checking that it is complete and preparing for handover to customer	
Road test	⇒ page 112

2.1 Delivery Inspection (service sticker)

The entry on the sticker stating whether LongLife Service or Inspection Service applies depends on the country of delivery
⇒ [page 8](#).

– Complete the sticker accordingly:

For vehicles with LongLife Service ⇒ [page 12](#)

For vehicles with Inspection Service ⇒ [page 18](#)



3 LongLife Service

Audi A4 from vehicle identification number 8DYA 000 001 onwards (vehicles from year 2000 onwards -Y-)



Note

The LongLife Service is activated at the factory for all vehicles delivered to the countries listed below.

- ◆ Belgium
- ◆ Denmark
- ◆ Germany
- ◆ Finland
- ◆ France
- ◆ Gibraltar
- ◆ Greece
- ◆ Great Britain
- ◆ Ireland
- ◆ Iceland
- ◆ Italy
- ◆ Canary Islands
- ◆ Luxembourg
- ◆ Malta
- ◆ Netherlands
- ◆ Norway
- ◆ Austria
- ◆ Portugal
- ◆ Sweden
- ◆ Switzerland/Liechtenstein
- ◆ Spain/Andorra
- ◆ Cyprus
- ◆ Japan (since August 2002)
- ◆ Czech Republic (since 2003)

3.1 Extended servicing intervals

- ◆ Vehicles with petrol engine/ turbocharged petrol engine: max. 30,000 km (19,000 miles) or max. 2 years, oil grade 2
- ◆ Vehicles with 4-cyl. diesel engine: max. 50,000 km (30,000 miles) or max. 2 years, oil grade 4
- ◆ Vehicles with 6-cyl. diesel engine: max. 35,000 km (21,000 miles) or max. 2 years, oil grade 3

The LongLife Service is not available for vehicles with 1.9 ltr. TDI engine (unit injector).

The oil grade must be entered in the instrument cluster.

LongLife engine oil

New VW standard (specially developed, resistant to ageing) according to specification:

- VW 503 00- Petrol engines / turbocharged petrol engines
- VW 503 01- Turbocharged petrol engines, 154 kW and above (only Audi S3, Audi TT, Audi RS 4 and Audi A6 2.7 ltr. biturbo)
- VW 506 00- Diesel engines (not unit injector)



Note

- ◆ *Vehicles with LongLife Service are already factory-filled with engine oil according to VW standard -503 00- (petrol engines/turbocharged petrol engines) or -503 01- (turbocharged petrol engines from 154 kW, only Audi S3, Audi TT, Audi RS 4 and Audi A6 2.7 ltr. biturbo) or -506 00- (diesel engines). The conditions for the LongLife Service with a maximum service interval of 2 years will only be met if this new engine oil is used at oil change and when topping up.*
- ◆ *In the case of vehicles with petrol engines and LongLife Service it is also possible to use oils which comply with -VW 500 00-, -VW 501 01- or -VW 502 00-, in the case of vehicles with diesel engines and LongLife Service it is also possible to use engine oils which comply with -VW 505 00- or -VW 505 01-. The Inspection Service will then apply. The service interval display must be programmed to 15,000 km (9,000 miles) / 12 months (oil grade 1).*

Do not use LongLife engine oils for vehicles up to and including model year 1999. Use only the originally specified engine oils on these vehicles.

Petrol engines: use engine oils according to specification - VW 500 00-, VW 501 01- or -VW 502 00-

Diesel engines: use engine oils according to specification -VW 505 00-, -VW 505 01-

3.2 LongLife Service

Perform LongLife Service according to service interval display (not later than 24 months after the previous Inspection Service).

The LongLife Service always includes an oil change and additional work.



Note

Vehicles from model year 2000 onwards with LongLife Service are already factory-filled with engine oil according to VW standard -503 00- (petrol engines/turbocharged petrol engines) or -503 01- (turbocharged petrol engines with 154 kW and above, only Audi S3, Audi TT and Audi RS 4) or -506 00- (diesel engines). If vehicles are not filled with one of these oils at the first service, the service intervals listed under Inspection Service apply.

Interval	Work to be completed	Page
according to service interval display	All work to be completed except for jobs marked "XX"	
every 60,000 km (38,000 miles)	All work to be completed including jobs marked "XX"	



Interval	Work to be completed	Page
every 60,000 km (38,000 miles)	In addition to LongLife Service: – Toothed belt: renewing, use repair kit (V6 2.7 ltr. engine ASJ, AZR)	⇒ page 82
every 90,000 km (57,000 miles)	In addition to LongLife Service: – Toothed belt and tensioning roller for camshaft drive: renewing (4-cyl. TDI engines)	⇒ page 82
every 120,000 km (76,000 miles) or after max. 5 years	In addition to LongLife Service: – Toothed belt and tensioning roller: renewing; checking water pump and renewing if necessary (V6 2.4 ltr. 5V petrol engines, up to model year 2000) – Toothed belt and tensioning roller: renewing (2.7 ltr. 5V petrol engines AGB, AZB), up to model year 2000 – Toothed belt and tensioning roller: renewing; checking water pump and renewing if necessary (2.8 ltr. 5V petrol engines), up to model year 2000	⇒ page 82 ⇒ page 82 ⇒ page 82
every 120,000 km (76,000 miles)	In addition to LongLife Service: – V-belt and poly V-belt: renewing (4-cyl. 5V engines) – Poly V-belt: renewing (4-cyl. 2V petrol engines) – Poly V-belt: renewing (V6 petrol engines) – Toothed belt: renewing (4-cyl. 5V 1.8 ltr. turbocharged petrol engines) – Toothed belt and tensioning roller: renewing (V6 2.4 ltr. 5V petrol engines, from model year 2001 onwards) – Toothed belt: renewing, use repair kit (V6 2.7 ltr. engines AGB, AZB from model year 2001 onwards) – Toothed belt and tensioning roller: renewing (2.8 ltr. 5V petrol engines, from model year 2001 onwards) – Toothed belt for camshaft drive and toothed belt for injection pump: renewing (V6 TDI engines) – Bearing bushes for poly V-belt tensioner: checking (V6 TDI engines)	⇒ page 74 ⇒ page 77 ⇒ page 79 ⇒ page 81 ⇒ page 82 ⇒ page 82 ⇒ page 82 ⇒ page 82 ⇒ page 83 ⇒ page 83
every 180,000 km (114,000 miles)	In addition to LongLife Service: – Toothed belt: renewing (4-cyl. 5V 1.8 ltr. petrol engines)	⇒ page 81
every 24 months	In addition to LongLife Service: – Brake fluid: changing	⇒ page 103
After 36 months, then every 24 months	Exhaust emissions test	

Work to be completed	Page
Electrical system	
Front lighting - checking operation: side lights, dipped headlights, main beam headlights, fog lights, turn signals, hazard warning lights	
Rear lighting - checking operation: brake lights (incl. 3rd brake light), rear lights, reversing lights, rear fog light, number plate lights, turn signals, hazard warning lights, luggage compartment light	
Interior lights and glove box lights, warning and indicator lamps, horn: checking operation	
Self-diagnosis: interrogating fault memory with fault reader - V.A.G 1551- or -VAS 5051-	⇒ page 27
Service interval display: resetting	⇒ page 36
Telematics: renewing emergency backup battery (every 4 years)	⇒ page 49
Vehicle, from outside	

Work to be completed		Page
	Rear lid hinges: lubricating	⇒ page 44
	Door arresters and lock cylinders: lubricating	⇒ page 45
	Sun roof: checking operation, cleaning guide rails and spraying with lubricating spray	⇒ page 46
	Windscreen wiper/washer system and headlight washer system: checking jet settings and operation	⇒ page 19
	Wiper blades: checking park position and checking for damage	⇒ page 21
	Tyres	
	Tyre on spare wheel: checking condition and wear pattern; entering tread depth	⇒ page 97
	Tyre (front left): checking condition and wear pattern; entering tread depth	⇒ page 97
	Tyre (rear left): checking condition and wear pattern; entering tread depth	⇒ page 97
	Tyre (rear right): checking condition and wear pattern; entering tread depth	⇒ page 97
	Tyre (front right): checking condition and wear pattern; entering tread depth	⇒ page 97
	Vehicle, from below:	
	Engine, gearbox, final drive, steering and boots: visual checks for leaks and damage	
	Engine oil: draining or extracting, changing oil filter	⇒ page 92
	Manual gearbox/final drive: checking oil level, topping up with oil if necessary	⇒ page 84
XX	Final drive (automatic gearbox): checking oil level, topping up with oil if necessary	⇒ page 90
	Brake system: visual check for leaks and damage	⇒ page 94
	Brake pads: checking thickness	⇒ page 95
	Underseal: visual check for damage	⇒ page 95
	Exhaust system: visual check for leaks and damage, check that parts are properly secured	
	Track rod ball joints: checking play, security and boots	⇒ page 95
	Swivel joints: checking boots for leaks and damage	
	Engine compartment	
	Engine (from above) and engine compartment: visual check for leaks and damage	⇒ page 55
	Engine oil: filling up	⇒ page 100
XX	Crankcase pressure: checking (V6 TDI engines) Not required on AFB engines from engine number -154 592- onwards Not required on AKN engines from engine number -031 890- onwards	⇒ page 56
	Battery: checking electrolyte level, topping up with distilled water if necessary	⇒ page 50
	Windscreen and headlight washer system: topping up with washer fluid	⇒ page 57
	Cooling system: checking antifreeze and coolant level / antifreeze specified value -25 °C; actual value (measured value):	⇒ page 57
XX	Hydraulic system: checking for leaks, checking hydraulic fluid level and topping up if necessary	⇒ page 65
XX	Air cleaner housing and snow strainer: cleaning; renewing filter element	⇒ page 60
XX	Spark plugs: renewing	⇒ page 61

Work to be completed		Page
	Fuel filter: renewing (6-cyl. TDI engines)	⇒ page 66
XX	Fuel filter: renewing (4-cyl. TDI engines)	⇒ page 66
	Dust and pollen filter: renewing	⇒ page 70
	Poly V-belt: renewing (according to mileage/km) - additional work	⇒ page 74
	Toothed belt for camshaft drive: checking for damage, checking tension, tensioning belt if necessary (V6 TDI engines) - additional work	⇒ page 80
	Toothed belt for injection pump: checking for damage, checking tension, tensioning belt if necessary (V6 TDI engines) - additional work	⇒ page 81
	Checking that toothed belt was renewed. If toothed belt was not renewed: renewing - additional work	
	Toothed belt: renewing (according to mileage/km) - additional work Use additional parts or repair kit if necessary	⇒ page 81
	Brake fluid: changing (every two years) - additional work - Note: Never remove strainer from brake fluid reservoir	⇒ page 103
	Final jobs	
	Tyre pressures on all 4 wheels and spare wheel: checking	⇒ page 98
	Headlights: checking settings and adjusting if necessary (ellipsoid headlights)	⇒ page 107
	Headlights: checking settings and adjusting if necessary (gaseous discharge headlight)	⇒ page 107
	Audi sticker: entering next service (and date for brake fluid change). Affixing sticker to left side of dash panel or to B-pillar	⇒ page 12
	Road test	⇒ page 112

3.2.1 LongLife Service (service sticker)

- On the sticker please tick the box: Next Service as shown in service interval display.
- Brake fluid Service: 24 months from current date.



Note

Note oil type used and entry of oil grade in instrument cluster.

Service Anzeige beachten!

Nächster Service Termin
nach Anzeige ☒ oder
Monat _____ Jahr _____
bei _____ km
je nachdem, was zuerst eintritt.
Nächster Bremsflüssigkeits Service
Monat _____ 08 Jahr _____ 2001

Hilfe rund um die Uhr
0800-283 44 45 33

A02-0255

4 Oil Change Service

OIL ⁷⁾	Work to be completed every 15,000 km (9,000 miles)	Only for vehicles travelling more than 15,000 km (9,000 miles) per year	Page
	Fuel filter: drain water (4-cyl. TDI engines up to and including model year 1999 -X-)		⇒ page 68
	Toothed belt for camshaft drive: checking for damage, measuring width of toothed belt (4-cyl. TDI engines up to and including model year 1999 -X-)		⇒ page 80
	Engine oil: draining or extracting, changing oil filter		⇒ page 92
	Brake pads: checking thickness of disc brake pads		⇒ page 95
	Engine oil: filling up		⇒ page 100
	Service interval display: resetting on models up to and including model year 1999 -X-		⇒ page 30
	Service interval display: resetting Inspection Service from model year 2000 onwards -Y-		⇒ page 42
	Audi sticker: entering next service (and date for brake fluid change) and affixing sticker to left side of dash panel or to door post (B-pillar)		⇒ page 13

7) Service due according to service interval display

4.1 Oil Change Service (service sticker)

Oil change service every 15,000 km (9,000 miles) or 12 months.
Inspection service every 30,000 km (19,000 miles).

- Month and year: 12 months from current date. Also enter mileage.
- Brake fluid Service: 24 months from current date.



Note

Note oil type used and entry of oil grade in instrument cluster.

Attach completed sticker to left of dash panel, on inside of door or on door post on driver's side of the vehicle (B-pillar).



The image shows an Audi service sticker. At the top, it says 'Service Anzeige beachten!' and 'Audi'. Below this, it asks for the 'Nächster Service Termin' (Next Service Term) and provides two options: 'nach Anzeige oder' (after display or) with a checkbox, and 'bei 15000 km je nachdem, was zuerst eintritt.' (at 15000 km depending on what happens first). It then asks for the 'Nächster Bremsflüssigkeits Service' (Next Brake Fluid Service) and provides a checkbox and a date field. At the bottom, it says 'Hilfe rund um die Uhr 0800-283 44 45 33' and 'A02-0257'.



5 Inspection Service

Inspection Service due according to service interval display (non-flexible)	Page
– Oil Change Service (every 12 months or every 15,000 km/9,000 miles)	⇒ page 13
– Inspection Service (every 30,000 km/19,000 miles, oil change and additional work are included)	⇒ page 14
– Brake fluid change every 2 years	⇒ page 103



Note

- ♦ For petrol engines use oils according to specification -VW 500 00-, -VW 501 01- or -VW 502 00- and for diesel engines oils according to specification -VW 505 00- or -VW 505 01-. The service interval display must then be programmed to non-flexible. (Oil grade 1)
- ♦ Only the Inspection Service is available (non-flexible) for vehicles with 1.9 ltr. TDI engine (unit injector). Use oil according to VW standard -505 01- on these engines.

Inspection ⁸⁾	Interval	Work to be completed	Page
In 1	every 12 months	All work to be completed, except for jobs marked "X/XX"	
In 1	every 12 months	In addition to Inspection Service „Work to be completed Audi A4 duo“ – Workshop Manual Audi A4 1995 duo; Booklet for duo service providers Edition 10.98; Work to be completed/description of work	
In 1	every 30,000 km (19,000 miles)	Jobs required every 12 months, including those marked with an X	
In 1	every 60,000 km (38,000 miles)	Jobs required every 12 months, including those marked with an X/XX	
In 1	every 60,000 km (38,000 miles)	In addition to Inspection Service: – Toothed belt and tensioning roller for camshaft drive: renewing (4-cyl. TDI engine AHH, up to and incl. model year 1999 -X-) – Toothed belt for camshaft drive: checking for damage (2.6 ltr. 2V engines and 2.8 ltr. 2V engines) – Toothed belt: renewing, use repair kit (V6 2.7 ltr. engine ASJ, AZR)	⇒ page 82 ⇒ page 79 ⇒ page 82
In 1	every 90,000 km (57,000 miles)	In addition to Inspection Service: – Toothed belt and tensioning roller for camshaft drive: renewing (4-cyl. TDI engines; except for engine AHH) – Toothed belt for camshaft drive: renewing (4-cyl. TDI engine AHH, from model year 2000 onwards -Y-)	⇒ page 82 ⇒ page 82

Inspection ⁸⁾	Interval	Work to be completed	Page
		– Toothed belt and tensioning roller for camshaft drive: renewing (4-cyl. TDI engines with unit injector)	⇒ page 82
In 1	every 120,000 km (76,000 miles) or after max. 5 years	In addition to Inspection Service: – Toothed belt: renewing, use repair kit (4-cyl. 5V 1.8 ltr. engines up to model year 1997 -V-) – Toothed belt: renewing (4-cyl. 5V 1.8 ltr. engines model year 1998 -W- and 1999 -X-) – Toothed belt: renewing, use repair kit (4-cyl. 5V 1.8 ltr. turbocharged engines up to model year 1999 -X-) – Toothed belt and tensioning roller: renewing; checking water pump and renewing if necessary (2.4 ltr. 5V V6 petrol engines up to model year 2000 -Y-) – Toothed belt and tensioning roller: renewing; checking water pump and renewing if necessary (2.8 ltr. 5V V6 petrol engines up to model year 2000 -Y-) – Toothed belt: renewing; checking water pump and renewing if necessary (V6 2.7 ltr. engines AGB, AZB up to model year 2000 -Y-)	⇒ page 81 ⇒ page 81 ⇒ page 81 ⇒ page 82 ⇒ page 82 ⇒ page 82
In 1	every 120,000 km (76,000 miles)	In addition to Inspection Service: – V-belt and poly V-belt: renewing (4-cyl. petrol engines ADP, ADR, AEB, AFY, AJL, ANB, APT, APU, ARG) – Poly V-belt: renewing (4-cyl. petrol engines AHL, ARM, ANA) – Poly V-belt: renewing (V6 petrol engines) – Toothed belt: renewing (4-cyl. 5V 1.8 ltr. turbocharged engines, from model year 2000 onwards -Y-) – Toothed belt and tensioning roller: renewing (2.4 ltr. 5V V6 petrol engines, from model year 2001 onwards -1-) – Toothed belt: renewing, use repair kit (V6 2.7 ltr. engines AGB, AZB, from model year 2001 onwards -1-) – Toothed belt and tensioning roller: renewing (2.8 ltr. 5V V6 petrol engines, from model year 2001 onwards -1-) – Toothed belt for camshaft drive and toothed belt for injection pump: renewing (V6 TDI engines) – Bearing bushes for poly V-belt tensioner: checking (V6 TDI engines)	⇒ page 74 ⇒ page 77 ⇒ page 79 ⇒ page 81 ⇒ page 82 ⇒ page 82 ⇒ page 82 ⇒ page 83 ⇒ page 83
In 1	every 180,000 km (114,000 miles)	In addition to Inspection Service: – Toothed belt for camshaft drive: renewing (4-cyl. 5V 1.8 ltr. engines, from model year 2000 onwards -Y-)	⇒ page 81

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of the data in this document. Copyright by AUDI AG.



Inspection ⁸⁾	Interval	Work to be completed	Page
In 1 ¹⁰⁾ In 2 ¹¹⁾	every 24 months	In addition to Inspection Service: – Brake fluid: changing	⇒ page 103
	After 36 months, then every 24 months	Exhaust emissions test	

8) Service due according to service interval display

9) Up to model year 1999 -X- every 60,000 km/38,000 miles; from model year 2000 onwards -Y- every 90,000 km/57,000 miles

10) From model year 1998 onwards

11) Up to model year 1997

12) From model year 2000 onwards -Y- every 180,000 km (114,000 miles) (except for turbocharged engines)

Work to be completed		Page
	Electrical system	
	Note: From model year 2000 onwards -Y- the Inspection Service, previously due every 12 months, is no longer required (HST, Chapter 6, Inspection and Maintenance) Perform oil change service. Perform Inspection Service after 30,000 km/19,000 miles or 2 years	
	Front lighting - checking operation: side lights, dipped headlights, main beam headlights, fog lights, turn signals, hazard warning lights	
	Rear lighting - checking operation: brake lights (incl. 3rd brake light), rear lights, reversing lights, rear fog light, number plate lights, turn signals, hazard warning lights, luggage compartment light	
	Interior lights and glove box lights, warning and indicator lamps, horn: checking operation	
	Self-diagnosis: interrogating fault memory with fault reader - V.A.G 1551- or -VAS 5051-	⇒ page 27
	Service interval display: resetting on models up to and including model year 1999 -X-	⇒ page 30
	Service interval display: resetting Inspection Service from model year 2000 onwards -Y-	⇒ page 42
	Telematics: renewing emergency backup battery (every 4 years) - additional work	⇒ page 49
	Vehicle, from outside	
	Door arresters and lock cylinders: lubricating	⇒ page 45
	Rear lid hinges: lubricating	⇒ page 44
X	Sun roof: checking operation, cleaning guide rails and spraying with lubricating spray	⇒ page 46
	Windscreen wiper/washer system and headlight washer system: checking jet settings and operation	⇒ page 19
	Wiper blades in park position: checking	⇒ page 21
	Only in the case of „juddering“ wiper blades: checking setting angle	⇒ page 21
	Wiper blades: checking for damage	
	Tyres	
	Tyre on spare wheel: checking condition and wear pattern; entering tread depth	⇒ page 97
	Tyre (front left): checking condition and wear pattern; entering tread depth	⇒ page 97

Work to be completed		Page
	Tyre (rear left): checking condition and wear pattern; entering tread depth	⇒ page 97
	Tyre (rear right): checking condition and wear pattern; entering tread depth	⇒ page 97
	Tyre (front right): checking condition and wear pattern; entering tread depth	⇒ page 97
	Vehicle, from below:	
	Engine, gearbox, final drive, steering and boots: visual checks for leaks and damage	
	Engine oil: draining or extracting, changing oil filter	⇒ page 92
X	Manual gearbox/final drive: checking oil level, topping up with oil if necessary	⇒ page 84
XX	Final drive (automatic gearbox): checking oil level, topping up with oil if necessary	⇒ page 90
	Brake system: visual check for leaks and damage	⇒ page 94
	Brake pads: checking thickness	⇒ page 95
X	Underseal: visual check for damage	⇒ page 95
	Exhaust system: visual check for leaks and damage, check that parts are properly secured	
	Track rod ball joints: checking play, security and boots	⇒ page 95
	Swivel joints: checking boots for leaks and damage	
	Engine compartment	
	Engine (from above) and engine compartment: visual check for leaks and damage	⇒ page 55
	Engine oil: filling up	⇒ page 100
XX	Crankcase pressure: checking (V6 TDI engines) Not required on AFB engines from engine number 154 592 on-wards Not required on AKN engines from engine number 031 890 on-wards	⇒ page 56
	Battery: checking electrolyte level, topping up with distilled water if necessary	⇒ page 50
	Windscreen and headlight washer system: topping up with washer fluid	⇒ page 57
	Cooling system: checking antifreeze and coolant level / anti-freeze specified value -25°C; actual value (measured value):	⇒ page 57
XX	Hydraulic system: checking for leaks, checking hydraulic fluid level and topping up if necessary	⇒ page 65
XX	Air cleaner housing and snow strainer: cleaning; renewing filter element	⇒ page 60
XX	Spark plugs: renewing	⇒ page 61
X	Fuel filter: renewing (6-cyl. TDI engines)	⇒ page 66
XX	Fuel filter: renewing (4-cyl. TDI engines)	⇒ page 66
X	Fuel filter: draining water (TDI engines up to and including model year 1999 -X-)	⇒ page 68
X	Dust and pollen filter: renewing	⇒ page 70
	Poly V-belt: renewing (according to mileage/km) - additional work	⇒ page 77
XX	Toothed belt for camshaft drive: checking for damage (2.6 ltr. 2V engines and 2.8 ltr. 2V engines)	⇒ page 79
	Toothed belt for camshaft drive: checking for damage, measuring width of toothed belt (4-cyl. TDI engines up to and including model year 1999 -X-)	⇒ page 80

Work to be completed		Page
X	Toothed belt for camshaft drive: checking for damage, checking tension, tensioning belt if necessary (V6 TDI engines) - additional work	⇒ page 80
X	Toothed belt for injection pump: checking for damage, checking tension, tensioning belt if necessary (V6 TDI engines) - additional work	⇒ page 81
	Toothed belt: renewing (according to mileage/km) - additional work Use additional parts or repair kit if necessary	⇒ page 81
	V-belt and poly V-belt: renewing (according to mileage) - additional work	⇒ page 74
	Checking that toothed belt was renewed. If toothed belt was not renewed: renewing - additional work	
	Brake fluid level (depends on brake pad wear): checking	⇒ page 102
	Brake fluid: changing (every two years) - additional work - Note: Never remove strainer from brake fluid reservoir	⇒ page 103
	Final jobs	
	Tyre pressures on all 4 wheels and spare wheel: checking	⇒ page 98
X	Headlights: checking settings and adjusting if necessary (ellipsoid headlights)	⇒ page 107
X	Headlights: checking settings and adjusting if necessary (gaseous discharge headlight)	⇒ page 107
	Audi sticker: entering next service (and date for brake fluid change). Affixing sticker to left side of dash panel or to door post (B-pillar)	⇒ page 18
	Road test	⇒ page 112

5.1 Inspection Service (service sticker)

Oil change service every 15,000 km (9,000 miles) or 12 months.
Inspection service every 30,000 km (19,000 miles).

- Month and year: 12 months from current date. Also enter mileage.
- Brake fluid Service: 24 months from current date.



Note

Note oil type used and entry of oil grade in instrument cluster.

Attach completed sticker to left of dash panel, on inside of door or on door post on driver's side of the vehicle (B-pillar).

Service Anzeige
beachten!

Nächster Service Termin

nach Anzeige ☐
oder

Monat: 08 Jahr: 2000

bei 15000 km
je nachdem, was zuerst eintritt.

Nächster
Bremsflüssigkeits Service

Monat: 08 Jahr: 2001

Hilfe rund um die Uhr
0800-283 44 45 33

A02-0257

6 Description of work

6.1 Switches, electrical equipment, displays and other driver-operated controls: checking operation

- The following components must be checked:
 - ◆ Lighting, headlights, fog lights, turn signals, hazard warning lights, rear lights, rear fog light, reversing lights, brake lights, parking light function
 - ◆ Interior lights and reading lights (automatic switch-off function for interior lights), glove box lighting, ashtray light, luggage compartment lighting, ignition key light
 - ◆ Warning buzzer indicating that lights and/or radio have been left on
 - ◆ All switches on console
 - ◆ Driver Information System (DIS)
 - ◆ Instrument cluster including all displays, counters, lights and illumination
 - ◆ Dual-tone horn
 - ◆ Windscreen wiper and washer system, headlight washer system
 - ◆ Cigarette lighter
 - ◆ Electric exterior mirrors (heated, adjustable)
 - ◆ Electric window regulators
 - ◆ Sliding/tilting sunroof (electric)
 - ◆ Central locking, remote control (radio-operated), convenience close function
 - ◆ Electric seat adjustment
 - ◆ Seat heating
 - ◆ Radio

6.2 Windscreen wiper/washer system and headlight washer system: checking jet settings and operation



Note

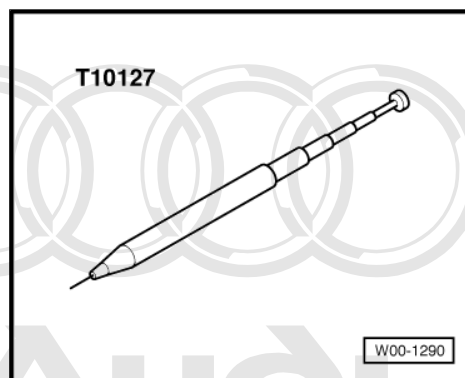
If the functional check shows that the wiper blades judder or make noises, check wiper blade setting angle [→ page 21](#).

Audi AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.2.1 Windscreen wiper/washer system: checking jet settings, adjusting jets if necessary

Special tools and workshop equipment required

- ◆ Washer jet adjusting tool -T10127- fitted with needle -3125 / 5A-



Note

Never use pins or other sharp objects as these will damage the water channels in the jet.

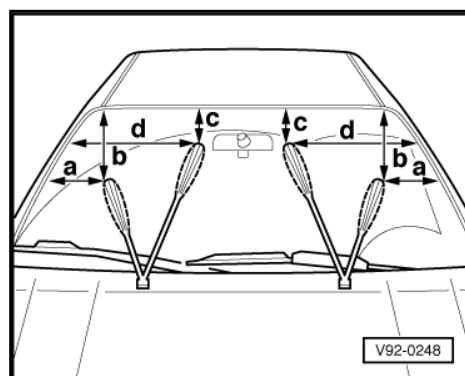
Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Windscreen washer jet settings

- Mark the four points on the glass using a water-soluble marker pen.

Setting dimensions:

- ◆ Distance a = 230 ± 50 mm
- ◆ Distance b = 510 ± 50 mm
- ◆ Distance c = 290 ± 50 mm
- ◆ Distance d = 470 ± 50 mm



Note

The setting dimensions refer to the distance from the outer edges of the windscreen.

- Use the adjusting tool -T10127- with needle -3125 / 5A- to aim the individual jets at the points marked.

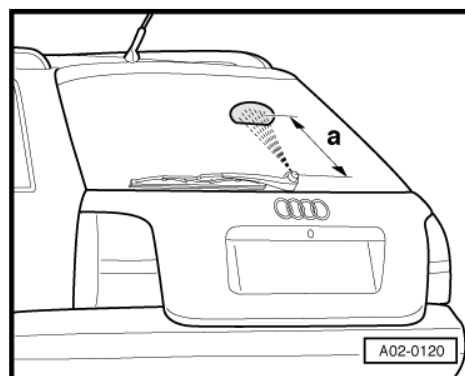


Note

If the jet of water is irregular or cannot be adjusted to the specified setting, renew the spray jet (repair measure).

Rear window washer jet setting

- Use adjusting tool -T10127- to adjust the spray jet so that the water is directed onto the rear window at distance a = 280 mm above the wiper shaft.



6.2.2 Headlight washer system: checking jet settings

The headlight washer jets are set by the manufacturer and therefore do not need to be adjusted.

6.3 Wiper blades: checking park position and checking for damage

Special tools and workshop equipment required

- ◆ Wiper arm setting tool -3358-

6.3.1 Park position for windscreen wiper blades

- Switch windscreen wipers on and off and let them return to their park position.
- Check that the wiper blades are in the correct position on the windscreen (marked -1-).

- ◆ Distance a = 25 mm

- ◆ Distance b = 12 mm

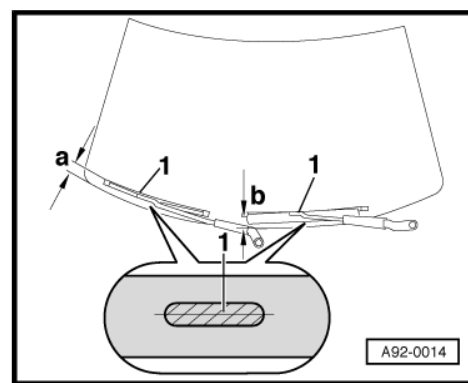


Note

The layout is symmetrically opposite for right-hand drive vehicles.

- If necessary, loosen the wiper arm, align and tighten securing nut.
- Actuate touch-wipe switch and check settings.

Tightening torque	Nm
Wiper arms to wiper shafts	16



6.3.2 Park position for rear window wiper blade

- Switch rear window wiper on and off and let it return to its park position.
- Make sure that the end of the wiper blade is between the first two filaments of the rear window heating element.
- If necessary, loosen the wiper arm, align and tighten securing nut.

Tightening torque	Nm
Wiper blade to wiper shaft	16

6.3.3 Setting angle of front wiper blades



Note

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability for errors or omissions in this document. Copyright by AUDI AG.

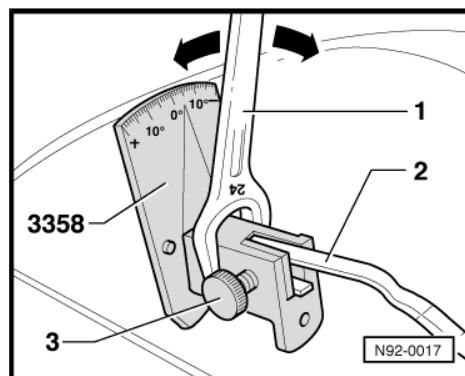
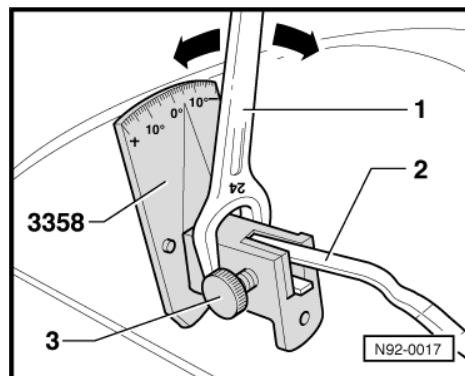
Only check the setting angle if the wiper blades judder or make noises.

- Switch windscreen wipers on and off and let them return to their park position.
- Remove wiper blade.

- Insert wiper arm -2- into wiper arm setting tool -3358- and secure with locking screw -3-.
- Compare angle indicated to value specified in table.

Setting angle (specifications)	
Driver's side	- 3°
Passenger's side	- 3°
Tolerance	± 0°

- If necessary, adjust the setting angle to the specified value as follows:
- Apply open-end spanner (24 mm) -1- to setting tool and adjust wiper arm -2- to specified value -arrows-.
- Release wiper arm -2- from setting tool and then re-secure with locking screw -3-.
- Check that value is set according to the table. If necessary, repeat setting and checking procedure until setting angle meets specification.
- Remove setting tool and fit wiper blade.
- Check wiper system operates without juddering.



6.3.4 Setting angle of rear wiper blade



Note

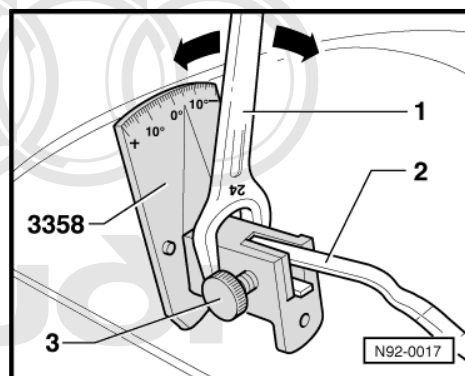
Only check the setting angle if the wiper blade judders or makes noises.

Checking setting angle

- Move wiper arms into park position.
- Remove wiper blade.
- Insert wiper arm -2- into wiper arm setting device -3358- and secure with locking screw -3-.
- Compare angle indicated to value specified in table.

Setting angle: Audi A4	
	0°
Tolerance	+2°

Adjusting wiper blade ⇒ [page 22](#)



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability for the completeness or correctness of the information in this document. Copyright by AUDI AG.

6.4 Electric windows: checking positions

The electric window regulators „forget“ their current positions and the automatic open/close function when the battery is disconnected.

Activate the automatic open/close function as follows:

- Switch on ignition.

- Close the windows all the way to their top positions using the window switches.
- Then operate all window switches again for at least one second in the „close“ direction to activate the automatic one-touch function.
- Press switch to open window. The side window should move all the way down automatically.

6.5 Clock: setting

To set the clock, use the instrument lighting dimmer switch (located at bottom right of the rev counter).

- Pull the adjuster knob out briefly to advance the minute hand one minute at a time.
- If the adjuster knob is pulled out and held, both hands will advance slowly at first and then more quickly.

6.5.1 Radio-controlled clock (from model year 2000 onwards)



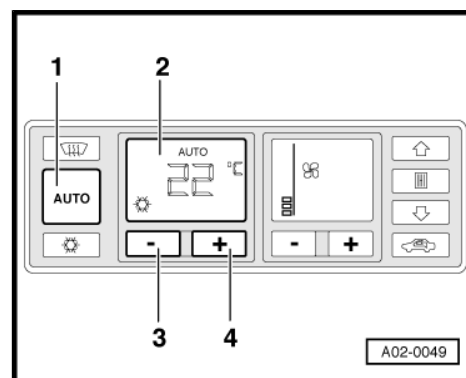
Note

The clock can function as a radio-controlled quartz clock or as a normal quartz clock.

If the radio-controlled clock receives a valid radio signal it will automatically switch to the operating mode „radio-controlled quartz clock“. The signal reception symbol (radio tower with radio waves) will then be shown in the display. If the clock does not receive a valid signal it will automatically switch to the „quartz clock“ mode after three days; the signal reception symbol will then disappear.

6.6 Air conditioner: checking operation and setting temperature to 22 °C

- Check all air conditioner functions: ⇒ Owner's Manual
- Check whether display zone -2- is set to 22 °C.
- If necessary, adjust the temperature setting as follows:
- Press button -1- for automatic operation. „AUTO“ will appear in the display -2-.
- Set temperature to 22 °C by pressing button -3- to reduce or button -4- to increase temperature accordingly.



6.7 Radio / Navigation System Plus (chorus, concert, symphony): deactivating transport mode

Special tools and workshop equipment required

- ◆ Vehicle diagnostic, testing and information system -VAS 5051-

Transport mode for the aforementioned radios was activated on vehicles built from week 18 onwards (gradual introduction).

The calendar week in which the vehicle was built is shown in the seven-digit production control number on the vehicle data sticker (see end of line „2“). The first two digits of the production control number „arrow“ indicate the week.

 Note

Transport mode may have been activated in „dash panel insert 17“ and „Radio 56“.

- To deactivate the transport mode (e.g. in dash panel insert 17) follow the instructions shown below.

To deactivate the transport mode in Radio 56 follow the same procedure.

- ◆ Connecting vehicle diagnostic, testing and information system -VAS 5051-
- Switch on ignition.

Indicated on display:

Selecting operating mode:

- Press button for Vehicle self-diagnosis on display.

 Note

*If the display does not coincide with the work sequence shown:
⇒ Operating instructions for Vehicle Diagnostic, Testing and Information System VAS 5051.*

Indicated on display:

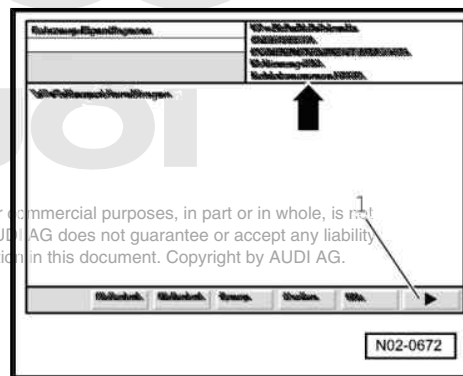
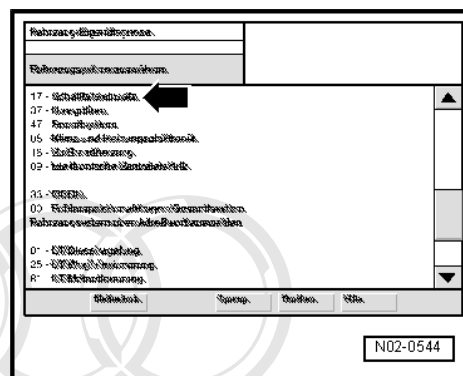
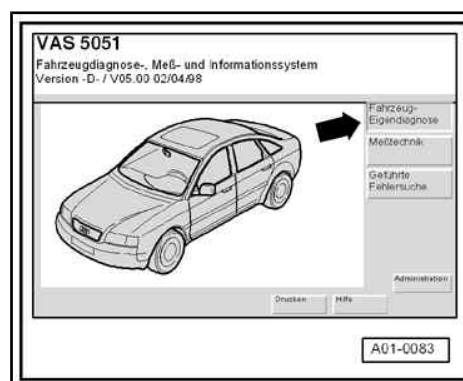
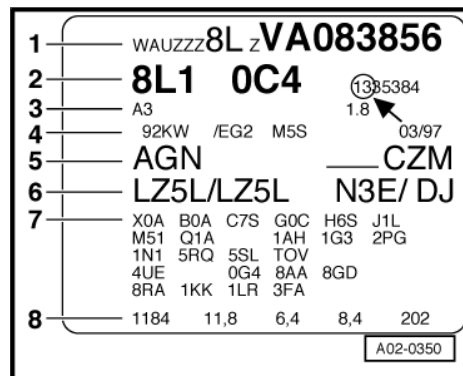
Selecting vehicle system:

- Press „17 - Dash panel insert“ on display -arrow-.

Indicated on display:

The control unit identification and coding are displayed -arrow-.

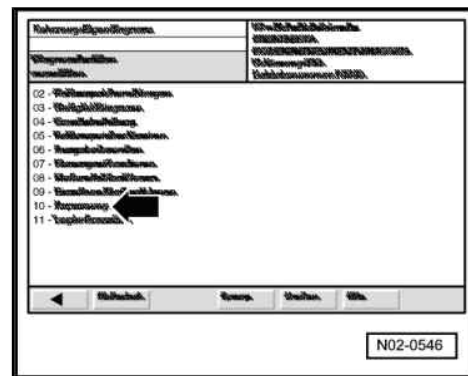
- Press arrow button -1- on the display.



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Indicated on display:

- Press „10 - Adaption“ on display -arrow-.

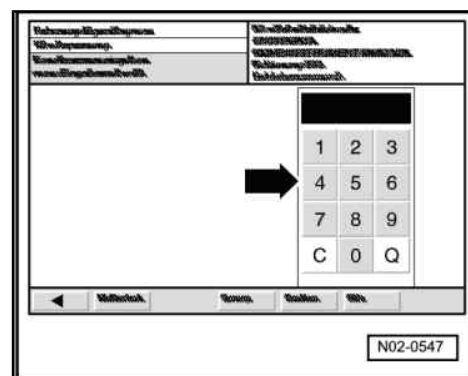


Indicated on display:

- On the number block of the display -arrow- press key [9] twice.

The transport mode is activated or deactivated in adaption channel 99

- Press [Q] key on display number block to confirm entry.



Note

- ◆ „0“ transport mode off
- ◆ „1“ transport mode on

Indicated on display:

- Move the cursor -arrow- on the display to the left until „0“ is displayed above the scroll bar -1-.

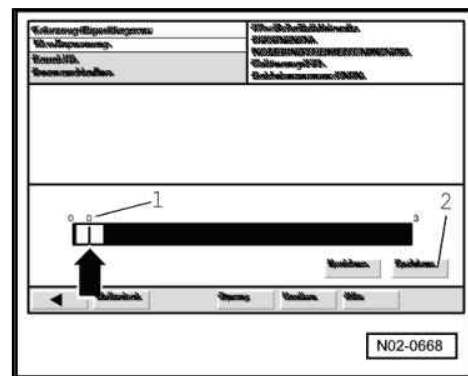
permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.



Note

„0“ transport mode off

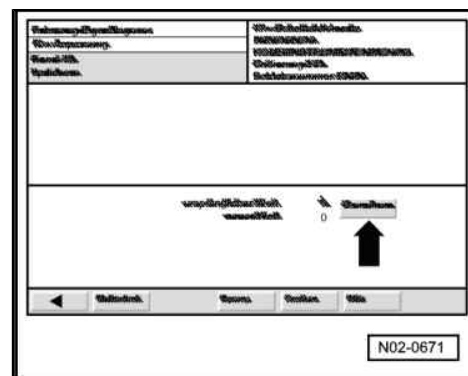
- Press [Save] button -2- on the display.



Indicated on display:

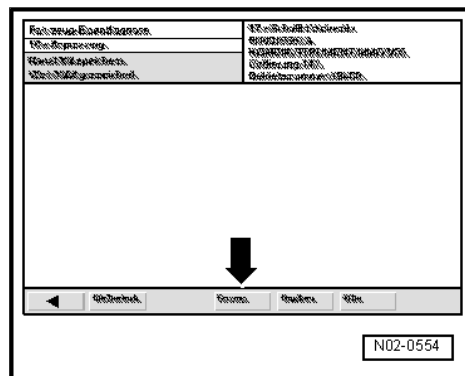
- Press [Transfer] button on display -arrow-.

Ending output:



Indicated on display:

- Press **Go to** button on display -arrow-.



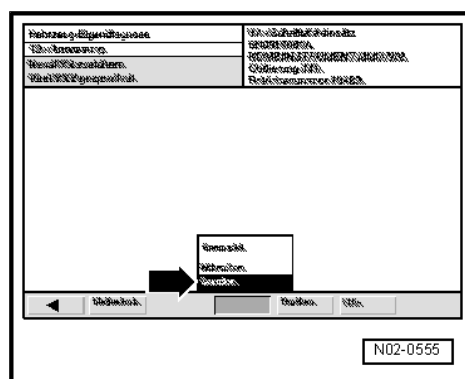
Indicated on display:

- Press **Exit** button on display -arrow-.
- Press **Exit** button in the Exit menu.
- Switch off ignition.



Note

The -VAS 5051- must remain connected for various checks and for carrying out the exhaust emissions test (if required).



6.8 Radio or Navigation System Plus: activating anti-theft coding by entering fixed code number

The radio units are supplied with a fixed code. This means that each radio unit with anti-theft coding is programmed with its own code number. The fixed code is not activated by the factory.

The security coding of the ready-to-use unit is only activated by entering the fixed code.

- Radio „beta“, „gamma“, „delta“ ⇒ [page 26](#)
- „chorus“, „concert“, „symphony“ radios ⇒ [page 26](#)
- Navigation System Plus ⇒ [page 27](#)

Activate the fixed code as follows:

- Switch on radio or navigation unit.

Radio „beta“, „gamma“, „delta“:

- Press buttons **DX** and **FM** simultaneously until „1000“ appears in the digital display. Release the buttons.
- Use radio station buttons **1** to **4** to enter the code number which appears on the adhesive radio code card. Button **1** is used to enter the first digit of the code number, button **2** for the second digit, and so on.
- Then press buttons **DX** and **FM** simultaneously again and hold down until „SAFE“ appears on the frequency display. Release the buttons. After a brief delay a frequency will appear automatically.

„chorus“, „concert“, „symphony“ radios:

- Press buttons **TP** and **RDS** simultaneously until „1000“ appears in the digital display. Release the buttons.

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

- Use radio station buttons [1] to [4] to enter the code number which appears on the adhesive radio code card. Button [1] is used to enter the first digit of the code number, button [2] for the second digit, and so on.
- Then press buttons [TP] and [RDS] simultaneously again and hold down until „SAFE“ appears on the frequency display. Release the buttons. After a brief delay a frequency will appear automatically.

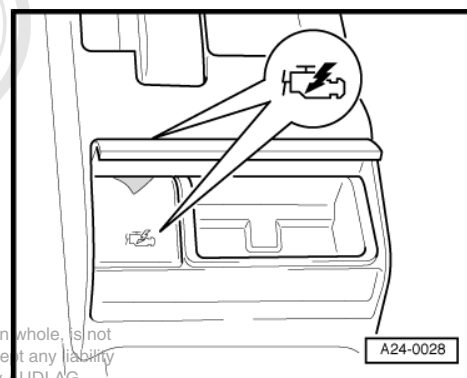
Navigation System Plus:

- Press [NAVIGATION] and [DISPLAY] buttons simultaneously and keep them pressed until the „code input mask“ appears. Release the buttons.
- Turn the rotary pushbutton to highlight the digits of the code number one after the other and confirm each digit by pressing the rotary pushbutton. The digits are entered in the 4 number zones below. The code number is attached to the device information card (operating instructions).
- Use the rotary pushbutton to highlight the „OK“ option and confirm by pressing the button. Once input has been successfully completed the unit will switch to its normal operating status.

6.9 Self-diagnosis: interrogating fault memory with fault reader -V.A.G 1551-

6.9.1 Connecting fault reader -V.A.G 1551-

- Apply the handbrake.
- On vehicles with automatic gearbox move selector lever into position „P“.
- Open rear ashtray (in centre console) and remove cover for diagnostic connector by pulling towards rear of vehicle.



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG

- Connect fault reader -V.A.G 1551- with lead -V.A.G 1551/3- (ignition must be switched off).
- Switch on printer with **PRINT** button (indicator lamp in button lights up).

Indicated on display ¹³⁾:

V.A.G - SELF-DIAGNOSIS 1 - Rapid data transfer	HELP
---	------

V.A.G - SELF-DIAGNOSIS 2 - Flash code output	HELP
---	------

13) Appears alternately

- Enter „1“ for „Rapid data transfer“.

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.9.2 Interrogating fault memory:

- Start engine and run at idling speed.
- Briefly press brake pedal once.
- Enter „00“ for address word „Automatic test sequence“ and confirm entry with **Q** key. The -V.A.G 1551- sends all known address words one after the other.

When a control unit responds stating its identification the display will show the number of stored faults or „No fault recognised“.

Any system faults that are stored will be displayed one after the other and printed out. The -V.A.G 1551- will then transmit the next address word.

The automatic test sequence is completed when the following is indicated on the display: ¹⁴⁾

14) Appears alternately

- Switch off ignition.

If faults have been stored these must be rectified. The fault log is required for the repair work.



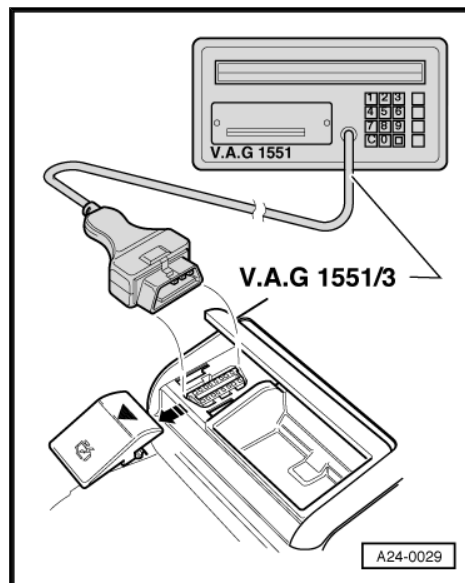
Note

The -V.A.G 1551- must remain connected for resetting the service interval display and carrying out the exhaust emissions test (if required).

6.10 Instrument cluster: setting the language

When a car is delivered to the customer, the multifunction monitor display can be set to any of the following languages as required:

- ◆ German
- ◆ English
- ◆ French
- ◆ Italian



V.A.G - SELF-DIAGNOSIS 1 - Rapid data transfer	HELP
---	------

V.A.G - SELF-DIAGNOSIS 2 - Flash code output	HELP
---	------

- ◆ Spanish
- ◆ Portuguese

Cars are delivered by the factory with the multifunction monitor set to German.

- To change the language proceed as follows:
- Connect -V.A.G 1551- => [page 27](#) .
- Switch on ignition.
- Press **[1]** for „Rapid data transfer“ mode.
- Press key **[1]** and **[7]** for address word „dash panel insert“ and confirm entry with key **[Q]**.
- Press **[Q]** key twice to continue.
- Press key **[1]** and **[0]** for function „Adaption“ and confirm entry with key **[Q]**.
- Press key **[0]** and **[4]** to select „Adaption channel 04“ and confirm entry with key **[Q]**.

Indicated on display:

Channel 4	Adaption	2	->
		-	↑ - ↓ -

- Press **[Q]** key to continue.

Indicated on display:

Channel 4	Adaption	2	Q
Enter adaption value XXXXX			

- Select desired language according to the following table

Language version	Code
German	00001
English	00002
French	00003
Italian	00004
Spanish	00005
Portuguese	00006



Note

- ◆ The first four digits must be „0“.
- ◆ If an incorrect value is entered the function „Adaption“ will be terminated automatically and must be restarted!

Example:

- Press key **[0]** four times and key **[1]** once.

Indicated on display:

Channel 4	Adaption	2	Q
Enter adaption value 00001			

- Confirm entry with **[Q]** key.

Indicated on display:

Channel 4	Adaption	1	Q
		-	↑ - ↓ -

- Confirm entry with **[Q]** key.

Indicated on display:

Channel 4	Adaption	1	Q
Store changed value?			

- Confirm entry with **[Q]** key.

Indicated on display:

- Complete adaption of language version by pressing  key.

Indicated on display:

Channel 4	Adaption	1	->
Changed value is stored			

Rapid data transfer	HELP
Select function XX	

6.11 Service interval display: resetting

6.11.1 Vehicles to 1997



Note

*Service interval display: resetting for vehicles from 1998 onwards
⇒ [page 33](#).*

The service interval display must be reset as part of the Delivery Inspection and also after each Oil Change or Inspection Service using fault reader -V.A.G 1551- .

When a service is due, this will be indicated in the trip recorder display once the ignition is switched on. The display will continue flashing for up to 60 seconds after starting the engine.

Display	Type of service due
OIL	Oil Change Service
In 1	Inspection Service
In 2	Inspection Service with additional work

The service interval display will appear 1,000 km or 10 days before the next service is due.

- Connect -V.A.G 1551- ⇒ [page 27](#) .
- Switch on ignition.

Indicated on display:¹⁵⁾

V.A.G - SELF-DIAGNOSIS	HELP
1 - Rapid data transfer	

V.A.G - SELF-DIAGNOSIS	HELP
2 - Flash code output	

15) Appears alternately

- Enter „1“ for „Rapid data transfer“.

Indicated on display:

Rapid data transfer	HELP
Enter address word XX	

- Enter „17“ to select the address word „Dash panel insert“ and confirm entry with  key.

Indicated on display (example):

8D0919033F B5 Dash panel insert D04	->
Coding 00042	WSC 12345



Note

For vehicles with Vehicle Identification Nos. up to 8DSA 008 750 and VDO dash panel inserts with software version „D01“, use the procedure described on Page ⇒ [page 33](#) .

- Press  key to continue.

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

- Enter „10“ to select the function „Adaption“ and confirm entry with  key.

Indicated on display:

Adaption Enter channel no. XX	
----------------------------------	---

- Enter the required adaption channel according to the following table.

Type of service being performed	Type of service to be cancelled	Adaption channel	Code to be entered
Delivery Inspection	OIL	05	00015
	In 1 (distance)	06	00030
	In 1 (time)	07	00036
	In 2	08	00073
OIL	OIL	05	00015
In 1	OIL	05	00015
	In 1 (distance)	06	00030
	In 1 (time)	07	00036
In 2	OIL	05	00015
	In 1 (distance)	06	00030
	In 1 (time)	07	00036
	In 2	08	00073

Resetting service interval display in adaption channel 05 (OIL):

- Enter „05“ to select „Adaption channel 05“ and confirm entry with  key.

Indicated on display:

The figure displayed indicates the number of kilometres remaining until the OIL Service is due (e.g. „1“ for 1000 km).

- Press  key.

Indicated on display:

Channel 5	Adaption	1	->
		(- 1	3-)

Channel 5	Adaption	1	
Enter adaption value XXXXX			

- Enter „00015“ for „15,000 km until next OIL service“ and confirm with  key.



Note

Always enter the distance in kilometres even for vehicles that are calibrated for miles.

Indicated on display:

Channel 5	Adaption	15	
		(-1	3-)

- Confirm entry with  key.

Indicated on display:

Channel 5	Adaption	15	
Store changed value?			

- Confirm entry with  key.

Indicated on display:

Channel 5	Adaption	15	->
Changed value is stored			

- Press  key to complete resetting procedure for service interval display in „adaption channel 05“.

Resetting service interval display in adaption channel 06 (In 1):

- Enter „06“ to select „Adaption channel 06“ and confirm entry with  key.

Indicated on display:

The figure displayed indicates the number of kilometres remaining until the Inspection Service 1 is due (e.g. „1“ for 1000 km).

- Press  key.

Indicated on display:

- Enter „00030“ for „30,000 km until next Inspection Service 1“ and confirm with  key.



Note

Always enter the distance in kilometres even for vehicles that are calibrated for miles.

Indicated on display:

- Confirm entry with  key.

Indicated on display:

- Confirm entry with  key.

Indicated on display:

- Press  key to complete resetting procedure for service interval display in „adaption channel 06“.

Resetting service interval display in adaption channel 07 (In 1):

- Enter „07“ to select „Adaption channel 07“ and confirm entry with  key.

Indicated on display:

The figure displayed indicates the number of days remaining until the Inspection Service 1 is due (e.g. „1“ for 10 days).

- Press  key.

Indicated on display:

- Enter „0036“ for „365 days until next Inspection Service 1“ and confirm with  key.

Indicated on display:

- Confirm entry with  key.

Indicated on display:

- Confirm entry with  key.

Indicated on display:

- Press  key to complete resetting procedure for service interval display in „adaption channel 07“.

Channel 6	Adaption	1	->
		(-1	3-)

Channel 6	Adaption	1	Q
Enter adaption value	XXXXX		

Channel 6	Adaption	30	Q
		(-1	3-)

Channel 6	Adaption	30	Q
Store changed value?			

Channel 6	Adaption	30	->
Changed value is stored			

Channel 7	Adaption	1	->
		(-1	3-)

Channel 7	Adaption	1	Q
Enter adaption value	XXXXX		

Channel 7	Adaption	36	Q
		(-1	3-)

Channel 7	Adaption	36	Q
Store changed value?			

Channel 7	Adaption	36	->
Changed value is stored			

Resetting service interval display in adaption channel 08 (In 2):

- Enter „08“ to select „Adaption channel 08“ and confirm entry with  key.

Indicated on display:

Channel 8	Adaption	12	->
		(-1	3-)

The figure displayed indicates the number of days remaining until the Inspection Service 2 is due (e.g. „12“ for 120 days).

- Press  key.

Indicated on display:

Channel 8	Adaption	12	Q
Enter adaption value XXXXX			

- Enter „00073“ for „730 days until next Inspection Service 2“ and confirm with  key.

Indicated on display:

Channel 8	Adaption	73	Q
		(-1	3-)

- Confirm entry with  key.

Indicated on display:

Channel 8	Adaption	73	Q
Store changed value?			

- Confirm entry with  key.

Indicated on display:

Channel 8	Adaption	73	->
Changed value is stored			

- Press  key to complete resetting procedure for service interval display in „adaption channel 08“.

Different procedure for vehicles with Vehicle Identification Nos. up to 8DSA 008 750 and VDO dash panel inserts with software version „D01“

Some dash panel inserts have been found to have a software fault which makes it impossible to reset the service interval display using the procedure described above. For vehicles on which the dash panel insert has not already been replaced there is therefore a different resetting procedure for the service interval display.

How to identify the vehicles affected:

- ◆ VDO dash panel inserts: the manufacturer's code „VDO“ is on the bottom of the dash panel insert in the centre.
- ◆ Control unit identification with software version „D01“.

8D0919033C B5 Dash panel insert D01 ->
Coding 00042 WSC 12345

- ◆ Sticker on diagnostic connector: „Before adjusting service interval display, see HST Inspection and Maintenance, Section 0.2“.

Type of service to be cancelled	Adaption channel	Code to be entered
OIL	05	00075
In 1 (distance)	06	00150
In 1 (time)	07	00073
In 2	08	00146

- Re-attach sticker to diagnostic connector.

6.11.2 Resetting service interval display: vehicles from model year 1998 onwards

The service interval display must be reset during the Delivery Inspection and also after each Oil Change or Inspection Service.

Delivery Inspection

The service interval display can be reset using one of two methods:

- ◆ Using the adjustment buttons for the trip recorder and clock on the dash panel insert

– Reset „serviceOIL“ and „serviceINSP“ ⇒ [page 35](#) .

or

- ◆ With fault reader -V.A.G 1551/1552-

– Select adaption channel 02 and enter adaption value „00000“ ⇒ [page 34](#) .

Oil Change Service or Inspection Service

When a service is due, this will be indicated in the trip recorder display once the ignition is switched on. The display will continue flashing for up to 60 seconds after starting the engine.

Language version		Type of
German	Other languages	Service due
serviceOIL	serviceOIL	Oil Change Service
serviceINSP	serviceINSP	Inspection Service

The service interval display will appear 1,000 km or 10 days before the next service is due.

6.11.3 Service interval display: resetting using -V.A.G 1551/1552-

– Connect -V.A.G 1551- ⇒ [page 27](#) .

– Switch on ignition.

Indicated on display:¹⁶⁾

V.A.G - SELF-DIAGNOSIS 1 - Rapid data transfer	HELP
---	------

V.A.G - SELF-DIAGNOSIS 2 - Flash code output	HELP
---	------

16) Appears alternately

– Enter „1“ for „Rapid data transfer“.

Indicated on display:

Rapid data transfer Enter address word XX	HELP
--	------

– Enter „17“ to select the address word „Dash panel insert“ and confirm entry with  key.

Indicated on display (example):

8D0919860G B5 Dash pnl insert VDO D09 - > Coding 00042	WSC 12345
---	-----------

– Press  key twice.

– Enter „10“ to select the function „Adaption“ and confirm entry with  key.

Indicated on display:

Adaption Enter channel no. XX

– Enter „02“ to select „Adaption channel 02“ and confirm entry with  key.

Indicated on display:

The service setting is displayed; in this example it is 11

Channel 2	Adaption	11	->
		- 1 - 1 -	

0 - means that no service is due

1 - means that an Oil Change Service is due

10 - means that an Inspection Service is due

11 - means that an Oil Change Service and Inspection Service is due

– Press  key.

Indicated on display:

Channel 2	Adaption	11	Q
Enter adaption value XXXXX			

– After completing the service enter the adaption value as follows:

Adaption value	Service completed
00000	Delivery Inspection
00000	serviceOIL and serviceINSP
00010	serviceOIL
00001	serviceINSP

Example:

– Enter „00000“.

Indicated on display (example):

Channel 2	Adaption	11	Q
Enter adaption value 00000			

– Confirm entry with  key.

Indicated on display:

Channel 2	Adaption	0	Q
- ↑ - ↓ -			

– Confirm entry with  key.

Indicated on display:

Channel 2	Adaption	0	Q
Store changed value?			

– Confirm entry with  key.

Indicated on display:

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright © 2012 Audi AG

Channel 2	Adaption	0	->
Changed value is stored			

– Terminate resetting of service interval display by pressing the  key.

Indicated on display:

Rapid data transfer			HELP
Select function XX			

6.11.4 Resetting service interval display with the adjuster buttons for trip recorder and clock

– Switch off ignition.

- Press the reset button for the trip recorder -2- on the dash panel insert and at the same time switch on the ignition.

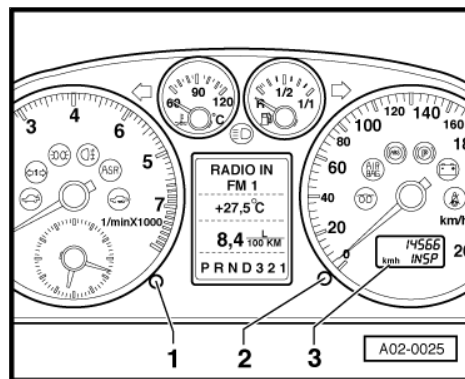
The display of trip recorder -3- shows: „serviceOIL“.

- Release the button.
- Pull out clock adjuster knob -1- in dash panel insert for approx. 2 seconds to reset „serviceOIL“.



Note

Depending on manufacturer of dash panel insert the trip recorder display will either continue to show „serviceOIL“ (Nippon Seiki) or it will display „- - -“ (VDO).



- Press the reset button for the trip recorder -2- again to call up the next type of service.
- Release the button.

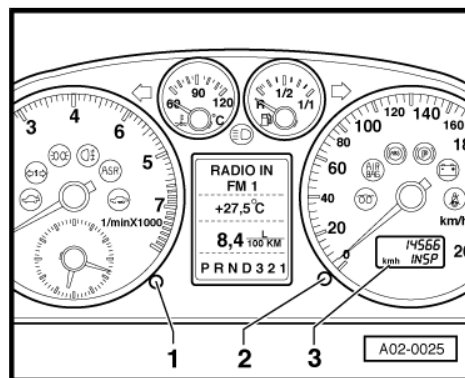
The display of trip recorder -3- shows: „serviceINSP“.

- Pull out clock adjuster knob -1- in dash panel insert for approx. 2 seconds to reset „serviceINSP“.



Note

Depending on manufacturer of dash panel insert the trip recorder display will either continue to show „serviceOIL“ (Nippon Seiki) or it will display „- - -“ (VDO).



- Switch off ignition.

6.12 Service interval display: resetting Long-Life Service

Resetting the service interval display after completing a service for Audi A4 from vehicle identification number 8DYA 000 001 onwards



Note

If resetting is performed without -V.A.G 1551/1552- or -VAS 5051-, this will automatically set fixed intervals for servicing.

Indicated on display:

- Press keys **[1]** and **[0]** and confirm entry with key **[Q]**.

Indicated on display:

- Confirm entry with **[Q]** key.

Indicated on display:

- Press keys **[0]** and **[2]**.
- Confirm entry with **[Q]** key.

Rapid data transfer
Select function XX

HELP

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the accuracy of the information in this document. Copyright © by AUDI AG.

Rapid data transfer
10 - Adaption

Adaption
Enter channel no. XX

 Note

- ◆ The service interval display serves to remind the driver that a service is due. It is shown in the centre display.
- ◆ The service reminder will first appear 1 month or 2,000 km before the next service is due. The display changes at intervals of 100 km. Example: after covering a total mileage of 28,700 km the display will show „SERVICE IN 1300 km“.
- ◆ The remaining mileage to the service can be called up via the menu in the centre display by pressing the clock reset button once.
- ◆ Once a service is due, an appropriate text message will be shown in the centre display for about 5 seconds when the ignition is switched on. It is displayed after the automatic gearbox info and after entering a destination in the navigation system (if applicable). Display shows: „SERVICE!“.

Indicated on the display:

Channel 2	Adaption	1	->
		(-1	3-)

The service setting is displayed

1 - means that Service is active, i.e. the instrument cluster display shows „SERVICE!“.

 Note

The service interval display must only be reset by direct numerical input.

- Press  key.

Indicated on display:

Channel 2	Adaption	1	
Enter adaption value	XXXXX		

The service is reset by entering the following adaption value:

Adaption value	Service setting
00000	Resetting

- Use the keypad to enter the correct adaption value -00000- to delete the service.
- Press key  five times.

Indicated on display:

Channel 2	Adaption	1	Q
Enter adaption value	00000		

- Confirm entry with  key.

Indicated on display:

Channel 2	Adaption	1	Q
		(-1	3-)

0 - means that the Service has been reset, i.e. the instrument cluster display will show „SERVICE IN 15000 km“ once the entry has been confirmed with the  key.



Note

The service interval display will initially show the starting value of 15,000 km. The conversion to the higher mileage (e.g. up to 30,000 km for 4-cyl. petrol engines) only takes place when the vehicle is driven.

- Confirm entry with **[Q]** key.

Indicated on display:

Channel 2	Adaption	0	Q
Store changed value?			

- Confirm entry with **[Q]** key.

Indicated on display:

Channel 2	Adaption	0	->
Changed value is stored			

- Press **[]** key to complete resetting of service interval display.

Checking or changing adaption values

After resetting the service interval display, the following channels and adaption values must be checked or changed (according to the engine version fitted in the vehicle):

Table of channels and adaption values

Channel 42 (min. mileage)	15000 km
Channel 43 (max. mileage) petrol engines	30000 km
Channel 43 (max. mileage) 6-cyl. diesel engines	35000 km
Channel 43 (max. mileage) 4-cyl. diesel engines (not unit-injector engines)	50000 km
Channel 44 (max. time interval to next due service)	730 days
Channel 45 (oil grade for petrol engines max. mileage 30,000 km)	2
Channel 45 (oil grade for 6-cyl. diesel engines, max. mileage 35,000 km)	3
Channel 45 (oil grade for 4-cyl. diesel engines max. mileage 50,000 km, not unit-injector engines)	4

Procedure for correction of adaption values:

- ◆ ⇒ [page 38](#) , Channel 42 (min. mileage)
- ◆ ⇒ [page 39](#) , Channel 43 (max. mileage)
- ◆ ⇒ [page 40](#) , Channel 44 (max. time interval to next due service)
- ◆ ⇒ [page 41](#) , Channel 45 (oil grade for max. mileage)

6.12.1 Minimum mileage

This function specifies a minimum mileage (shown in km) for the service interval display in the instrument cluster.

Indicated on display:

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any responsibility with respect to the correctness of information in this document. Copyright by AUDI AG.	Rapid data transfer Select function XX	HELP
--	---	------

- Press keys **[1]** and **[0]** and confirm entry with key **[Q]**.

Indicated on display:

Rapid data transfer 10 - Adaption	Q
--------------------------------------	---

- Confirm entry with **[Q]** key.

Indicated on display:

Adaption
Enter channel no. XX

- Press keys **[4]** and **[2]**.
- Confirm entry with **[Q]** key.

Indicated on the display:

Channel 42	Adaption	15	->
min. val. oil in	1,000 km	(-1	3-)

The display shows the minimum mileage in km before the next service is due (in this example: 15 = 15,000 km).

- Press **[Q]** key to end adaption of minimum mileage.



Note

- ♦ *The required value can only be entered in steps of 1000 km. Accordingly, the readout on the display will also only show steps of 1000 km.*
- ♦ *When using the keypad on the fault reader, only direct numerical input is possible!*
- ♦ *If an incorrect value is entered the function „Adaption“ will be terminated automatically and must be restarted!*

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorized by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.12.2 Maximum mileage

This function specifies a maximum mileage (shown in km) for the service interval display in the instrument cluster.

Indicated on display:

Rapid data transfer
Select function XX HELP

- Press keys **[1]** and **[0]** and confirm entry with key **[Q]**.

Indicated on display:

Rapid data transfer
10 - Adaption Q

- Confirm entry with **[Q]** key.

Indicated on display:

Adaption
Enter channel no. XX

- Press keys **[4]** and **[3]**.
- Confirm entry with **[Q]** key.

Indicated on the display:

Channel 43	Adaption	30	->
max. val. oil in	1,000 km	(-1	3-)

The display shows the maximum mileage in km before the next service is due (in this example: 30 = 30,000 km).



Note

- ♦ *The value entered for the correct engine version must correspond with the value specified in the table ⇒ [page 38](#).*
- ♦ *The required value can only be entered in steps of 1000 km. Accordingly, the readout on the display will also only show steps of 1000 km.*
- ♦ *When using the keypad on the fault reader, only direct numerical input is possible!*
- ♦ *If an incorrect value is entered the function „Adaption“ will be terminated automatically and must be restarted!*

- Press  key.

Indicated on display:

Channel 43	Adaption	30	
Enter adaption value XXXXX			

- Enter input value via keypad, filling in first digits with „0“.

Input value: e.g. 50,000 km

Keypad input: 00050

Indicated on display:

Channel 43	Adaption	30	Q
Enter adaption value 00050			

- Confirm entry with  key.

Indicated on display:

Channel 43	Adaption	50	Q
max. val. oil in 1,000 km (-1 3-)			

- Confirm entry with  key.

Indicated on display:

Channel 43	Adaption	50	Q
Store changed value?			

- Confirm entry with  key.

Indicated on display:

Channel 43	Adaption	50	->
Changed value is stored			

- Press  key to end adaption of maximum mileage.

6.12.3 Maximum time interval

This function specifies a maximum interval (shown in days) for the service interval display in the instrument cluster.

Indicated on display:

Rapid data transfer	HELP
Select function XX	

- Press keys  and  and confirm entry with key .

Indicated on display:

Rapid data transfer	Q
10 - Adaption	

- Confirm entry with  key.

Indicated on the display:

Adaption
Enter channel no. XX

- Press keys  and .

- Confirm entry with  key.

Indicated on the display:

Channel 44	Adaption	730	-
> max. val. Insp. in 1 days (-1 3-)			

Indicated on display: maximum interval in days before the next service is due (in this example: 730 = 730 days).



Note

- ♦ *The value entered for the correct engine version must correspond with the value specified in the table [=> page 38](#).*
- ♦ *The specification must be entered in days. Accordingly, the display will also only show the figure in days.*
- ♦ *When using the keypad on the fault reader, only direct numerical input is possible!*
- ♦ *If an incorrect value is entered the function „Adaption“ will be terminated automatically and must be restarted!*

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability for errors or omissions in this document. Copyright by AUDI AG.

- Press  key.

Indicated on display:

Channel 44	Adaption	730	
Enter adaption value XXXXX			

- Enter input value via keypad, filling in first digits with „0“.

Input value: e.g. 730 days

- Use keypad to enter "00730".

Indicated on display:

Channel 44	Adaption	730	Q
Enter adaption value 00730			

- Confirm entry with  key.

Indicated on display:

Channel 44	Adaption	730	Q
max. val. Insp. in 1 days (-1 3-)			

- Confirm entry with  key.

Indicated on display:

Channel 44	Adaption	730	Q
Store changed value?			

- Confirm entry with  key.

Indicated on display:

Channel 44	Adaption	730	-
> Changed value is stored			

- Press  key to end adaption of maximum time interval.

6.12.4 Adaption of oil grade

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted. Copyright © 2012 AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Indicated on display:

Rapid data transfer	HELP
Select function XX	

- Press keys  and  and confirm entry with key .

Indicated on display:

Rapid data transfer	Q
10 - Adaption	

- Confirm entry with  key.

Indicated on display:

Adaption	
Enter channel no. XX	

- Press keys  and .

- Confirm entry with  key.

Indicated on display:

Channel 45	Adaption	1	->
Oil grade (-1 3-)			



Note

- ◆ The oil used for the vehicle has to be adapted after each Service.
- ◆ Settings for the adaption value range from 1-4. Each value from 1-4 is linked with a max. mileage (channel 43) and max. time interval (channel 44).
- ◆ The value entered for the correct engine version must correspond with the value specified in the table ⇒ [page 38](#).

Indicated on display:

Channel 45	Adaption	1	->
Oil grade (-1 3-)			

- Press  key.

Indicated on display:

- Enter input value via keypad, filling in first digits with „0“.

Input value: e.g. 2

- Use keypad to enter "00002".

Indicated on display:

- Confirm entry with  key.

Indicated on display:

- Confirm entry with  key.

Indicated on display:

- Confirm entry with  key.

Indicated on display:

- Press  key to complete adaption of oil grade.

6.13 Service interval display: resetting Inspection Service (fixed interval)

Resetting the service interval display after completing a service for Audi A4 from vehicle identification number 8DYA 000 001 onwards

Indicated on display:

- Press keys  and  and confirm entry with key .

Indicated on display:

- Confirm entry with  key.

Indicated on display:

- Press keys  and .

- Confirm entry with  key.

Channel 45	Adaption	1
Enter adaption value XXXXX		

Channel 45	Adaption	1	Q
Enter adaption value		00002	

Channel 45	Adaption	2	Q
Oil grade		(-1 3-)	

Channel 45	Adaption	2	Q
Store changed value?			

Channel 45	Adaption	2	->
Changed value is stored			

Rapid data transfer	HELP
Select function XX	

Rapid data transfer	Q
10 - Adaption	

Adaption
Enter channel no. XX

Protected by copyright. This document is not to be used for commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.



Note

- ◆ The service interval display serves to remind the driver that a service is due. It is shown in the centre display.
- ◆ The service reminder will first appear 1 month or 2,000 km before the next service is due. The display changes at intervals of 100 km. Example: after covering a total mileage of 13,700 km the display will show „SERVICE IN 1300 km“.
- ◆ The remaining mileage to the service can be called up via the menu in the centre display by pressing the clock reset button once.
- ◆ Once a service is due, an appropriate text message will be shown in the centre display for about 5 seconds when the ignition is switched on. It is displayed after the automatic gear-box info and after entering a destination in the navigation system (if applicable). Display shows: „SERVICE!“.

Indicated on display:

The service setting is displayed

1 - means that Service is active, i.e. the instrument cluster display shows „SERVICE!“.

Channel 2	Adaption	1	->
		(-1	3-)



Note

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted without the prior written consent of Audi AG. Audi AG is not responsible for any errors or omissions with respect to the correctness of information in this document. Copyright by AUDI AG.

The service interval display must only be reset by direct numerical input.

- Press  key.

Indicated on display:

The service is reset by entering the following adaption value:

Adaption value	Service setting
00000	Resetting

- Use the keypad to enter the correct adaption value -00000- to delete the service.
- Press key  five times.

Indicated on display:

- Confirm entry with  key.

Indicated on display:

0 - means that the Service has been reset, i.e. the instrument cluster display will show „SERVICE IN 15000 km“ once the entry has been confirmed with the  key.

- Confirm entry with  key.

Indicated on display:

- Confirm entry with  key.

Channel 2	Adaption	1
Enter adaption value	XXXXX	

Channel 2	Adaption	1	Q
Enter adaption value	00000		

Channel 2	Adaption	0	Q
		(-1	3-)

Channel 2	Adaption	0	Q
Store changed value?			

Indicated on display:

Channel 2	Adaption	0	->
Changed value is stored			

- Press  key to complete resetting of service interval display.

6.13.1 Checking or changing adaption values

After resetting the service interval display the following channels and adaption values must be checked or changed.

Table of channels and adaption values

Channel 42 (min. mileage)	15000 km
Channel 43 (max. mileage)	15000 km
Channel 44 (max. time interval to next due service)	365 days
Channel 45 (oil grade)	1

Procedure for correction of adaption values:

- ♦ ➔ [page 38](#) , Channel 42 (min. mileage)
- ♦ ➔ [page 39](#) , Channel 43 (max. mileage)
- ♦ ➔ [page 40](#) , Channel 44 (max. time interval to next due service)
- ♦ ➔ [page 41](#) , Channel 45 (oil grade for max. mileage)

6.13.2 Resetting the service interval display (after completing a Service) without the use of -V.A.G 1551/1552- or -VAS 5051-

Please note:

If resetting is performed without -V.A.G 1551/1552- or -VAS 5051-, this will automatically set fixed intervals for servicing.

The service interval display has to be reset after carrying out a Service.

The service interval display can be reset with the fault reader - V.A.G 1551- or -VAS 5051- , using the function „Adaption“
➔ [page 42](#) .

The service interval display can also be reset as follows:

- Switch off ignition.
- Press the reset button for the trip recorder in the instrument cluster and at the same time switch on the ignition.

When you release the trip recorder button the display will show:
„SERVICE IN ???? km“ or „SERVICE!“.

- Keep the clock adjuster button in the instrument cluster pressed until the display is set back to „SERVICE IN ????KM“ or „SERVICE!“.

The display will show: „SERVICE IN 15000 km“.

Adaption values: check and change (if necessary), see table
➔ [page 44](#)

- Switch off ignition.

6.14 Rear lid hinges: lubricating

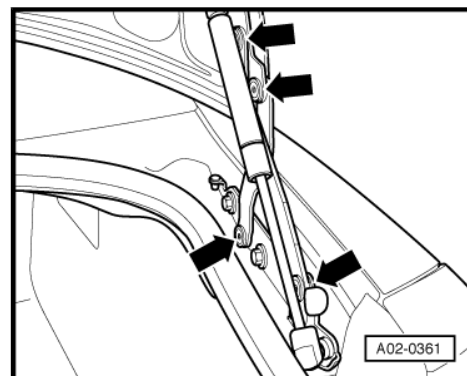
Special tools and workshop equipment required

- ♦ Lubricant -G 000 115 A2-
- Open rear lid
- If fitted, remove covers for rear lid hinges (left and right).

- Lubricate the four hinge joints on both rear lid hinges at the contact points on the left and right of the hinge guides -arrows-.

 Note

- ◆ *To ensure accurate spraying, the enclosed spray tube must be inserted in the spray nozzle.*
- ◆ *Shake the spray can about five times.*
- ◆ *The spray can must not be shaken too often or too vigorously; otherwise, the spray oil will foam and lose some of its penetrating and lubricating effect.*



- Clean joints and body to remove excess oil.

6.15 Door hinges with arresters, lock cylinder and bonnet arrester hook: lubricating

Special tools and workshop equipment required

- ◆ Universal oil -G 000 115 A2-
- ◆ Lubricant -G 052 778 A2-

 Note

- ◆ *The vehicle must be at least at room temperature.*
- ◆ *Operate moving parts several times so that the lubricant is able to penetrate.*
- ◆ *Remove surplus lubricant with a cloth.*

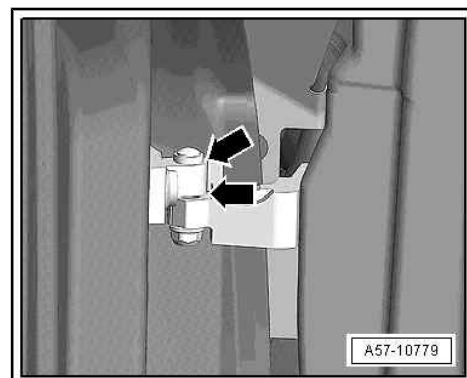
6.15.1 Door hinges and arresters

- Lubricate the door arresters at the points shown in the illustration -arrows- with universal oil G 000 115 A2.



Protected by copyright. Copying for private or commercial purposes in whole or in part, or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

- Lubricate door hinges with universal oil G 000 115 A2 at points marked with -arrows-.

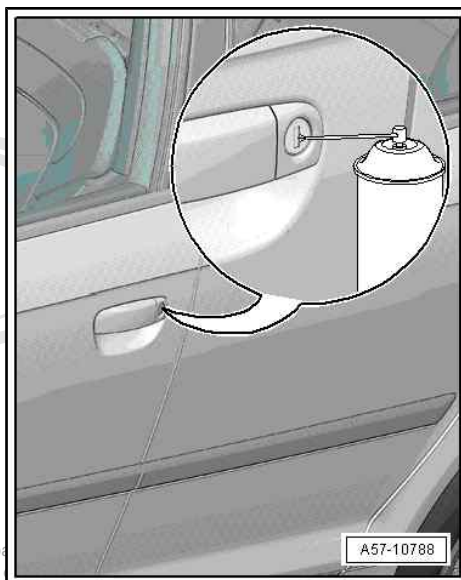


6.15.2 Lock cylinder

- Lubricate lock cylinders with spray-on grease G 052 778 A2.

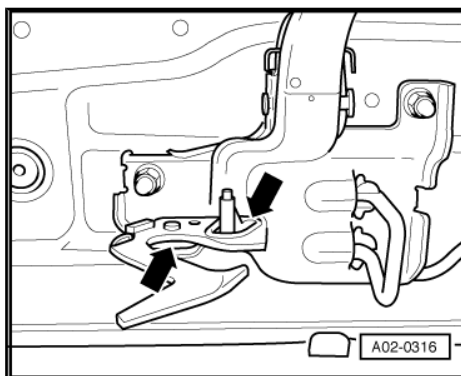


Protected by copyright. Copying for private or commercial purposes, in part or in full, is permitted unless authorised by AUDI AG. AUDI AG does not guarantee the accuracy of the information with respect to the correctness of information in this document. Copyright by AUDI AG.



6.15.3 Bonnet arrester

- Lubricate bonnet arrester with universal oil G 000 115 A2 at points marked with -arrows-.



6.16 Sliding/tilting sunroof: cleaning and lubricating

Special tools and workshop equipment required

- ◆ Lubricating paste -G 060 751 A2-
- ◆ Krytox lubricating paste -G 052 141 A2-
- ◆ Cleaning solution -D 009 401 04-



Note

Bend brush (commercially available, approx. 15 mm wide) by approx. 40° using workshop equipment.



Caution

Hold a cloth under the relevant part of the sunroof to protect the interior from dirt.

Cleaning and lubricating wind deflector seal

- Run glass sunroof panel to the rear until wind deflector is completely extended.



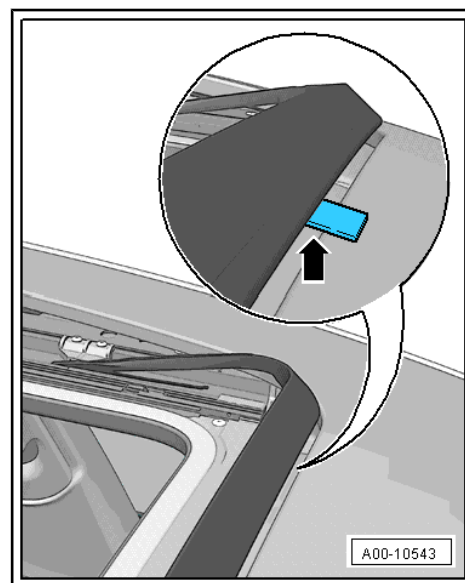
Note

It is not necessary to remove the wind deflector.

- Remove grease and dirt from cowl panel seal -arrow- using cleaning solution D 009 401 04 and a lint-free cloth.
- Using a paintbrush (commercially available), apply a small amount of Krytox paste G 052 141 A2 to rubber lip on wind deflector from underneath -arrow-.
- Make sure that no white grease film remains visible after applying lubricant.
- Remove surplus Krytox paste from rubber lip with a lint-free cloth.

Cleaning and lubricating glass panel seal

- Tilt open glass sunroof.

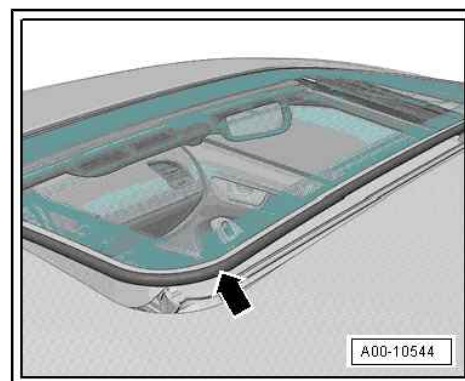


Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not warrant or accept any liability with respect to the correctness of the content in this document, copyright © AUDI AG.

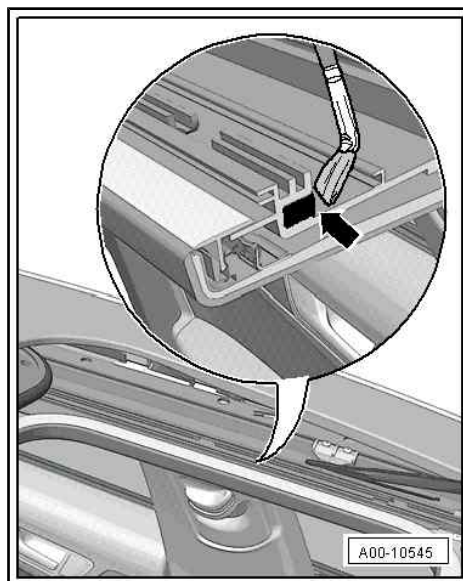
- Remove grease and dirt from glass panel seal -arrow- using cleaning solution D 009 401 04 and a lint-free cloth.
- Using a paintbrush (commercially available), apply a small amount of Krytox paste G 052 141 A2 as far as possible on glass panel seal -arrow-.
- Make sure that no white grease film remains visible after applying lubricant.
- Remove surplus Krytox paste from seal with a lint-free cloth.

Cleaning and lubricating guide rail

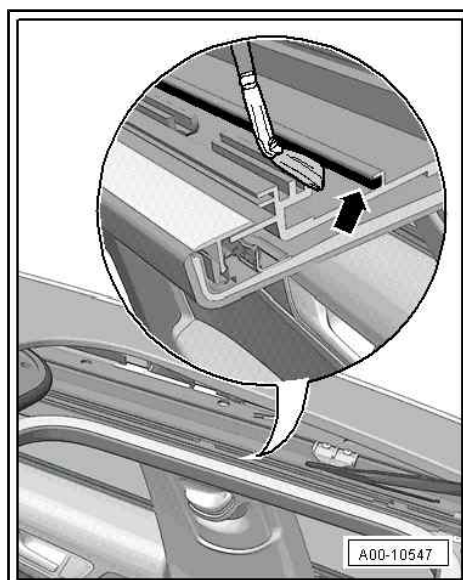
- Open glass sunroof completely.
- Remove grease and dirt from guide rail with a lint-free cloth.
- If necessary, use a workshop vacuum cleaner to remove sand and fine dust from guide rail.



- Apply lubricant G 060 751 A2 to inside of guide rail -arrow- using a paintbrush (commercially available).



- Apply lubricant G 060 751 A2 to outside of guide rail -arrow- using a paintbrush (commercially available).

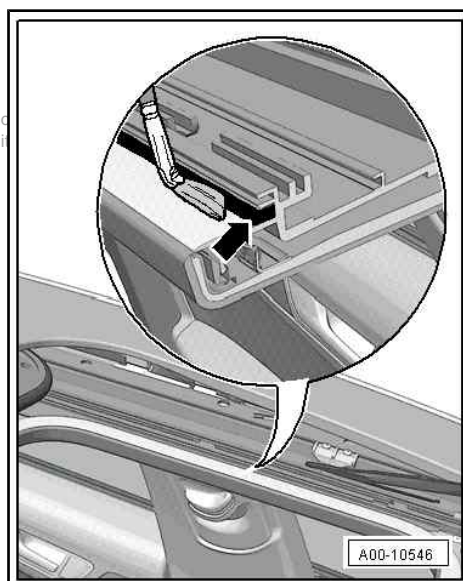


- Apply lubricant G 060 751 A2 to side guide rail of sliding headliner -arrow- using a paintbrush (commercially available).

- Remove surplus lubricant on guide rails with a lint-free cloth.

- Repeat procedure on opposite side of vehicle!

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted without the written permission of Audi AG. Audi AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.



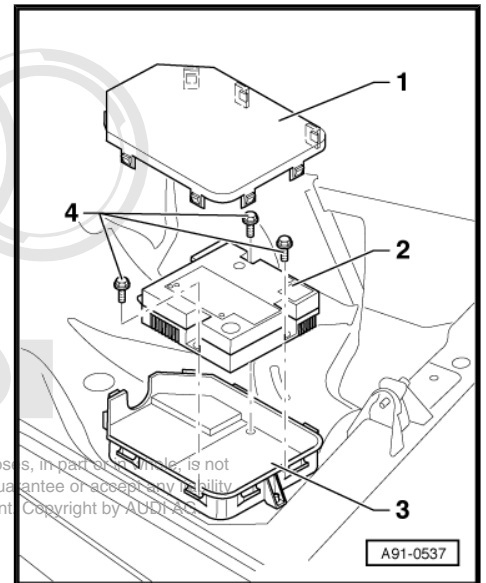
6.17 Telematics: renewing emergency back-up battery

Note

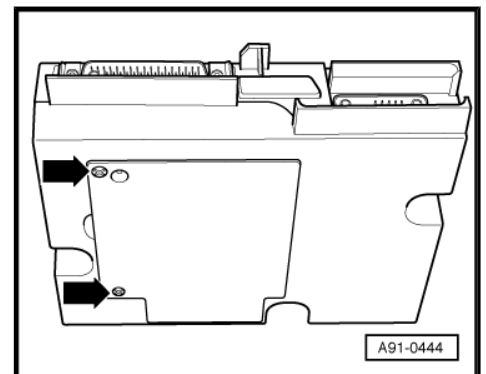
On vehicles with telematics system the emergency backup battery should be renewed every four years.

Removing:

- Remove driver's seat ⇒ General body repairs, interior; Rep. gr. 72 ; Front seats .
- Remove floor covering.
- Remove cover -1- of electronics box -3-.
- Unscrew bolts -4- and take control unit out of electronics box -3- (do not disconnect control unit).



- Remove both bolts -arrows- from underside of telematics control unit and remove cover.

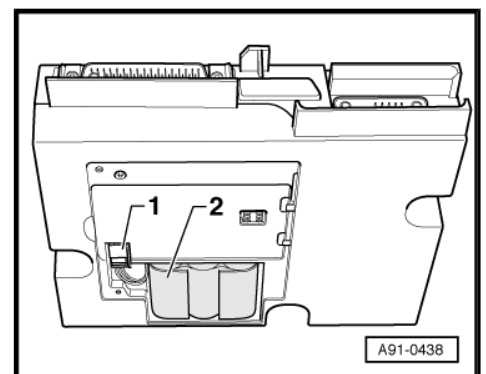


- Unplug connector -1- and pull out the emergency backup battery -2-.

Installing:

- Installation is performed in reverse sequence.

Tightening torques	Nm
Securing bolts for control unit	2



6.18 Steps required before disconnecting battery



WARNING

Activate the service mode on the telematics control unit before disconnecting the battery → Vehicle diagnostic tester.



Note

- ◆ *Obtain the anti-theft code for the radio/navigation unit before disconnecting the battery.*
- ◆ *When reconnecting the battery, please make sure that the vehicle equipment (radio/navigation system, clock, electric window regulators, engine) is activated as described in the Owner's Manual. Also remember to deactivate the service mode on the telematics control unit → Vehicle diagnostic tester.*

6.19 Battery: checking electrolyte level

6.19.1 Batteries without magic eye



Note

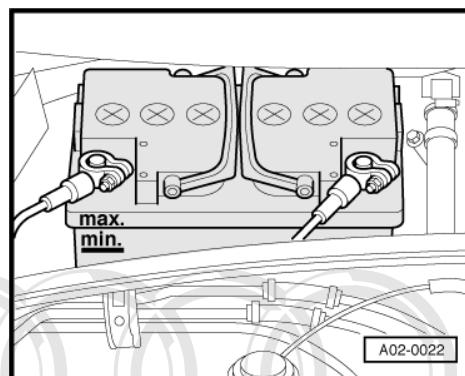
The battery is located in the plenum chamber at the front left between the engine compartment and the windscreen.

- Check battery housing for damage.
- Check electrolyte level: The electrolyte level must be between MIN. and MAX. marking.



Note

- ◆ *A visual check of the battery is sufficient for batteries with clearly visible MIN and MAX marks.*
- ◆ *When performing a visual check, a bright hand-held torch helps to better see the electrolyte level as well as the MIN. and MAX. marks.*
- ◆ *If the electrolyte level is below the MIN. marking, the battery must be renewed → Rep. gr. 27.*



6.19.2 Battery with magic eye



WARNING

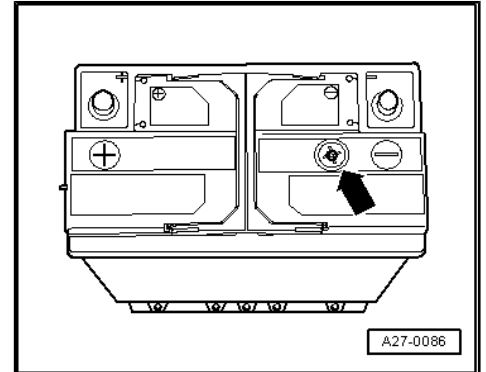
If the magic eye is colourless or light yellow: do not test or charge the battery. Do not attempt to jump-start the vehicle - danger of explosion! The battery must be renewed → Rep. gr. 27.

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

 Note

The battery is located in plenum chamber at front left between engine compartment and windscreen.

- ◆ The magic eye -arrow- indicates the fluid level and the charge level of the battery to be checked.
- ◆ The magic eye is found in only one battery cell; the electrolyte level is therefore checked only for this battery cell.
- ◆ During battery charging or vehicle operation, air bubbles can form underneath the magic eye which could falsify colour display.
- Tap magic eye -arrow- lightly and carefully with the handle of a screwdriver to release any bubbles under magic eye.
- Read off battery electrolyte level according to colour display of magic eye.



Two different colours are used as indicators:

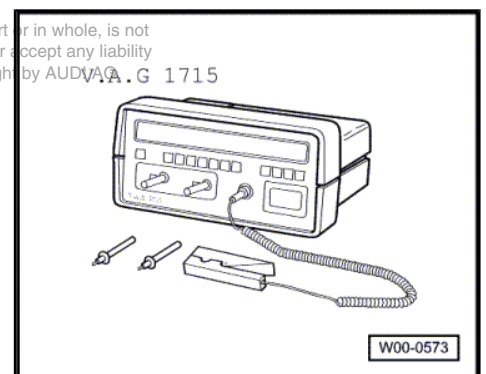
Colour indicator	Battery status
Black or green	• Electrolyte level OK.
Colourless or yellow	• Electrolyte level too low. Risk of explosion: the battery must not be checked or charged.

6.20 Battery: checking "no load" voltage before starting the engine for the first time (only applies to stock vehicles)

Special tools and workshop equipment required

- ◆ Digital multimeter -V.A.G 1715-

Produced by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG V.A.G 1715



or

- ◆ Hand-held multimeter -V.A.G 1526 B-



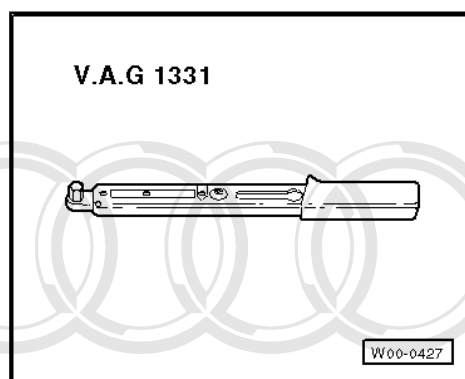
Note

- ◆ *The vehicle must not be driven or started with the battery that is to be tested for at least 2 hours before performing test.*
- ◆ *The battery must not be placed under load from connected electrical equipment for at least 2 hours before the test.*
- ◆ *The battery must not be charged for at least 2 hours before the test.*
- Check voltage between battery terminals with the ignition switched off.
- ◆ If the tester indicates 12.5 V or more, then the battery is OK.
- ◆ If the voltage is less than 12.5 V, locate the source of the problem (repair measure).

6.21 Battery: checking that battery cables are securely fitted (only applies to vehicles kept in stock for long periods)

Special tools and workshop equipment required

- ◆ Torque wrench -V.A.G 1331-

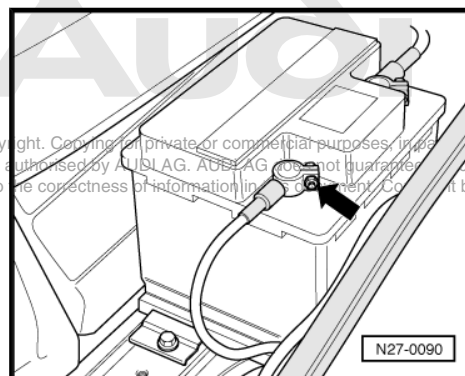


- Check that the battery clamps are securely fitted on the vehicle battery. If necessary, tighten nuts -arrow-.



WARNING

If the battery clamp on the positive terminal is not fitted securely, disconnect the battery earth strap from the battery negative terminal first to avoid possible accidents.

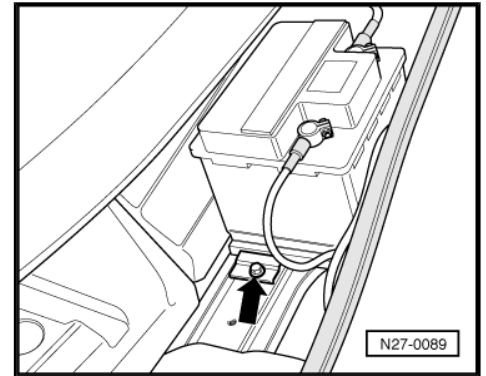


Note

Before disconnecting the battery, please refer to ➔ [page 50](#).

- Check that battery is securely seated. If necessary tighten securing bolt -arrow- on retainer plate.

Tightening torque	Nm
Battery clamp to battery terminal	5
Bolt on retainer plate	22

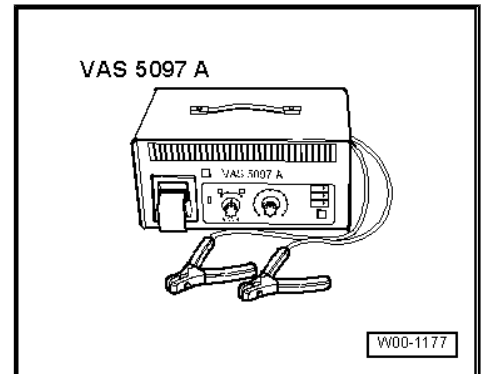


6.22 Battery: performing load test

The battery load test provides information on the condition of the battery.

Special tools and workshop equipment required

- ◆ Battery tester -VAS 5097 A-



It is not necessary to remove the battery when using battery tester -VAS 5097A-. The battery does not have to be disconnected.

6.22.1 Carrying out load test

- Switch off ignition.
- Read operating instructions for battery tester.
- Connect the clamps of the test leads to battery terminals as described in operating instructions for the tester.

The clamps must make good contact with the battery terminals.

- As the load current differs depending on the battery, the current must be set on the tester according to battery capacity ⇒ Operating instructions for battery test equipment .
- Perform a battery load test as described in the operating instructions.

6.22.2 Test equipment display during load test

Please note the test results shown on the display of the tester.

Display on battery tester	Delivery Inspection	Inspection Service LongLife Service
Battery Very Good	Battery OK	Battery OK

Display on battery tester	Delivery Inspection	Inspection Service LongLife Service
Battery Good	Charge battery ¹⁾	Battery OK
Battery Not Good	Charge battery ¹⁾	Charge battery ¹⁾
Battery Faulty	Renew battery	Renew battery ²⁾

1) - Perform battery load test again after recharging the battery. If tester shows „Battery Good“ after charging battery, battery is OK. However, if tester still shows „Battery Not Good“, battery must be renewed.

2) - Agree battery replacement with customer.

- Renew battery ⇒ Electrical system; Repair group 27; Removing and installing battery

Notes on battery load test:

The battery voltage will decrease during the test due to the high load (high current flow).

If a battery is in working order battery voltage will only drop to minimum voltage.

If the battery is defective or only insufficiently charged, battery voltage will very quickly drop below minimum voltage.

After carrying out the load test the voltage will remain at this low level for quite a while; voltage will only rise again slowly.

6.23 Engine cover panel: removing

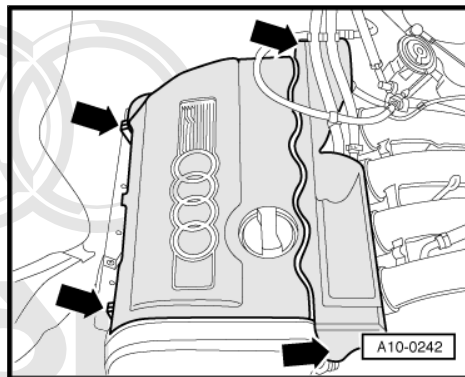
- Slacken bolts/nuts -arrows- and remove engine cover panel (s).

4-cyl. petrol engines



Note

The illustration shows a 1.8 ltr. 5-valve engine (engine code).

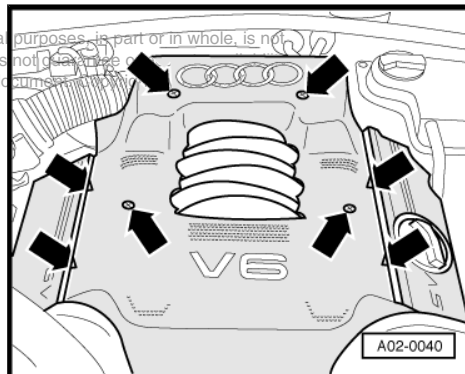


V6 petrol engines



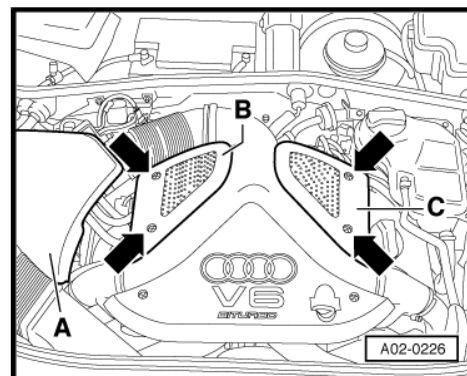
Note

The illustration shows a 5-valve engine.



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee with respect to the correctness of information in this document.

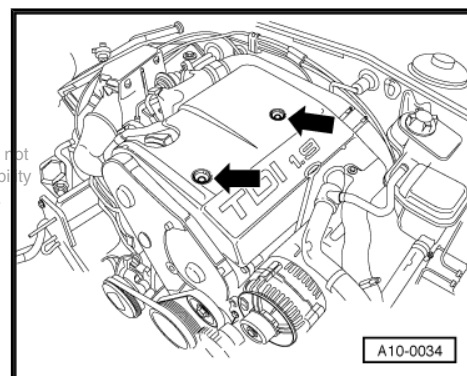
6-cyl. engines (biturbo)



4-cyl. TDI engines

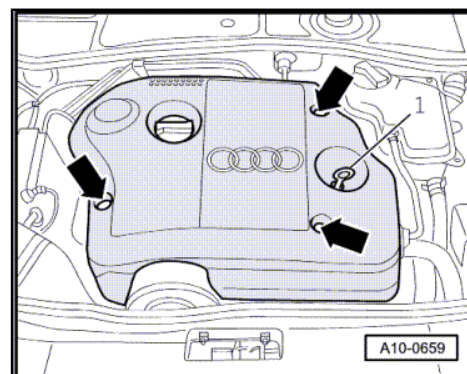


Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

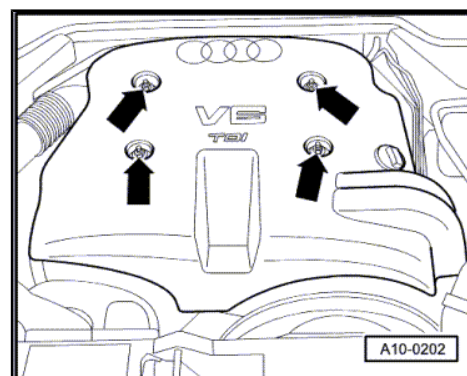


4-cyl. TDI engines (unit injector)

- Pull oil dipstick -1- out of guide tube.
- Unclip caps.
- Remove nuts -arrows- and remove engine cover panel.
- Remove noise insulation which is now visible.
- Re-insert oil dipstick into guide tube.
- Slacken bolts/nuts -arrows- and remove engine cover panel (s).



V6 TDI engines



6.24 Engine (from above and below) and engine compartment: visual check for leaks and damage

Carry out visual check as follows:

- Remove engine cover panel [⇒ page 54](#) .
- Check engine and engine compartment for leaks and damage.

- Check the pipes, hoses and connections of the following systems for leaks, chafing, porosity and brittleness.
- ◆ Fuel system
- ◆ Cooling and heating system
- ◆ Brake system
- Perform a visual check of the same components from below with the vehicle raised on a lifting platform and the noise insulation removed.



WARNING

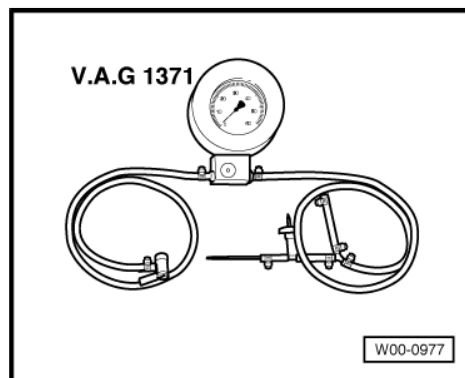
Any faults found must be rectified (repair measure).

6.25 Crankcase pressure: checking (V6 TDI engine AFB, AKN)

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted without express authorisation by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Special tools and workshop equipment required

- ◆ Pressure gauge -VAG 1371-



Note

The checking of the crankcase pressure is no longer performed on AFB engines from engine number „154 592“ and on AKN engines from engine number „031 890“.

The engine number is stamped onto the right inner side of the cylinder block between cylinder head and injection pump.

The crankcase pressure should be checked every 60,000 km (38,000 miles) or if oil leaks are visible.

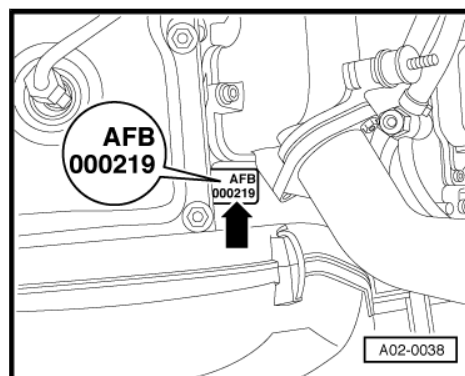


Note

The engine must be at operating temperature (above 80°C)

- Pull out dipstick, connect pressure gauge -VAG 1371- to dipstick guide and let engine run at idling speed (for at least 3 minutes).

A repair is required if the crankcase pressure exceeds 5 mbar:
Renew oil separator ⇒ 6-cyl. diesel direct injection TDI engine, mechanics (engine code AFB); Rep. gr. 17 ; Oil filter bracket - overview picture no. A17-0118, loosen both bolts of item 17 and renew oil separator (hose connection) using replacement parts from set of seals -059 103 464- .



6.26 Windscreen and headlight washer system: topping up with washer fluid

- Fill container up to top with washer fluid.



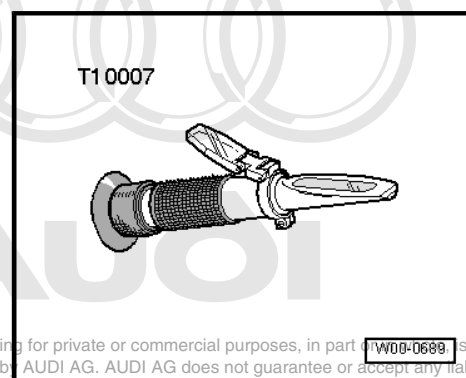
Note

The washer fluid must always contain a pH-neutral window cleaning additive (antifreeze additive in winter).

6.27 Cooling system: checking antifreeze and topping up with coolant if necessary

Special tools and workshop equipment required

- ◆ Refractometer -T10007-



Protected by copyright. Copying for private or commercial purposes, in part or in full, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.



Note

- ◆ *The cooling system is filled all year round with with a mixture of water and antifreeze/corrosion protection agent.*
- ◆ *For vehicles with Vehicle Identification No. 8DVA 012 531, use coolant additive -G 011 A8 C- (green colour).*
- ◆ *For vehicles with Vehicle Identification No. 8DVA 012 532, use only coolant additive -G 012 A8 D- (red colour).*



WARNING

The two different coolant additives -G 011 A8 C- (green colour) and -G 012 A8 D- (red colour) must never be mixed. Mixing the two could result in serious damage to the engine.

**Note**

- ◆
- ◆ *If the fluid in the expansion tank is of brownish colour, this means -G 012 A8 D- has been mixed with another type of coolant. If this should be the case, flush out the cooling system and change coolant. To flush the system, fill it with clean water and run the engine for about 2 minutes. This should remove most of the old coolant.*
- ◆ *-G 011 A8 C- and coolant additive conforming to specification „TL VW 774 C“ or -G 012 A8 D- as well as coolant additive „TL VW 774 D“ prevent frost and corrosion damage, stop scaling and also raise the boiling point of the coolant. It is therefore essential to use the correct antifreeze and corrosion protection additive in the cooling system all year round.*



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.27.1 Checking coolant level and topping up with coolant if necessary

- Check coolant level on expansion tank while the engine is cold.

Delivery Inspection

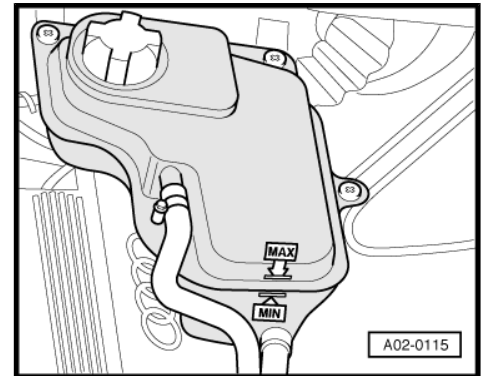
- ◆ Coolant level at MAX marking
- If coolant level is too low, add required amount (using correct mixture ratio).

Inspection Service

- ◆ Coolant level between MIN and MAX markings
- If coolant level is too low, add required amount (using correct mixture ratio).

Mixture ratio:

Frost protection to	Coolant additive	Water
-25 °C	approx. 40 %	approx. 60 %
-35 °C	approx. 50 %	approx. 50 %
-40 °C	approx. 60 %	approx. 40 %



Note

◆ *Because of its high boiling point, the coolant improves engine reliability under heavy loads, particularly in countries with tropical climates.*

- ◆ *Antifreeze protection must be guaranteed down to about -25 °C (in countries with an arctic climate to approx. -35 °C).*
- ◆ *The coolant concentration must not be reduced by adding water even in warmer seasons and in warmer countries. The coolant additive ratio must be at least 40%.*
- ◆ *If greater antifreeze protection is required in very cold climates, the proportion of -G 011 A8 C- or -G 012 A8 D- can be increased, but only up to 60% (this gives frost protection to about -40 °C). Beyond this concentration the antifreeze protection and also the cooling efficiency are reduced again.*

Checking antifreeze and topping up with coolant additive if necessary

- If the degree of frost protection is too low, drain off the required quantity as specified in the antifreeze protection table [⇒ page 59](#) and add coolant additive: up to Vehicle Identification No. 8DVA 012 531, -G 011 A8 C- or coolant additive conforming to „TL VW 774 C“; from Vehicle Identification No. 8DVA 012 532, -G 012 A8 D- or coolant additive conforming to „TL VW 774 D“.



Note

Observe disposal regulations.

6.27.2 Antifreeze protection table

Antifreeze protection to °C		Required quantity in litres	
Actual	Specified	4-cyl. engine	6-cyl. engine

Antifreeze protection to °C		Required quantity in litres	
0	- 25	3.5	5.0
	- 35	4.0	6.0
- 5	- 25	3.0	4.5
	- 35	3.5	5.5
-10	- 25	2.0	3.5
	- 35	3.0	4.5
-15	- 25	1.5	2.5
	- 35	2.0	3.5
- 20	- 25	1.0	1.5
	- 35	1.5	2.5
- 25	- 35	1.0	1.5
- 30	- 35	0.5	1.0
- 35	- 40	0.5	0.5

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

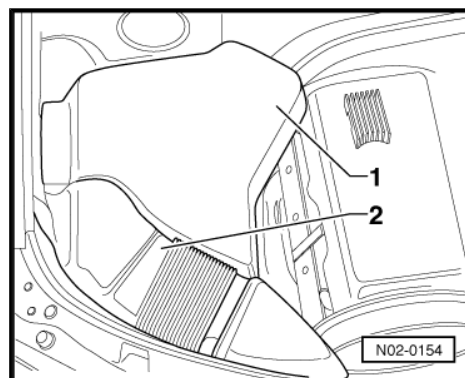
- Check coolant additive concentration after road test.

6.28 Air cleaner housing and snow strainer: cleaning; renewing filter element

V6 petrol engines (biturbo) S4, RS 4 ⇒ [page 61](#)

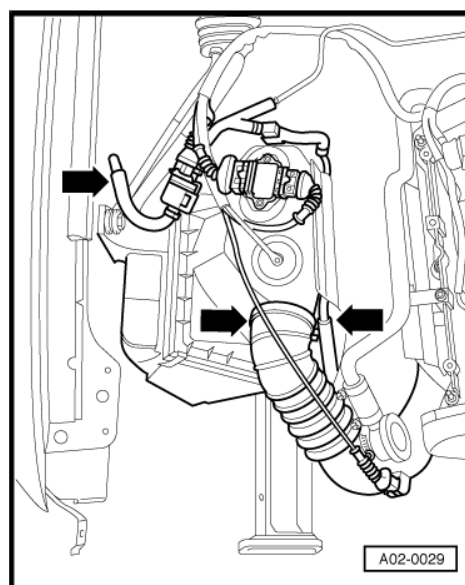
- Pull cover -1- off upwards (if fitted).
- Remove air intake hose -2-.

4-cyl. petrol engines (turbocharged):



- Pull off hose connections -arrows-.

All engines:



- Release spring retainers -1-.
- Move top section of filter housing to side, remove air intake hose -2- if necessary.
- Remove old filter element.



Note

Observe disposal regulations.

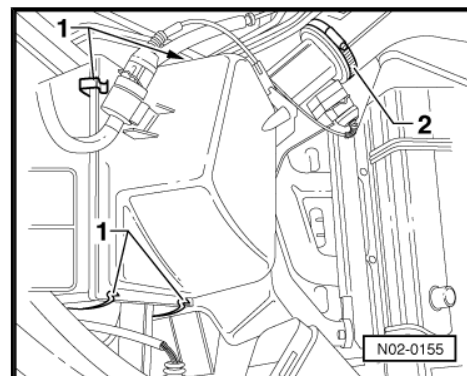
- Check whether there is a strainer in the intake duct.



Note

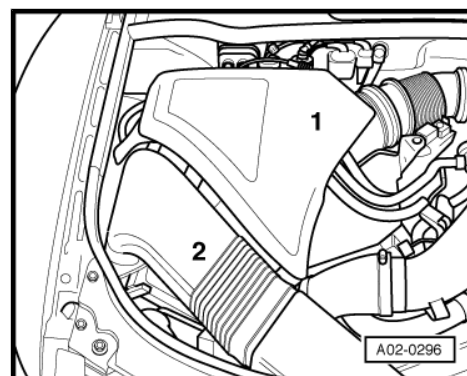
On several engine types the intake duct is fitted with a snow strainer. Be sure to remove and clean strainer.

- Unscrew securing bolt and lift strainer out of guide.
- Tap against strainer and blow through with compressed air.
- Fit strainer, press down and tighten bolt.
- Clean filter housing and install new filter element.



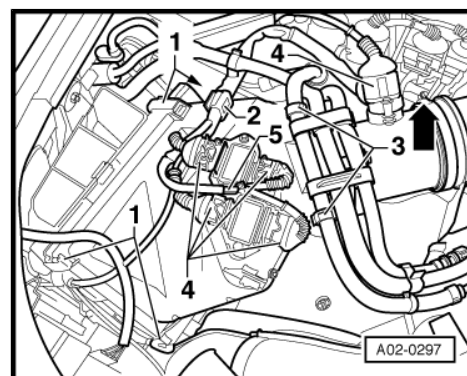
6.28.1 V6 petrol engines (biturbo) S4, RS 4

- Lift off cover -1-.
- Remove air intake hose -2-.



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

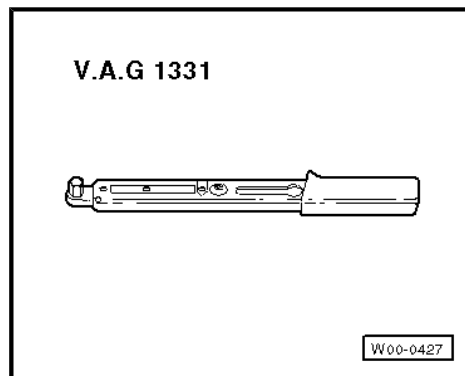
- Unplug the five connectors -4- and remove cable tie -5-.
- Pull wiring harness out of clip -2- and place next to intake opening of air cleaner.
- Release both fuel filter retaining clips -3-.
- Release hose clip -arrow- and spring retainers -1-, remove upper section of air cleaner.
- Remove old filter element.
- Clean filter housing and install new filter element.



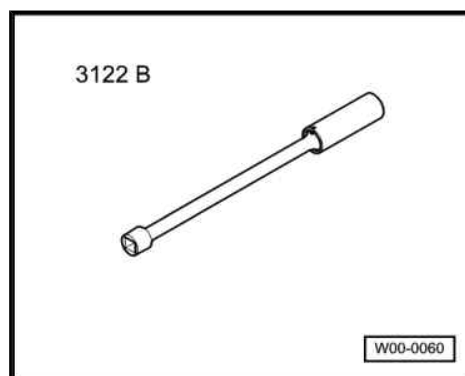
6.29 Spark plugs: renewing

Special tools and workshop equipment required

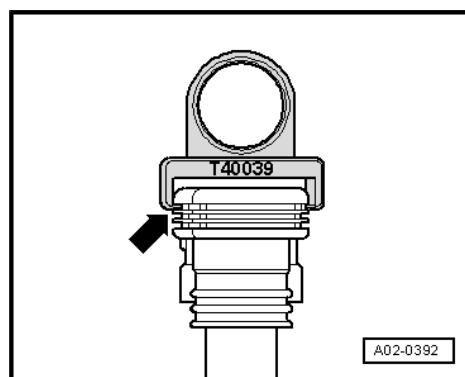
- ◆ Torque wrench -V.A.G 1331-



- ◆ Spark plug socket -3122 B- (not for 4-cyl. 2V engines)



- ◆ Spark plug wrench, 20.8 mm (only for 4-cyl. 2V engines)
- ◆ Puller for pencil-type ignition coils -T40039-



WARNING

Position puller -T40039- on thick rib at the top of pencil-type ignition coils -arrow- and then pull ignition coils off spark plugs. Do not apply puller to lower ribs, as these could be damaged.



Note

- ◆ Spark plug designation ⇒ "Exhaust emissions test"
- ◆ Observe disposal regulations.

4-cyl. 2V engines ➔ [page 63](#)

4-cyl. 5V naturally aspirated engines ➔ [page 63](#)

4-cyl. 5V engines (turbocharged) ➔ [page 63](#)

V6 petrol naturally aspirated engines ➔ [page 64](#)

V6 petrol engines (biturbo) S4, RS 4 ➔ [page 64](#)

6.29.1 4-cyl. 2V engines:

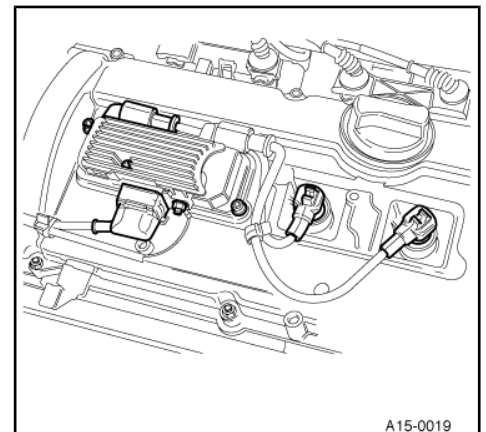
- Remove engine cover panel ➔ [page 54](#)
- With ignition switched off, unplug connectors from spark plugs.
- Remove spark plugs using spark plug wrench.
- Install new spark plugs.
- Check that ignition cables and spark plug connectors are correctly seated.

Tightening torque	Nm
Spark plugs in cylinder head	30

6.29.2 4-cyl. 5V naturally aspirated engines:

- Remove engine cover panel ➔ [page 54](#) .
- With ignition switched off, unscrew/unclip connector and earth wire on ignition coil with output stage -arrows-.
- Remove spark plugs using spark plug socket -3122 B- .
- Fit spark plugs and ignition coil with output stage.
- Check that ignition cables and spark plug connectors are correctly seated.

Tightening torques	Nm
Spark plugs in cylinder head	30
Spark plug with output stage to cylinder head cover	10

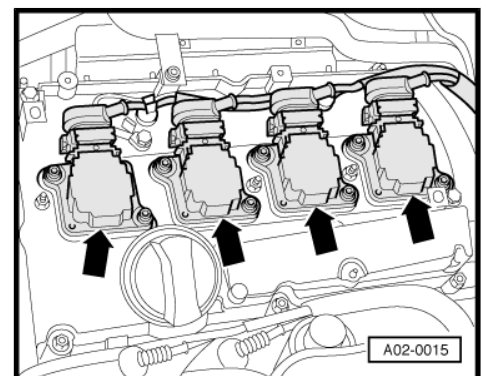


A15-0019

6.29.3 4-cyl. 5V engines (turbocharged):

- Remove engine cover panel ➔ [page 54](#) .
- With the ignition switched off, disconnect the connectors from the ignition coils.
- Unscrew and remove the ignition coils -arrows-.
- Remove spark plugs using spark plug socket -3122 B- .
- Install new spark plugs.
- Install ignition coils. Renew seals if damaged.

Tightening torques	Nm
Spark plugs in cylinder head	30
Ignition coils to cylinder head cover	10



A02-0015

6.29.4 V6 petrol naturally aspirated engines:

- Remove intake manifold between air cleaner and throttle valve unit.
- In order to unscrew rear left spark plug, remove coolant expansion tank with hoses still connected.
- Remove engine cover panel ⇒ [page 54](#) .
- Pull off spark plug connectors -arrows-.
- Remove spark plugs using spark plug socket -3122 B- .

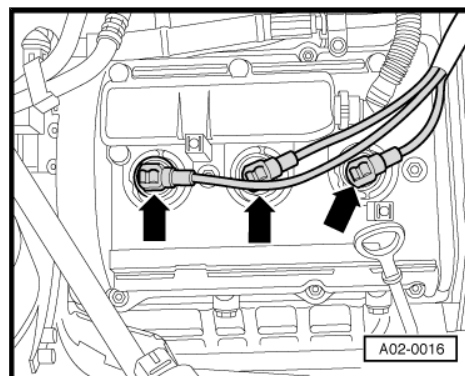


Note

The illustration shows a V6 5V petrol engine.

- Install new spark plugs.
- Check that ignition cables and spark plug connectors are correctly seated.

Tightening torque	Nm
Spark plugs in cylinder head	30



6.29.5 V6 petrol engines (biturbo) S4, RS 4:

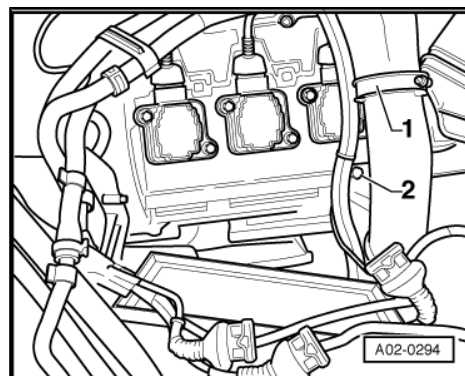
- Switch off ignition.
- Remove engine cover panel ⇒ [page 54](#) .

Cylinder bank (right-side)

- Remove upper section of air cleaner ⇒ [page 61](#) .
- Remove engine cover panel.
- Loosen hose clip -1- and bolt -2-.
- Detach connectors from ignition coils.
- Unscrew and remove the ignition coils.
- Remove spark plugs using spark plug socket -3122 B- .
- Install new spark plugs.
- Install ignition coils. Renew seals if damaged.

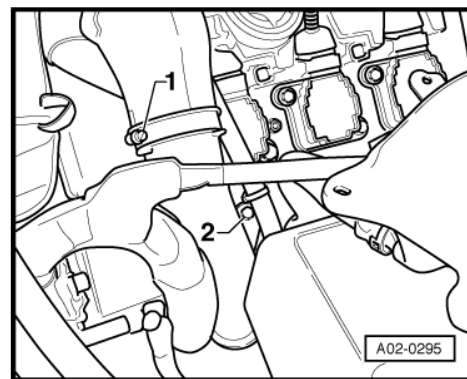
Cylinder bank (left-side)

- Remove coolant expansion tank with hoses connected.
- Remove engine cover panel.



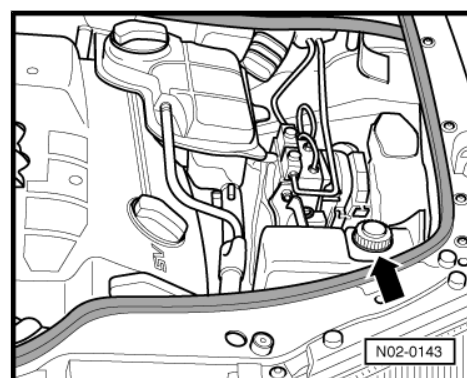
- Loosen hose clip -1- and bolt -2-.
- Detach connectors from ignition coils.
- Unscrew and remove the ignition coils.
- Remove spark plugs using spark plug socket -3122 B- .
- Install new spark plugs.
- Install ignition coils. Renew seals if damaged.

Tightening torques	Nm
Spark plugs in cylinder head	30
Ignition coils to cylinder head cover	10



6.30 Hydraulic system: checking for leaks, checking hydraulic fluid level and topping up if necessary

- Fluid in cold condition:
 - Do not start engine but bring front wheels to straight-ahead position.
- Fluid at operating temperature (above approx. 50 °C):
 - Start engine and bring front wheels to straight-ahead position.
 - Remove filler cap -arrow- with dipstick.
 - Clean dipstick with a clean cloth.
 - Screw cap on hand tight and unscrew again.



Checking fluid level

- Fluid in cold condition:

The fluid level must be in area of MIN. marking (up to 2 mm above or below marking).

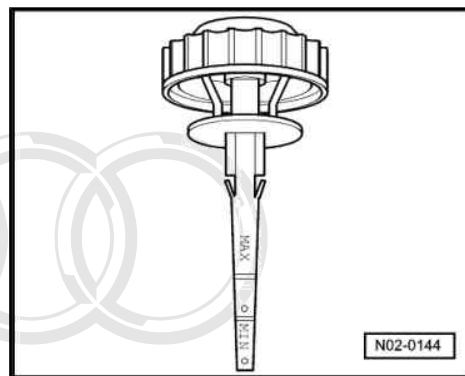
- Fluid at operating temperature (above approx. 50 °C):

Fluid level must be between MIN. and MAX. markings.



Note

- ◆ *The fluid level reading will only be accurate if the cap was screwed on properly before checking the dipstick.*
- ◆ *If the fluid level is above the area specified, the excess fluid must be extracted.*



WARNING

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

If the fluid level is below the area specified, the hydraulic system must be checked for leaks (repair measure). It is then not sufficient to merely top up the fluid.

- Top up hydraulic fluid -G 002 000- if there is no leak in the hydraulic system.
- Screw cap on hand tight.

6.31 Fuel filter: renewing (TDI engines)



Note

- ◆ *Please ensure that no diesel fuel makes contact with the coolant hoses. If necessary, clean hoses immediately.*
- ◆ *Observe disposal regulations.*

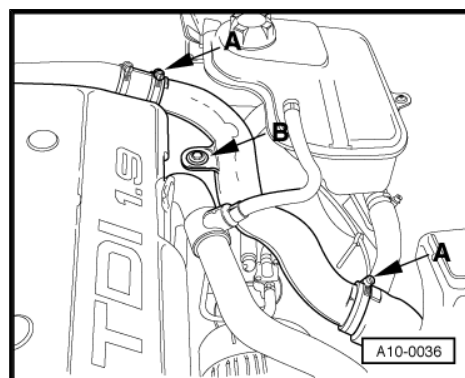
4-cyl. TDI engines ➔ [page 66](#)

4-cyl. TDI engines (unit injector) ➔ [page 67](#)

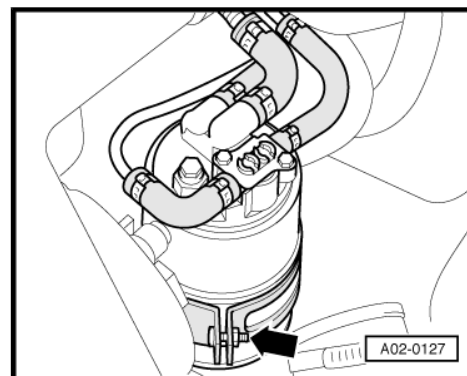
6-cyl. TDI engines ➔ [page 68](#)

6.31.1 4-cyl. TDI engines

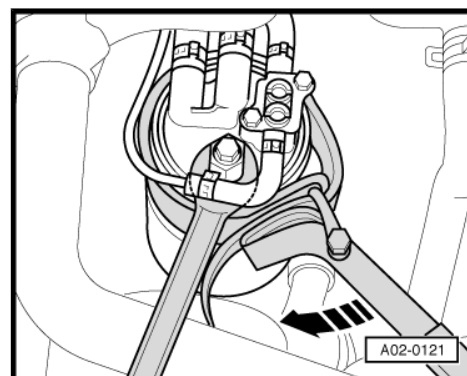
- Remove pressure pipe from charge air cooler, to do this loosen clamps -A- and remove bolt -B-.



- Loosen clip -arrow- on bracket and take filter out of bracket (pipes remain connected).



- Counterhold upper section of fuel filter by applying 17 mm AF open-end spanner to hexagon flats on base of bleeder screw, and unscrew filter (using strap wrench if necessary -arrow-).



WARNING

Do not use pliers to hold the fuel filter. This can damage the head of the filter and cause fuel leaks.

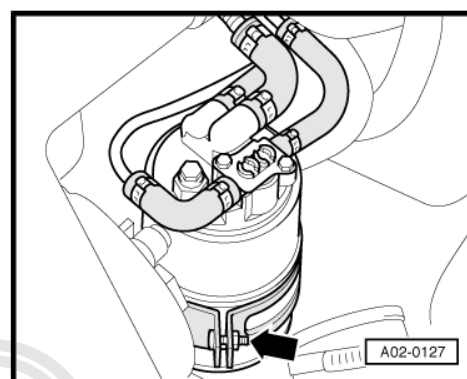
- Unscrew filter from upper section of fuel filter.
- Moisten new seal and new rubber seal lightly with diesel.
- Fill new filter with clean diesel. This will enable the engine to start more quickly.
- Tighten filter hand-tight onto top section of filter.
- Push plastic insert onto new filter.
- Insert fuel filter into bracket and secure with clamping bolt -arrow-.



Note

Flow direction is marked by arrows (do not interchange connections).

- Start engine and check fuel system for leaks (visual check).



6.31.2 4-cyl. TDI engines (unit injector)

Special tools and workshop equipment required

- ◆ Torque wrench -V.A.G 1331-

V.A.G 1331



W00-0427

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

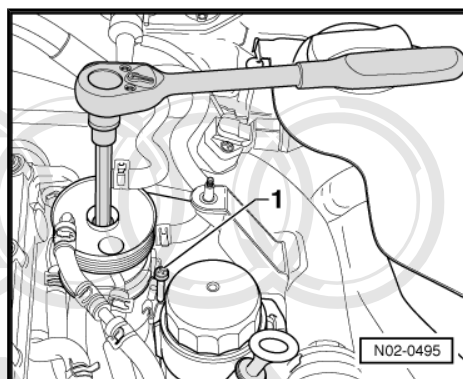
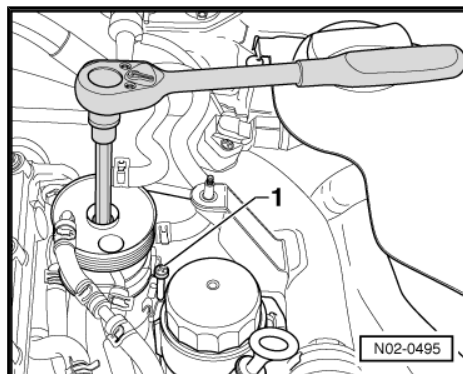
Follow the procedure shown below:

Removing:

- Remove engine cover panel ⇒ [page 55](#) .
- Unscrew hexagon socket head bolt and place top section to one side with fuel hoses connected.
- Loosen screw -1- on filter mounting and pull filter out upwards.

Installing:

- Fill new filter with clean diesel. This will enable the engine to start more quickly.

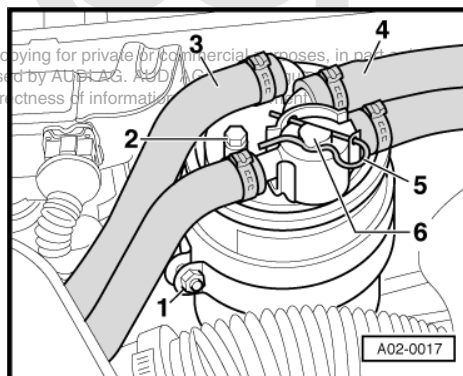


- Slide filter downwards through filter mounting and tighten screw -1-.
- Fit top section and secure with hexagon socket head bolt.
- Start engine and check fuel system for leaks (visual check).

Tightening torques	Nm
Hexagon socket head bolt	14

6.31.3 V6 TDI engines:

- Pull off retaining clip -5-.
- Remove regulating valve -6- with fuel lines attached.
- Disconnect fuel hoses from hose connections -3- and -4-.
- Loosen clip -1- on bracket and take filter out of bracket.
- Fill new filter with clean diesel. This will enable the engine to start more quickly.
- When inserting regulating valve, take care not to damage O-ring in filter housing.
- Install regulating valve with fuel lines attached.
- Fit retaining clip -5-.
- Push fuel hoses onto hose connections -3- and -4- and secure hoses with hose clips.



Note

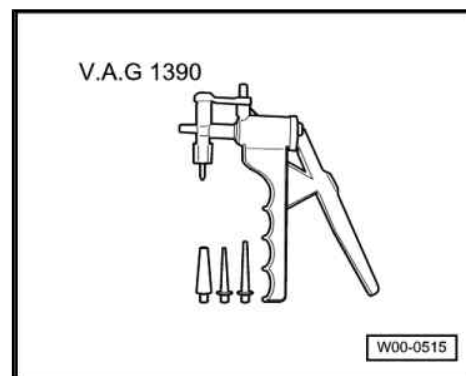
Flow direction is marked by arrows (do not interchange connections).

- Start engine and check fuel system for leaks (visual check).

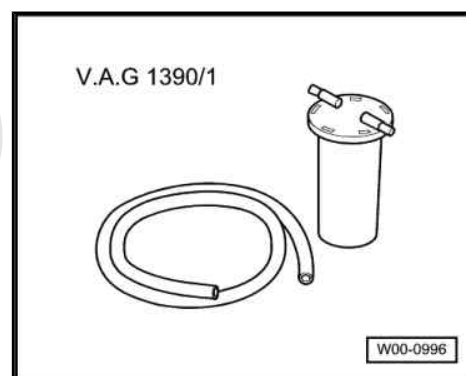
6.32 Fuel filter: draining water (TDI engines)

Special tools and workshop equipment required

◆ Hand operated vacuum pump -V.A.G 1390-



◆ Water drainage container -V.A.G 1390/1-



Note

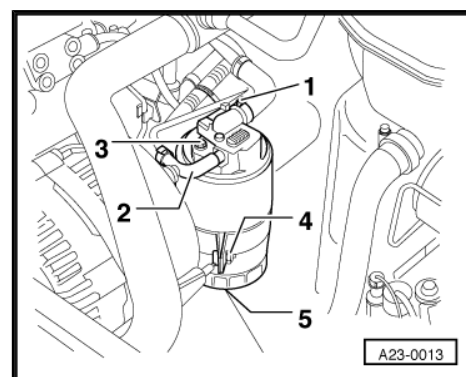
Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

- ◆ *Please ensure that no diesel fuel makes contact with the coolant hoses. If necessary, clean hoses immediately.*
- ◆ *Observe disposal regulations.*

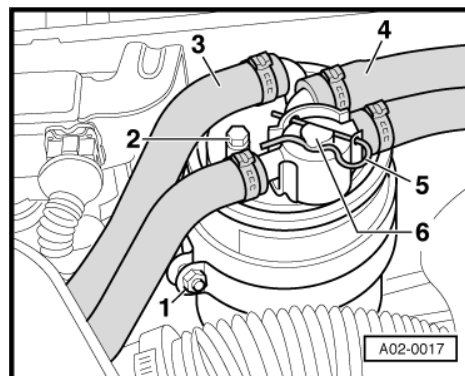
4-cyl. TDI engines:

- Loosen vent screw -3-.
- Fit hose onto water drain screw -5- and place other end of hose in a suitable container.
- Open drain screw and allow approx. 0.1 ltr. of fluid to drain.
- Close drain screw and vent screw.

V6 TDI engines:



- Unscrew bleeder screw -2- on fuel filter, leaving bleeder hole open.

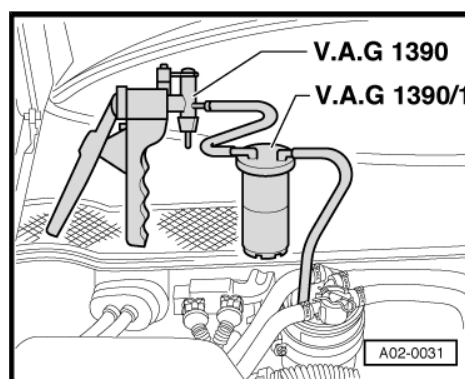


- Connect hand-operated vacuum pump -V.A.G 1390- with water drainage container -V.A.G 1390/1- to bleeder hole of fuel filter -arrow-.
- Operate hand-operated vacuum pump until approx. 100 cm³ of fluid has been extracted from fuel filter.



WARNING

Do not allow any fluid to enter the hand-operated vacuum pump.



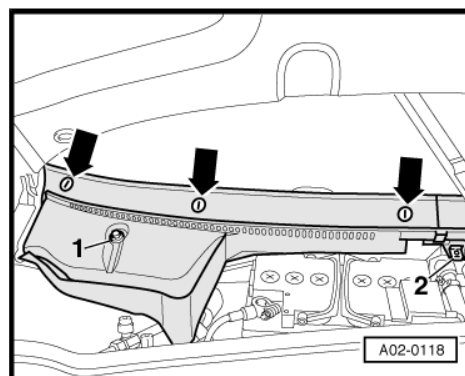
All engines:

- Start engine and check fuel system for leaks (visual check).

6.33 Dust and pollen filter: renewing

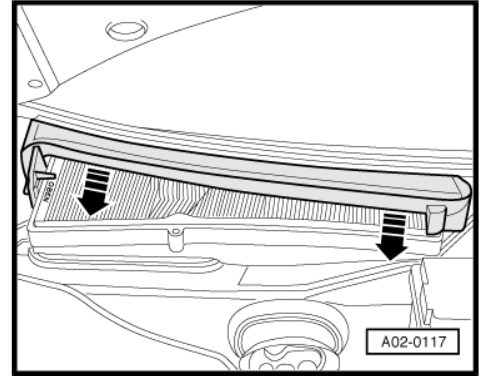
The filter is located below the cowl panel trim, on the right side.

- Switch on ignition and windscreen wipers.
- When the wipers reach half-way position on the windscreen, switch off the ignition.
- Remove right-hand section of cowl panel trim: turn the quick-release fasteners -arrows- through 90°, remove bolt -1- and release clip -2-.



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

- Unclip rain channel and pull it off towards the front -arrows-.
- Clean the area around the pollen filter retainer housing in the plenum chamber.

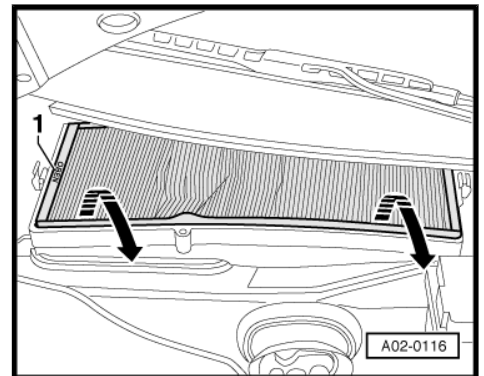


- Remove the dust and pollen filter -arrows- from the housing.

 Note

Observe disposal regulations.

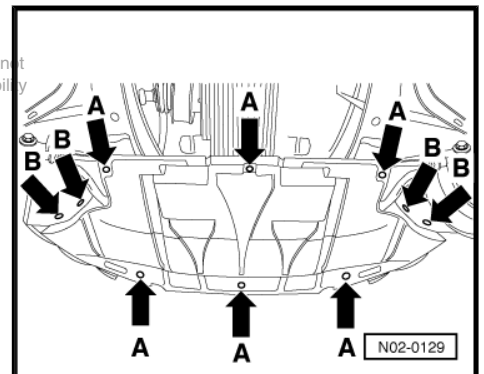
- Install new filter element.
- ◆ Installation position: note marking „OBEN“ -1-
- When installing, make sure that the rain channel is properly fitted, otherwise water will run down into the dust and pollen filter and into the heating system.



6.34 Noise insulation: removing

- Unscrew quick-release screws -A-.
- Pull out clamping pins -B- by turning gently.

This document is a technical drawing and is not intended for legal purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.



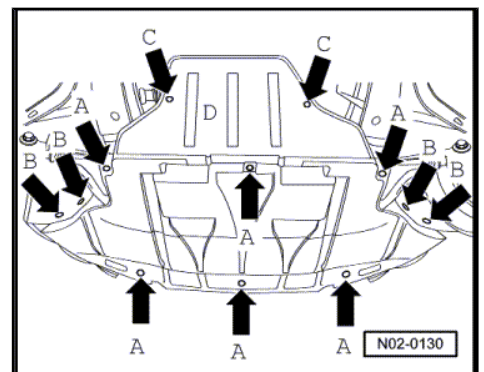
 Note

On vehicles with noise insulation -D-, additionally release 2 quick release screws -C-.

- Pull noise insulation rearwards off bumper cover and take out.

 Note

When installing, ensure that the noise insulation is pushed over the bumper cover at the front.



6.35 Lock carrier: moving into service position

Special tools and workshop equipment required

◆ Special tool -3369-

1 - 45 Nm

2 - 45 Nm

3 - 10 Nm

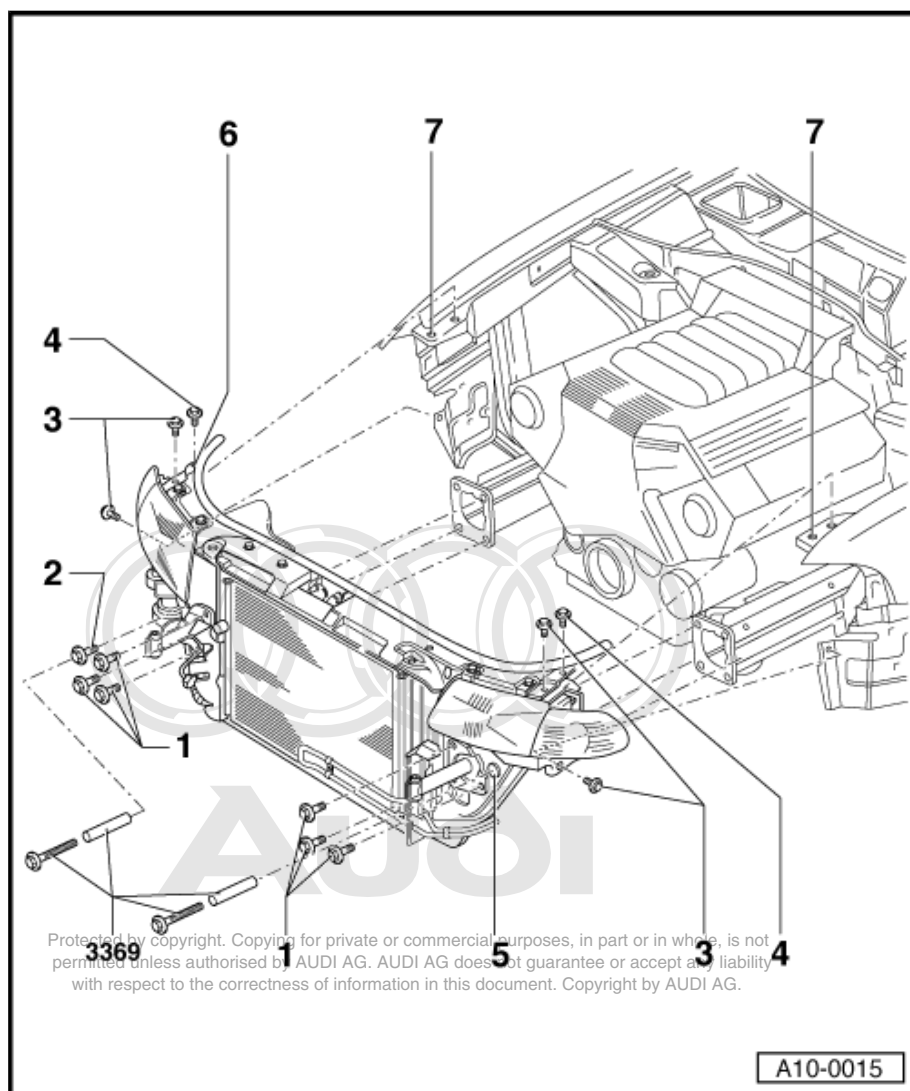
4 - 10 Nm

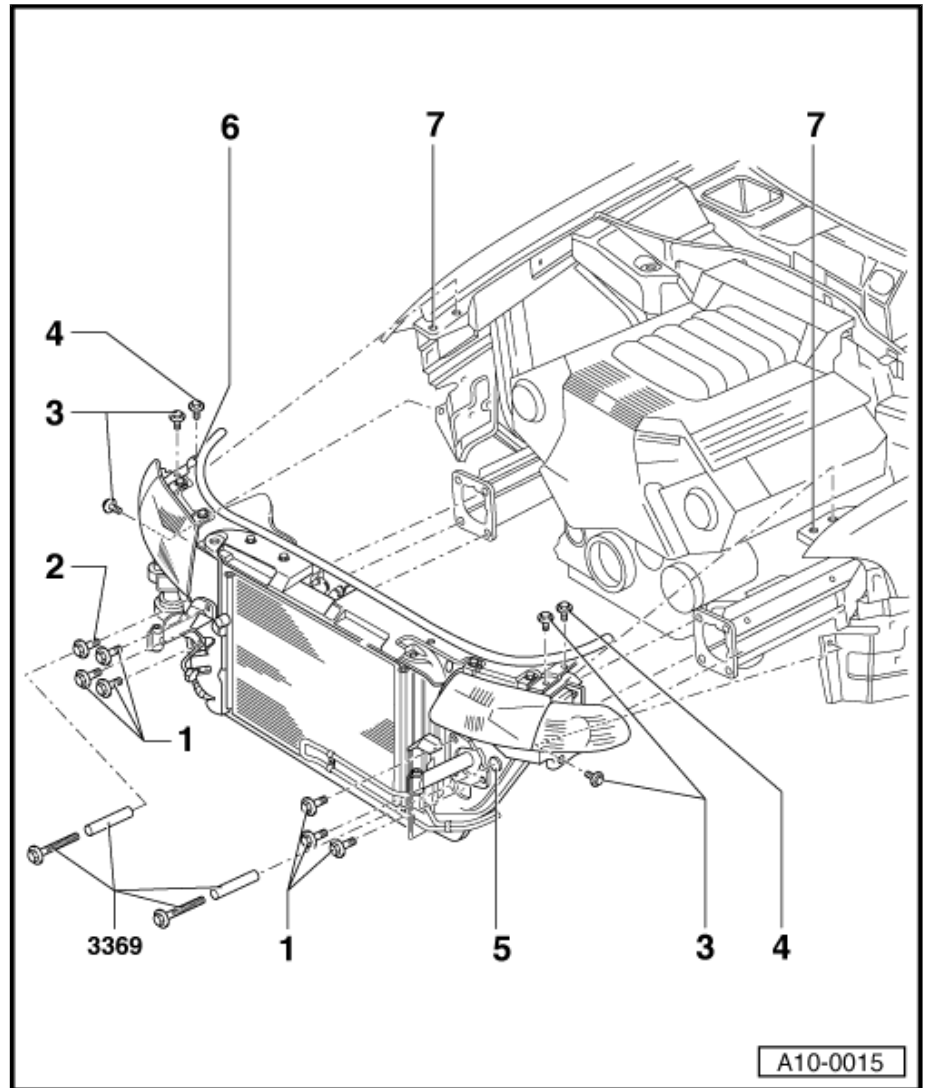
5 - Bore

□ For special tool -3369-

6 - Hole in lock carrier

7 - Hole in wing panel





- Remove front bumper: ⇒ General body repairs; Rep. gr. 63 ; Front bumper; Removing and installing front bumper
- Undo the three quick-release fasteners on the noise insulation at the front.
- Unbolt air duct between lock carrier and air cleaner from lock carrier.
- Remove retaining clips (if fitted) for wiring harness to the left of the radiator cowl.
- Remove bolt -2- on the right and screw in special tool -3369- .
- Screw special tool -3369- into hole -5- (left-side).
- Remove bolts -1- and -3-.
- Remove bolts -4- and pull the whole lock carrier out as far as it will go.

Protected by copyright. Copying or reproduction in any form is prohibited without the written permission of Audi AG. Audi AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

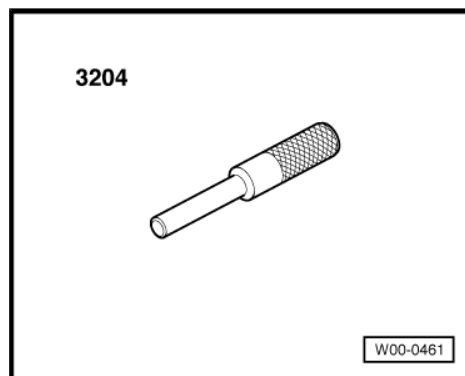
Secure the lock carrier with suitable M6 bolts in hole -6- (lock carrier) and hole -7- (wing panel).

- When lock carrier has been installed, check that the wiring next to the radiator is correctly routed.
- Install front bumper: ⇒ General body repairs; Rep. gr. 63 ; Front bumper; Removing and installing front bumper

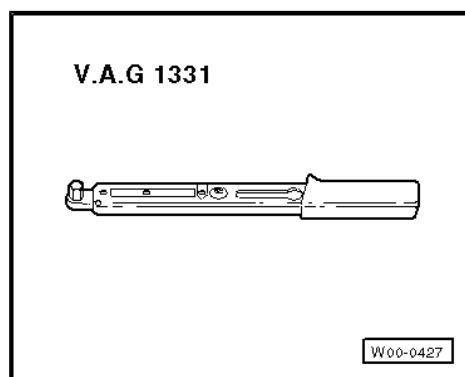
6.36 V-belt and poly V-belt: renewing (4-cyl. petrol engines ADP, ADR, AEB, AFY, AJL, ANB, APT, APU, ARG)

Special tools and workshop equipment required

- ◆ Locking pin -3204-



- ◆ Torque wrench -V.A.G 1331-

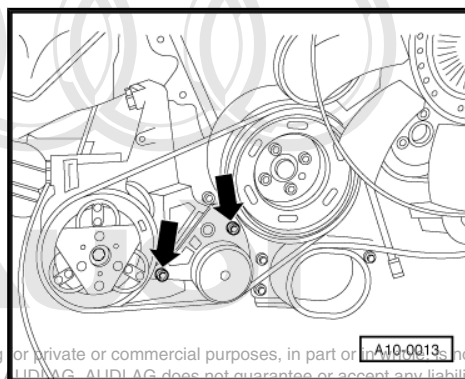


6.36.1 Removing

Vehicles with air conditioner:

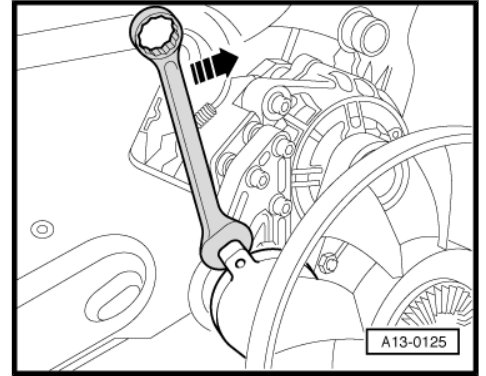
- Move lock carrier to service position ⇒ [page 71](#)
- Remove noise insulation ⇒ [page 71](#) .
- Loosen bolts securing tensioning roller for air conditioner compressor poly V-belt -arrows-; slacken poly V-belt and detach.

All models:



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

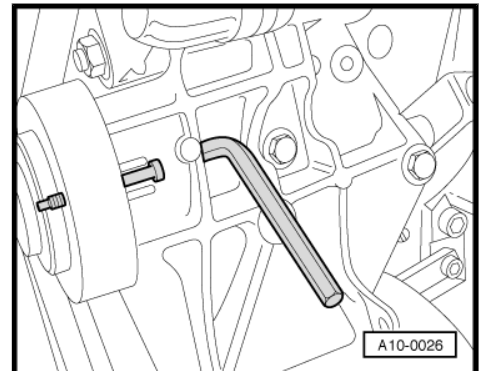
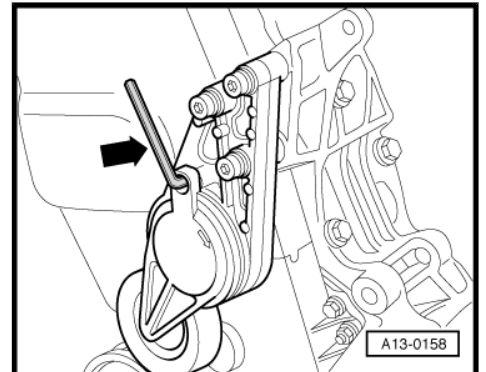
- Move tensioner for poly V-belt in direction of arrow to slacken poly V-belt.



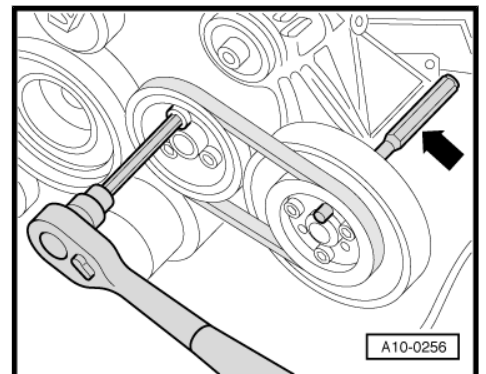
 Note

The tensioner for the poly V-belt can be locked in position by inserting a suitable Allen key -arrow- or locking pin -3204- in the locating holes.

- Detach poly V-belt, relieve tensioner.
- Secure viscous fan pulley with bolt M5 x 60 mm and remove using an 8 mm Allen key .
- Take off viscous fan.



- Remove V-belt pulley for coolant pump. Counterhold by inserting a drift -arrow- in the power steering pump pulley.
- Remove V-belt.



6.36.2 Installing

Installation is performed in reverse sequence; note the following:

- Fit V-belt on pulleys and assemble both sections of pulley on coolant pump without tightening the bolts.
- Tighten the bolts securing the two sections of the pulley in stages while turning the coolant pump.

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

- As the bolts are tightened, the V-belt should gradually move outwards until seated on the running surface
- Tighten bolts.



Note

It is not possible to adjust the tension of the V-belt for the coolant pump.

- Secure viscous fan.
- Fit poly V-belt over crankshaft pulley, viscous fan pulley and power steering pump pulley. If necessary, pull the belt upwards using a suitable tool.
- Move poly V-belt tensioner in direction of arrow.
- Fit poly V-belt over power steering pump pulley last. Release tensioner.
- Check that poly V-belt is in correct position.

♦ Routing of poly V-belt ⇒ [page 77](#)

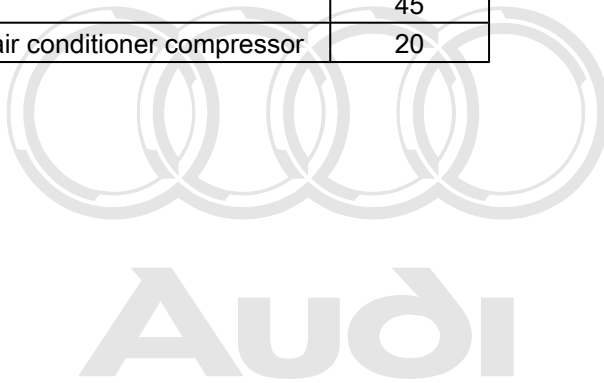
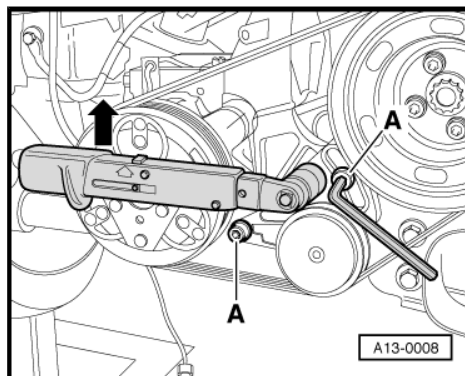
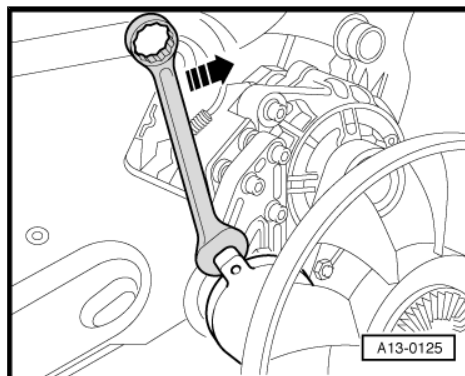
Vehicles with air conditioner:

- Fit poly V-belt for air conditioner compressor.
- ♦ Routing of poly V-belt ⇒ [page 77](#)
- Apply torque wrench to hexagon on tensioner and tension with a torque of 25 Nm.
- At the same time, tighten bolts -A-.

All models:

- Start engine and check that belt runs properly.
- Check again to make sure that the bolts for the coolant pump pulley are tightened to the correct torque.

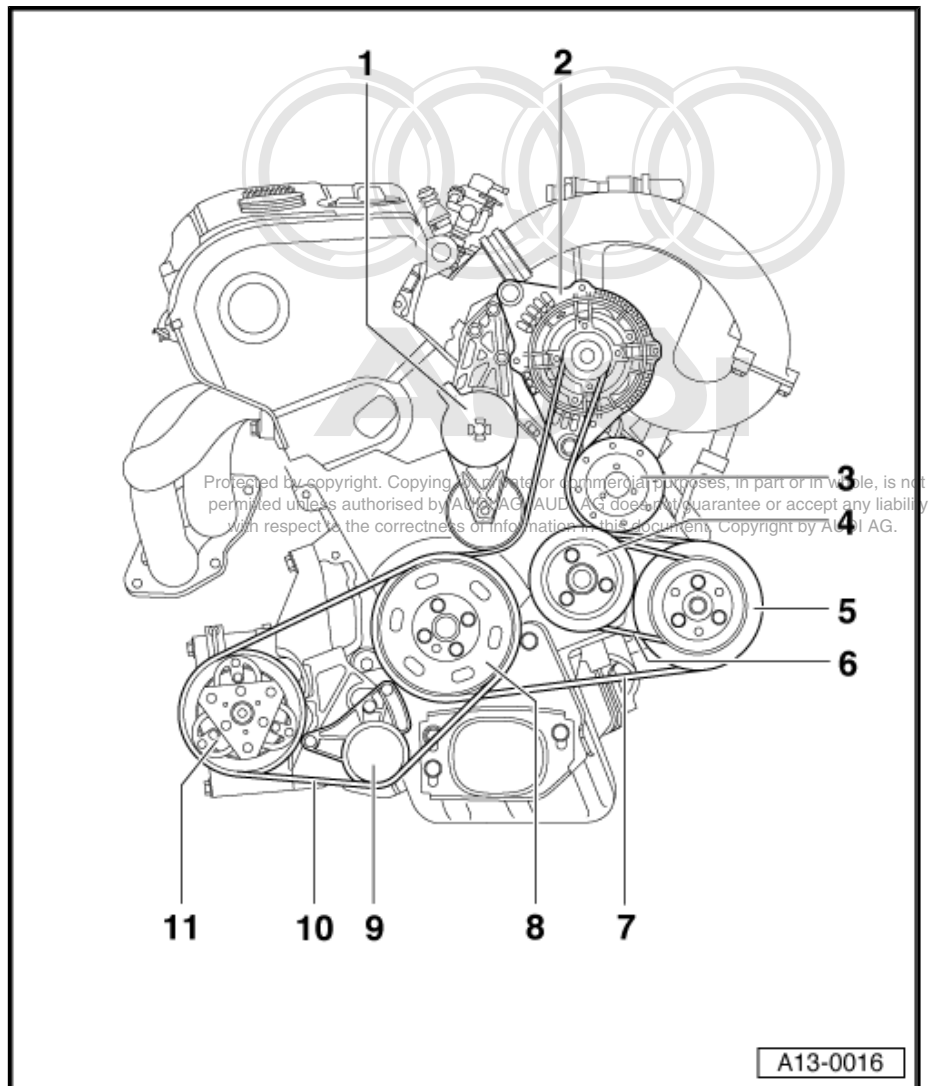
Tightening torques	Nm
Belt pulley for coolant pump	25
Viscous fan	45
Tensioning roller for air conditioner compressor	20



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.36.3 Routing of V-belt and poly V-belt

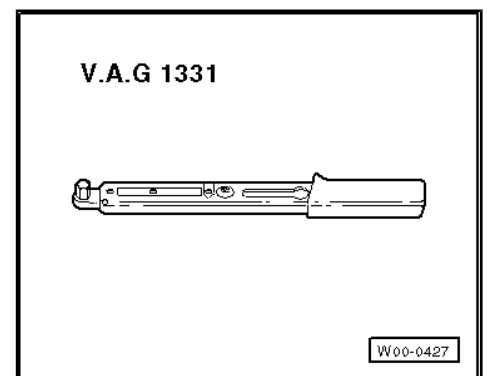
- 1 - Tensioner for poly V-belt
- 2 - Alternator
- 3 - Viscous coupling
- 4 - Coolant pump
- 5 - Power steering pump
- 6 - V-belt
 - ☐ For coolant pump
- 7 - Poly V-belt
 - ☐ For alternator, power steering pump and viscous fan
- 8 - Vibration damper
- 9 - Tensioner for poly V-belt
 - ☐ For air conditioner compressor
- 10 - Poly V-belt
 - ☐ For air conditioner compressor
- 11 - Air conditioner compressor



6.37 Poly V-belt: renewing (4-cyl. petrol engines AHL, ARM, ANA)

Special tools and workshop equipment required

- ◆ Torque wrench -V.A.G 1331-



- Moving lock carrier to service position ⇒ [page 71](#) .

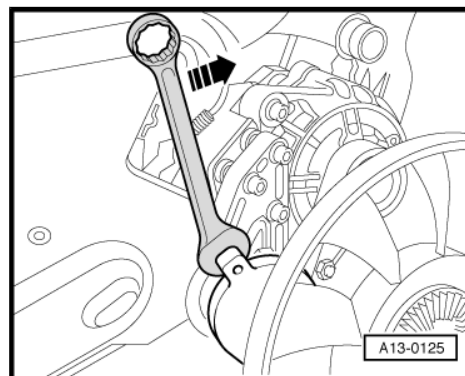
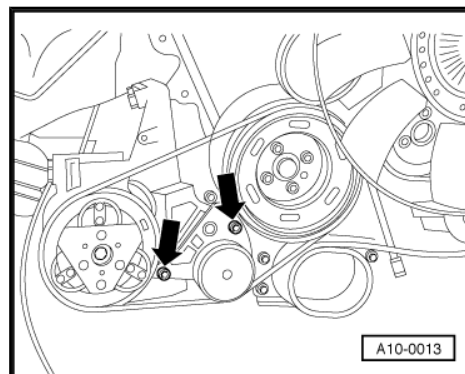
6.37.1 Removing

Vehicles with air conditioner:

- Remove noise insulation ⇒ [page 71](#) .
- Loosen bolts securing tensioning roller for air conditioner compressor poly V-belt -arrows-; slacken poly V-belt and detach.

All models:

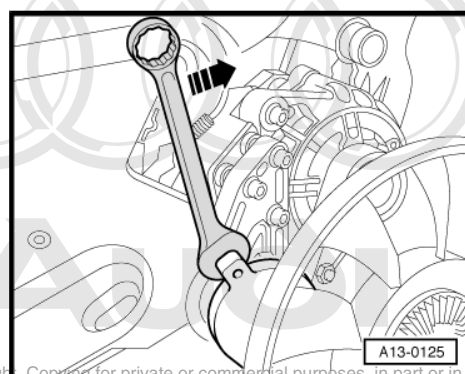
- Move tensioner for poly V-belt in direction of arrow to slacken poly V-belt.
- Detach poly V-belt, relieve tensioner.



6.37.2 Installing

Installation is performed in reverse sequence; note the following:

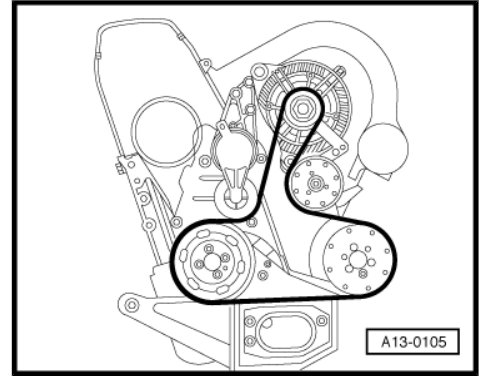
- Fit poly V-belt over crankshaft pulley, viscous fan pulley and power steering pump pulley. If necessary, pull the belt upwards using a suitable tool.
- Move poly V-belt tensioner in direction of arrow.
- Fit poly V-belt over power steering pump pulley last. Release tensioner.



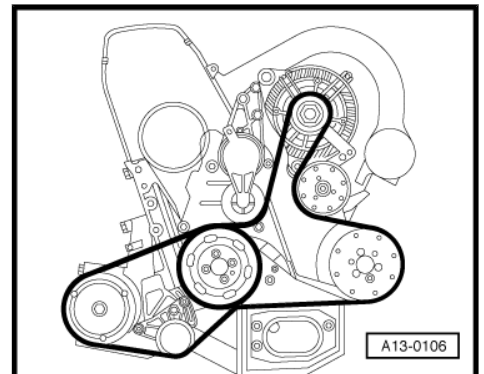
Protected by copyright. Copyright for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

- Check that poly V-belt is in correct position.

Vehicles with air conditioner:



- Fit poly V-belt for air conditioner compressor.

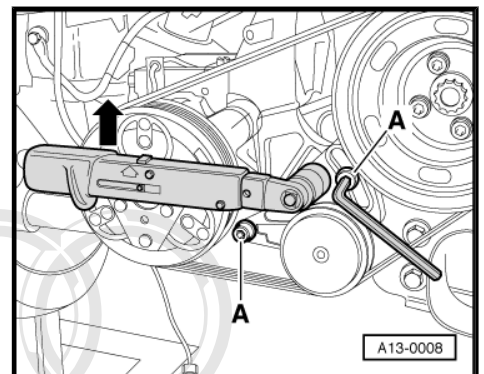


- Apply torque wrench to hexagon on tensioner and tension with a torque of 25 Nm.
- At the same time, tighten bolts -A-.

All models:

- Start engine and check that belt runs properly.

Tightening torques	Nm
Tensioning roller for air conditioner compressor	20



6.38 Poly V-belt: renewing (V6 petrol engines)

- Removing and installing poly V-belt: ⇒ 6-cylinder engine, mechanics; Rep. gr. 13 ; Crankshaft group; Removing and installing poly V-belt or ⇒ 6-cylinder engine (5-valve), mechanics; Rep. gr. 13 ; Dismantling and assembling cylinder block, crankshaft and flywheel; Removing and installing poly V-belt .

For reproduction or translation into other languages for commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.39 Toothed belt for camshaft drive: checking for damage (2.6 ltr. 2V engines and 2.8 ltr. 2V engines)

- Remove engine cover panel ⇒ [page 54](#) .
- Remove top cover of toothed belt.
- Check condition of toothed belt for:
 - ◆ Cracks, cross-sectional fractures
 - ◆ Layer separation (toothed belt body, cord strands)
 - ◆ Break-up on toothed belt body

- ◆ Fraying of cord strands
- ◆ Surface cracks (synthetic coating)
- ◆ Traces of oil and grease


WARNING

Any faults found must be rectified (repair measure).

6.40 Toothed belt for camshaft drive: checking for damage, measuring width of toothed belt (4-cyl. TDI engines up to and including model year 1999 -X-)

- Release the two tensioning clips at the top of the toothed belt cover and upper edge of cover forwards.
- Check condition of toothed belt for:
 - ◆ Cracks, cross-sectional fractures
 - ◆ Layer separation (toothed belt body, cord strands)
 - ◆ Break-up on toothed belt body
 - ◆ Fraying of cord strands
 - ◆ Surface cracks (synthetic coating)
 - ◆ Traces of oil and grease

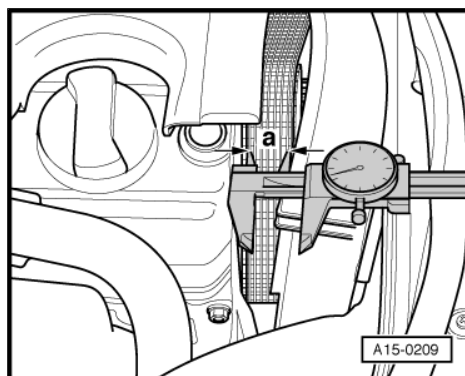

WARNING

Any faults found must be rectified (repair measure).

- Measure toothed belt width -a-.
- ◆ Wear limit = 22 mm


WARNING

If width of toothed belt is less than 22 mm it is essential that you renew the toothed belt (repair measure).



6.41 Toothed belt for camshaft drive: checking condition and tension (V6 TDI engines)

- Remove engine cover panel ⇒ [page 55](#) .
- Remove top cover of toothed belt.
- Check condition of toothed belt for:
 - ◆ Cracks, cross-sectional fractures
 - ◆ Layer separation (toothed belt body, cord strands)
 - ◆ Break-up on toothed belt body

- ◆ Fraying of cord strands
- ◆ Surface cracks (synthetic coating)
- ◆ Traces of oil and grease



WARNING

Any faults found must be rectified (repair measure).



Note

The toothed belt is tensioned by an automatic tensioning roller.

6.42 Toothed belt for injection pump: checking condition and tension (V6 TDI engines), tensioning toothed belt

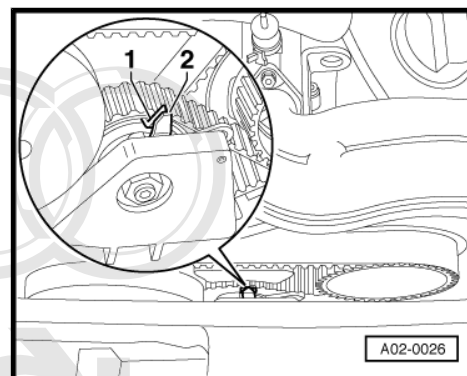
- Remove engine cover panel ⇒ [page 55](#) .
- Remove top cover of toothed belt.
- Check condition of toothed belt for:
 - ◆ Cracks, cross-sectional fractures
 - ◆ Layer separation (toothed belt body, cord strands)
 - ◆ Break-up on toothed belt body
 - ◆ Fraying of cord strands
 - ◆ Surface cracks (synthetic coating)
 - ◆ Traces of oil and grease



WARNING

Any faults found must be rectified (repair measure).

- Check tension of toothed belt for injection pump.
- ◆ The markings -1- and -2- must align.
- If the markings do not align, tension the toothed belt ⇒ 6-cyl. diesel direct injection engine (TDI), mechanics; Rep. gr. 13 ; Removing and installing poly V-belt; Removing and installing toothed belt



6.43 Toothed belt: renewing

6.43.1 4-cylinder 5V 1.8 ltr. petrol engines

- Removing and installing toothed belt: ⇒ 4-cyl. engine (5-valve), mechanics; Rep. gr. 13 ; Crankshaft group; Removing and installing poly V-belt; Removing and installing toothed belt

- Attach toothed belt renewal sticker ➔ [page 83](#) .

6.43.2 Toothed belt: renewing (4-cyl. petrol engine ADW)

- Removing and installing toothed belt: ➔ Audi 80 from 1992 onwards; 4-cyl. injection engine (2-valve), mechanics; Rep. gr. 13 ; Dismantling and assembling engine; installing toothed belt
- Attach toothed belt renewal sticker ➔ [page 83](#) .

6.43.3 Toothed belt: renewing (V6 2.4 ltr. 5V petrol engines)

- Removing and installing toothed belt: ➔ 6-cylinder engine (5-valve), mechanics; Rep. gr. 13 ; Dismantling and assembling cylinder block, crankshaft and flywheel; Removing and installing toothed belt
- Attach toothed belt renewal sticker ➔ [page 83](#) .

6.43.4 Toothed belt and tensioning roller: renewing (2.8 ltr. 5-valve petrol engines)

- Removing and installing toothed belt: renewing toothed belt tensioning roller ➔ 6-cylinder engine (5-valve), mechanics; Rep. gr. 13 ; Dismantling and assembling cylinder block, crankshaft and flywheel; Removing and installing toothed belt
- Attach toothed belt renewal sticker ➔ [page 83](#) .

6.43.5 Toothed belt, tensioning roller, idler roller, tensioner/damper and tensioning lever: renewing (V6 2.7 ltr. 5-valve engines)

- Removing and installing toothed belt, renewing toothed belt tensioning roller: ➔ 6-cyl. engine (5-valve, turbocharged), mechanics; Rep. gr. 13 ; Crankshaft group; Removing and installing poly V-belt; Removing and installing toothed belt
- Attach toothed belt renewal sticker ➔ [page 83](#) .

6.43.6 Toothed belt for camshaft drive: renewing (4-cyl. TDI engines)

- Removing and installing toothed belt: ➔ 4-cyl. diesel direct injection engines (TDI), mechanics; Rep. gr. 13 ; Removing and installing toothed belt
- Dynamic check and adjustment of commencement of injection: ➔ Diesel direct injection and glow plug system (TDI 4-cyl.); Rep. gr. 23 ; Dynamic check and adjustment of commencement of injection .
- Attach toothed belt renewal sticker ➔ [page 83](#) .

6.43.7 Toothed belt for camshaft drive: renewing (4-cyl. TDI engines with unit injector)

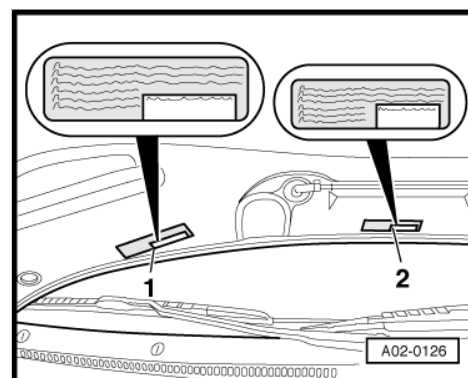
- Removing and installing toothed belt: ➔ 4-cyl. TDI diesel direct injection engines with unit injectors, mechanics; Rep. gr. 13 ; Removing and installing toothed belt
- Attach toothed belt renewal sticker ➔ [page 83](#) .

6.43.8 Toothed belt for camshaft drive and toothed belt for injection pump: renewing (V6 TDI engines)

- Removing and installing toothed belt for camshaft drive and toothed belt for injection pump: ⇒ 6-cyl. diesel direct injection (TDI), mechanics; Rep. gr. 13 ; Removing and installing poly V-belt; Removing and installing toothed belt
- Dynamic check and adjustment of commencement of injection: ⇒ Diesel direct injection and glow plug system (TDI 6-cyl.); Rep. gr. 23 ; Servicing diesel direct injection system; Dynamic check and adjustment of commencement of injection .
- Attach toothed belt renewal sticker ⇒ [page 83](#) .

6.43.9 Filling in toothed belt renewal sticker - all models

- Fill in toothed belt renewal sticker -2- (at rear of bonnet). Attach a new sticker if necessary.



6.44 Bearing bushes for poly V-belt tensioner: checking



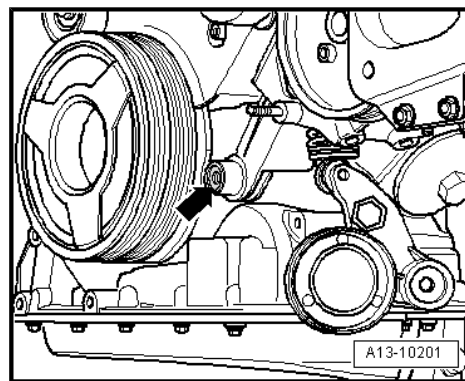
Note

Only perform check when renewing toothed belt.

- ◆ Removing and installing lever of tensioner ⇒ Engine, crankshaft group, servicing belt drive; Rep. gr. 13 ; Removing and installing bearing bushes at bracket for power steering pump and oil cooler
- ◆ Check whether mounting pin -arrow- in bracket for power steering pump and engine oil cooler can be turned or moved.
- ◆ Check mounting pin for rust.
- ◆ Check lever of tensioner for rust.


WARNING

If the mounting pin cannot be moved or if there are visible traces of rust, the mounting pin and the bearing bushes must be renewed (repair measure).



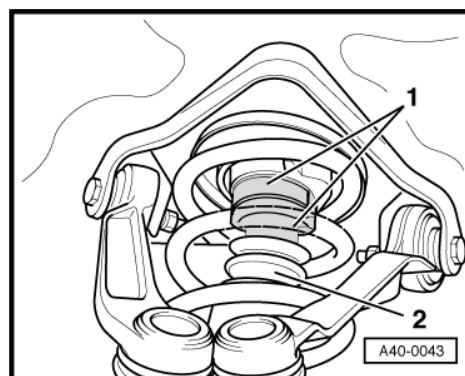
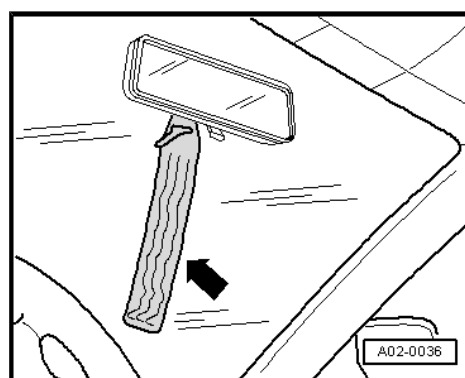
6.45 Transport locks: removing locking elements for front suspension struts

Some models are supplied with transport locks fitted on the front suspension struts. These vehicles are identified by a tag fixed to the mirror -arrow-.

- Relieve the load on the coil springs (e.g. by raising vehicle on a lifting platform).


Note

- ◆ *It is not necessary to remove the wheels.*
- ◆ *Ensure that surface of springs is not damaged.*
- Pull auxiliary spring -2- downwards.
- Remove locking elements -1- from the suspension struts (two on each suspension strut).
- Push auxiliary spring -2- upwards and engage in spring plate.



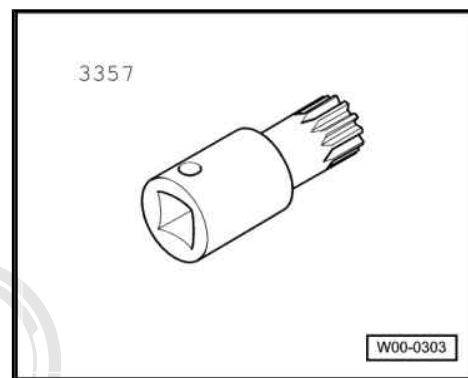
Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.46 Manual gearbox/final drive: checking oil level, topping up with oil if necessary

6.46.1 5-speed manual gearbox 012/01W, front-wheel drive

Special tools and workshop equipment required

- ◆ Multi-point bit -3357-



or

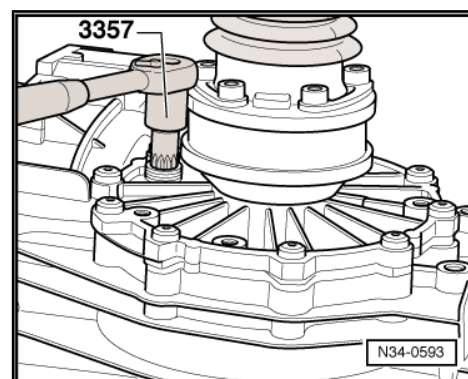
- ◆ Socket (hexagon key), 17 mm
- ◆ Torque wrench -V.A.G 1331-



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Note

- ◆ To check the gear oil the vehicle must be standing absolutely level. This work is best performed over an inspection pit or using a 4 -column lifting platform.
- ◆ The prescribed oil level must be adhered to exactly; the gear-box reacts very sensitively to overfilling.
- ◆ The oil filler plug is located on the left side of the gearbox, below the sender for the speedometer and may be concealed by the heat shield for the drive shaft.
- ◆ Depending on the version fitted, use either multi-point bit -3357- or a 17 mm hexagon key to loosen the oil filler plug.



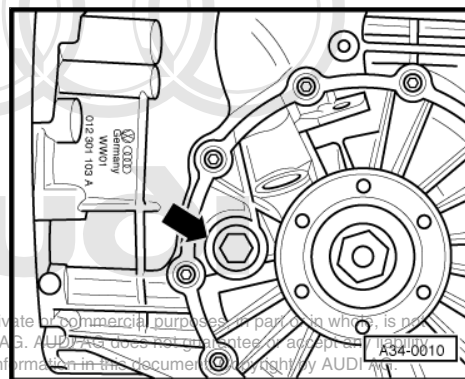
- Remove oil filler plug to check gear oil -arrow-.
- Check oil level using a self-made tool, e.g. a piece of angled wire.
- ◆ Specification: oil level 7 mm below bottom lip of oil filler hole



WARNING

If the oil level is below the range specified, the gearbox must be checked for leaks (repair measure). It is then not sufficient to merely top up the oil.

Protected by copyright. Copying for private or commercial purposes without prior written permission is prohibited. Audi AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by Audi AG.



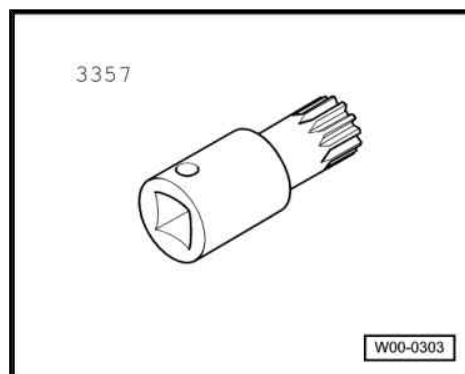
- If there are no leaks in gearbox, top up with gear oil „SAE 75 W 90“ (synthetic oil) according to specification -G 052 911 A- .
- Install oil filler plug.

Tightening torque	Nm
Oil filler plug	25

6.46.2 5-speed and 6-speed manual gearbox 01E, front-wheel drive

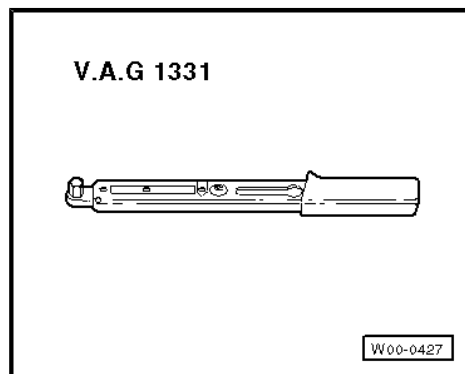
Special tools and workshop equipment required

- ◆ Multi-point bit -3357-



or

- ◆ Socket (hexagon key), 17 mm
- ◆ Torque wrench -V.A.G 1331-



 Note

- ◆ *To check the gear oil the vehicle must be standing absolutely level. This work is best performed over an inspection pit or using a 4 -column lifting platform.*
- ◆ *The prescribed oil level must be adhered to exactly; the gear-box reacts very sensitively to overfilling.*
- Remove oil filler plug -B- (in front of flange shaft) to check gear oil level.
- ◆ **Specification: oil level up to lower edge of filler hole**

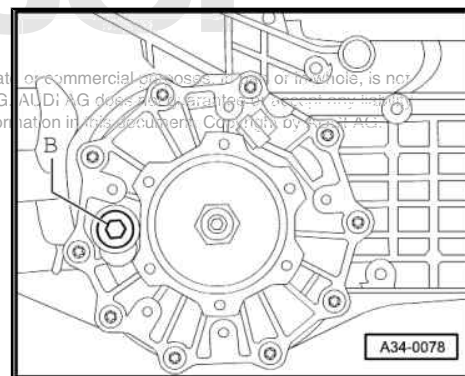


WARNING

If the oil level is below the range specified, the gearbox must be checked for leaks (repair measure). It is then not sufficient to merely top up the oil.

- If there are no leaks in gearbox, top up with gear oil „SAE 75 W 90“ (synthetic oil) according to specification G 052 911 A .
- Install oil filler plug.

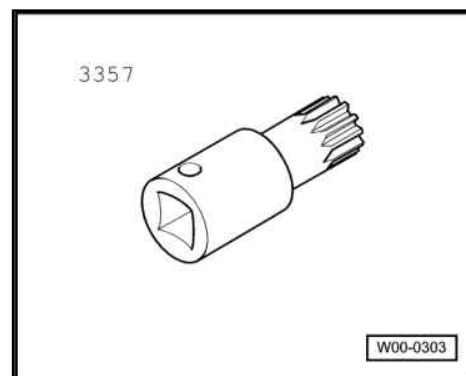
Tightening torque	Nm
Oil filler plug	40



6.46.3 5-speed manual gearbox 01A, four-wheel drive

Special tools and workshop equipment required

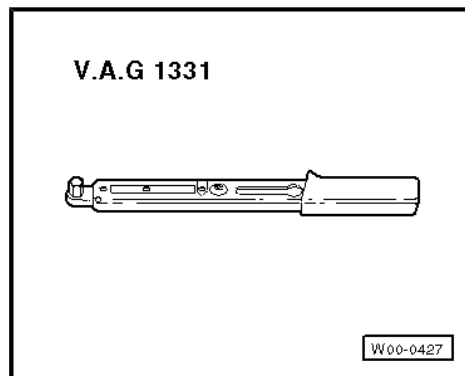
- ◆ Multi-point bit -3357-



or

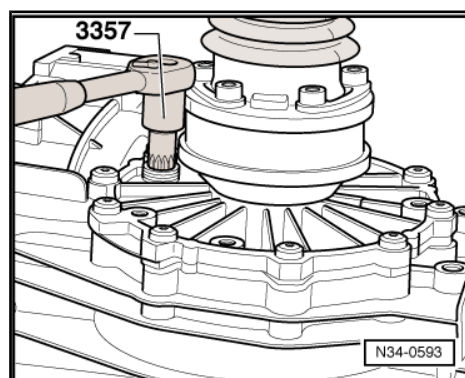
- ◆ Socket (hexagon key), 17 mm

- ◆ Torque wrench -V.A.G 1331-



Note

- ◆ The oil filler plug is located on the left side of the gearbox, below the sender for the speedometer and may be concealed by the heat shield for the drive shaft.
- ◆ Depending on the version fitted, use either multi-point bit -3357- or a 17 mm hexagon key to loosen the oil filler plug.

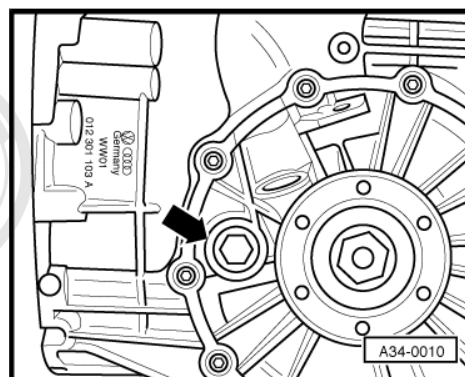


- Remove oil filler plug to check gear oil -arrow-.
- ◆ Specification: oil level up to lower edge of filler hole



WARNING

If the oil level is below the range specified, the gearbox must be checked for leaks (repair measure). It is then not sufficient to merely top up the oil.



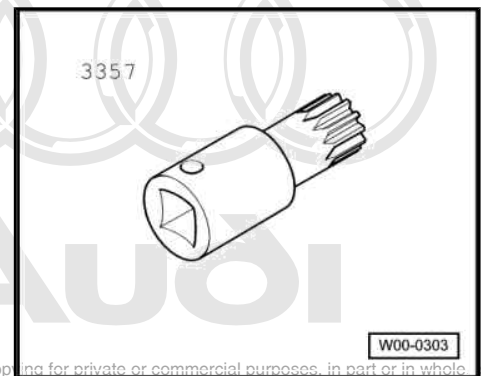
- If there are no leaks in gearbox, top up with gear oil SAE 75 W 90 (synthetic oil) according to specification „G 052 911 A“.
- Install oil filler plug.

Tightening torque	Nm
Oil filler plug	25

6.46.4 6-speed manual gearbox 01E, four-wheel drive

Special tools and workshop equipment required

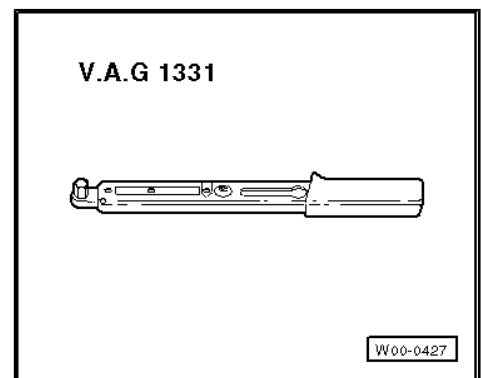
- ◆ Multi-point bit -3357-



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

or

- ◆ Socket (hexagon key), 17 mm
- ◆ Torque wrench -V.A.G 1331-



Note

- ◆ *To check the gear oil the vehicle must be standing absolutely level. This work is best performed over an inspection pit or using a 4 -column lifting platform.*
- ◆ *The prescribed oil level must be adhered to exactly; the gear-box reacts very sensitively to overfilling.*

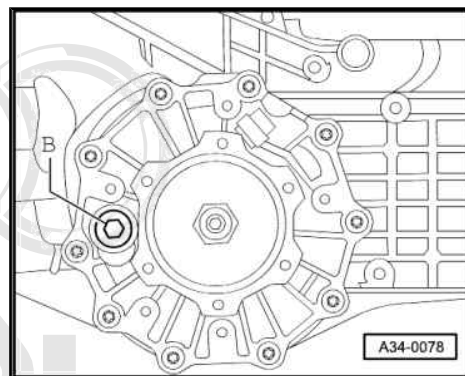
- Remove oil filler plug -B- (in front of flange shaft) to check gear oil level.
- Check oil level using a self-made tool, e.g. a piece of angled wire.

All models except S4, RS 4:

- ◆ Specification: oil level 1 mm below bottom edge of oil filler hole (tolerance: ± 1 mm)

Audi S4, RS 4:

- ◆ Specification: oil level 12 mm below bottom edge of oil filler hole (tolerance: ± 1 mm)



WARNING

If the oil level is below the range specified, the gearbox must be checked for leaks (repair measure). It is then not sufficient to merely top up the oil.

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted without prior written permission of AUDI AG. AUDI AG does not guarantee or accept any liability for errors or omissions in this document. Copyright by AUDI AG.

- If there are no leaks in gearbox, top up with gear oil „SAE 75 W 90“ (synthetic oil) according to specification -G 052 911 A-.
- Install oil filler plug.

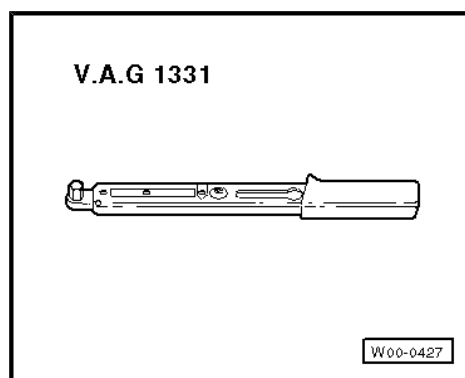
Tightening torque	Nm
Oil filler plug	40

6.47 Final drive (automatic gearbox): checking oil level, topping up with oil if necessary

6.47.1 Automatic gearbox 01N

Special tools and workshop equipment required

- ◆ Torque wrench -V.A.G 1331-



- Remove oil filler plug -arrow-.
- Specification: oil level up to lower edge of filler hole



WARNING

If the oil level is below the range specified, the final drive must be checked for leaks (repair measure). It is then not sufficient to merely top up the oil.

- If there are no leaks in final drive, top up with gear oil „SAE 75 W 90“ (synthetic oil) according to specification -G 052 145-.
- Install oil filler plug.

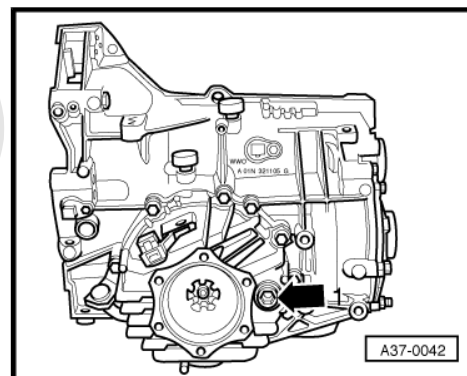
Tightening torque

Nm

Oil filler plug

25

- Fill in the sticker „final drive oil check“ ➔ [page 92](#) .



6.47.2 Automatic gearbox 01V

Special tools and workshop equipment required

- ◆ Torque wrench -V.A.G 1331-

V.A.G 1331



W00-0427

- Remove oil filler plug -arrow-.
- ◆ Specification: oil level up to lower edge of filler hole



WARNING

If the oil level is below the range specified, the final drive must be checked for leaks (repair measure). It is then not sufficient to merely top up the oil.

- If there are no leaks in final drive, top up with gear oil „SAE 75 W 90“ (synthetic oil) according to specification -G 052 145-.
- Always renew O-ring for oil filler plug.
- Install oil filler plug.

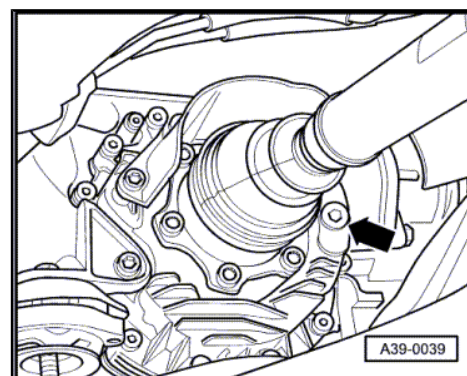
Tightening torque

Nm

Oil filler plug

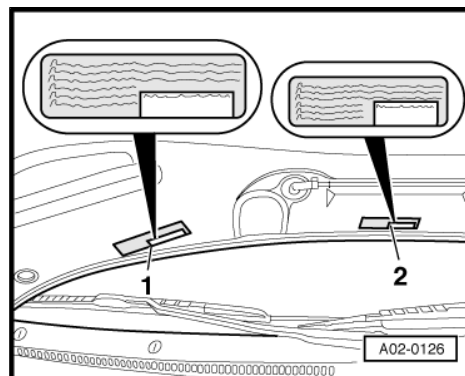
30

- Fill in the sticker „final drive oil check“ ➔ [page 92](#) .



6.47.3 Filling in sticker for final drive oil check

- Fill in sticker for final drive oil check -1- (at rear of bonnet). Attach a new sticker if necessary.



6.48 Engine oil: draining or extracting, changing oil filter



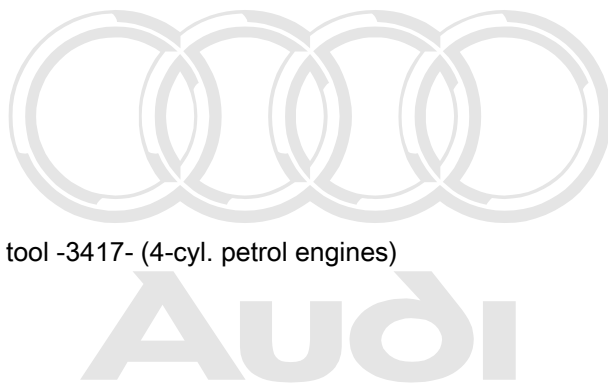
Note

Oil should always be changed when engine is warm.

Observe notes at the end of the section ⇒ [page 94](#) .

Special tools and workshop equipment required

- ◆ Oil extractor -V.A.G. 1782-
- ◆ Torque wrench -V.A.G 1331-



- ◆ Oil filter tool -3417- (4-cyl. petrol engines)

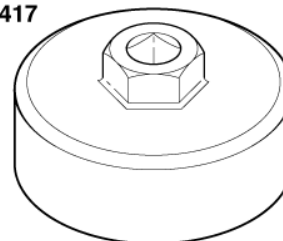
Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

V.A.G 1331



W00-0427

3417



W00-0408

- ◆ Hazet strap wrench -Hazet 2171-1- (4-cyl. TDI engines without unit injector, V6 petrol engines)
- Remove noise insulation ⇒ [page 71](#) .

4-cyl. petrol engines:

- Loosen oil filter -arrow- with oil filter tool -3417- .

4-cyl. TDI engines without unit injector:

- Loosen oil filter using e.g. Hazet strap wrench -2171-1-.

V6 petrol engines:

- Loosen oil filter -arrow- using e.g. Hazet strap wrench -2171-1-.

Remove oil filter

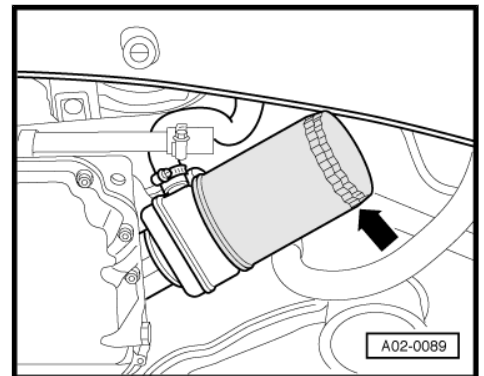
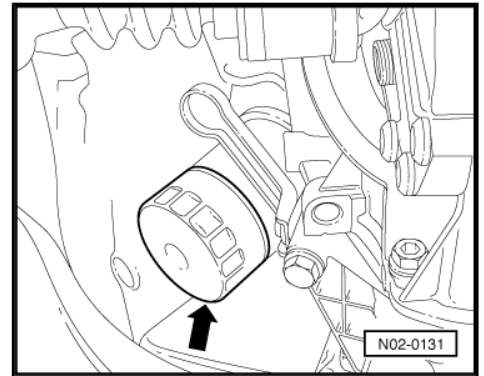
Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted without the written permission of AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

All models (except for V6 TDI and 4-cyl. unit injector engines):

- Open oil drain plug / draw off engine oil.
- Clean sealing surface for oil filter at engine.
- Lightly lubricate rubber seal.
- Screw in new filter and tighten.
- Screw in oil drain plug with new seal.

Tightening torques	Nm
4-cyl. petrol engines ADP, ADW, AHL, 4-cyl. TDI engines	30
4-cyl. petrol engines ADR, AEB, AFY, AJL	50
Oil drain plug (V6 2V petrol engine)	40
Oil drain plug (V6 5V petrol engine)	30

V6 TDI and 4-cyl. unit injector engines:



- Loosen sealing cap -1- with 32 mm ring spanner .
- Renew O-ring -2- and oil filter element -3-.
- Extract remaining oil from filter housing using oil extractor.
- Open oil drain plug / draw off engine oil.
- Screw in oil drain plug with new seal.
- Tighten sealing cap -1- with 32 mm ring spanner .

Tightening torques	Nm
Sealing cap for oil filter	25
Oil drain plug	25

- Fill up with engine oil, specifications ⇒ [page 100](#) .



Note

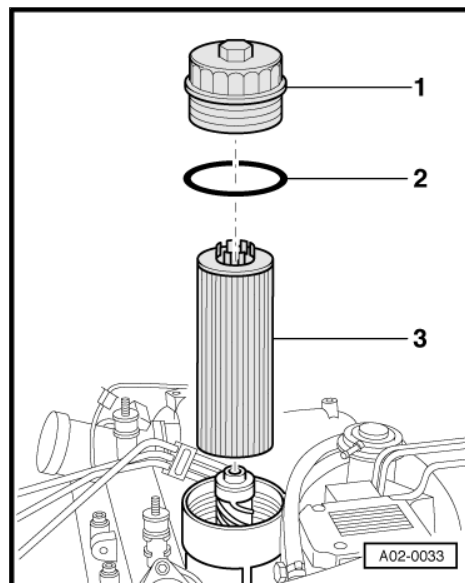
- ◆ Please observe the notes for turbocharged engines ⇒ [page 101](#) .
- ◆ Observe disposal regulations.
- ◆ Note the fitting instructions on the oil filter.



WARNING

On engines with oil cooler:

After renewing oil filter cartridge, check clearance of hoses from oil cooler to adjacent components, if necessary correct oil cooler position.



6.49 Brake system: visual check for leaks and damage

- Check the following components for leaks and damage:
 - ◆ Brake master cylinder
 - ◆ Brake servo
 - ◆ ABS hydraulic unit
 - ◆ Brake calipers
- Ensure that brake hoses are not twisted.
- Make sure that brake hoses do not touch any components when steering is on full lock.
- Check brake hoses for porosity, blistering and brittleness.
- Check brake hoses and pipes for chafing.
- Check brake pipe connections and mountings for correct seating, leaks and corrosion.



WARNING

Any faults found must be rectified (repair measure).

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.50 Brake pads: checking thickness



WARNING

When brake pad thickness is down to 7 mm (including backplate) the brake pads have reached their wear limit and must be renewed (repair measure). The customer must be informed.

Front disc brake pads:

- Determine thickness of outer pads by checking visually (with electric flashlight through cut-out in wheel).
- Determine thickness of inner pads by checking visually (with help of electric torch and mirror).

a - Pad thickness including backplate

Wear limit: 7 mm

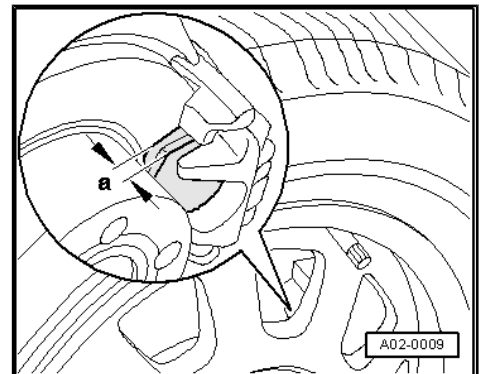
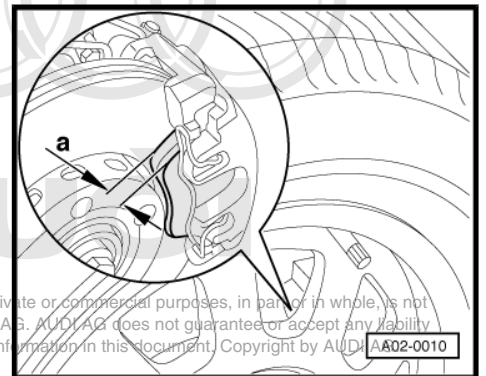
Rear disc brake pads:

- Determine thickness of outer pads by checking visually (with electric flashlight through cut-out in wheel).

- Determine thickness of inner pads by checking visually (with help of electric torch and mirror).

a - Pad thickness including backplate

Wear limit: 7 mm



6.51 Underseal: visual check for damage

- When performing visual check, check underbody, wheel housings and side members.



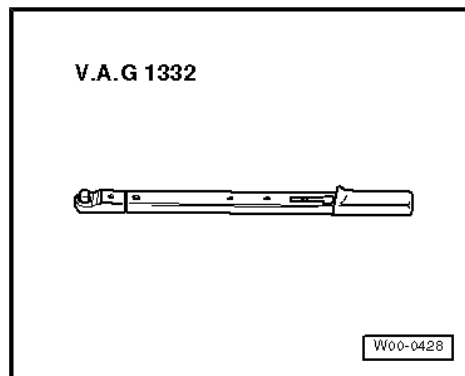
WARNING

Any faults found must be rectified (repair measure).

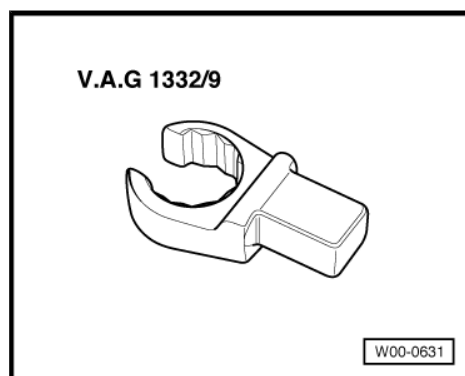
6.52 Track rod ball joints: checking play, security and boots

Special tools and workshop equipment required

◆ Torque wrench -V.A.G 1332-



◆ Tool insert -V.A.G 1332/9-

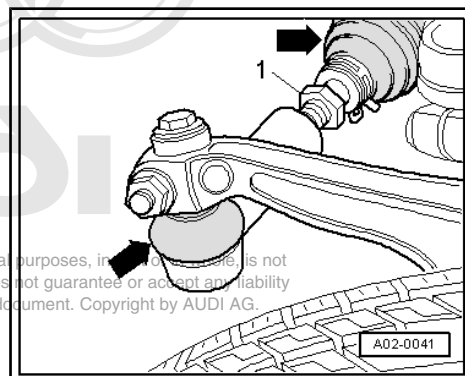


Note

The test must be carried out with vehicle raised on a lifting platform (wheels free to move).

- Check play by moving the track rods and wheels.
- There should be no play.
- Check that lock nut -1- is secure.
- Check that boots -arrow- are not damaged and are seated correctly.

Tightening torque	Nm
Lock nut	40



Protected by copyright. Copying for private or commercial purposes, in whole or in part, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.53 Tyres: checking condition, wear pattern, tread depth and correcting inflation pressures.

Checking tyres



Note

- ◆ *In the interest of driving safety, only tyres of the same type and tread pattern should be fitted on a vehicle.*
- ◆ *On four-wheel drive vehicles tyres of the same type and tread pattern must be used. Otherwise the centre differential may be damaged.*

6.53.1 Delivery Inspection

- Check tyre tread surfaces and sidewalls for damage and remove any foreign bodies.

6.53.2 Inspection Service

- Check tyre tread surfaces and sidewalls for damage and remove any foreign bodies.
- Check tyres for scuffing, one-sided wear, porous sidewalls, cuts and fractures.



WARNING

Any defects must be reported to the customer.

6.53.3 Checking tyre wear pattern

The wear pattern of the front tyres indicates, for example, whether the toe and camber have to be checked.

- ◆ Feathering on tread indicates incorrect toe setting.
- ◆ One-sided tread wear is usually due to incorrect camber.



Note

If the above types of wear are found, check wheel alignment to determine the cause (repair measure).

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorized by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

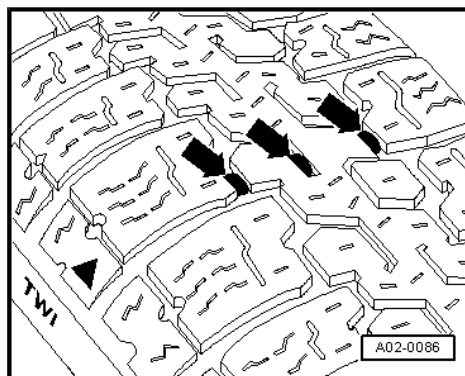
6.53.4 Checking tyre tread depth

- Minimum depth: 1.6 mm



Note

- ◆ This figure may vary for individual countries due to different legislation.
- ◆ The minimum tread depth is reached when the tyres have worn down level with the 1.6 mm high tread wear indicators -arrows- positioned at intervals around the tyre.
- ◆ If the tread depth is approaching the minimum permissible tread depth, the customer must be informed.



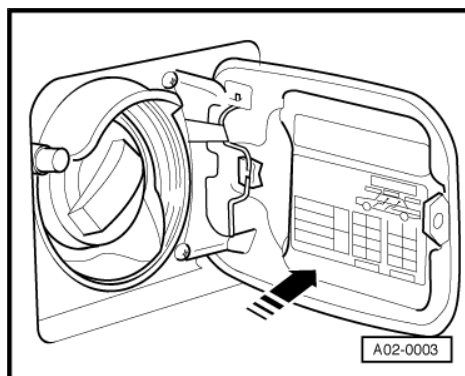
6.53.5 Inflating to correct pressures

The correct inflation pressures for summer tyres are listed on the sticker on the inside of the tank flap.



Note

- ◆ Please note that the inflation pressures listed on the sticker apply to cold tyres. When the tyres are warm, the actual pressures will be higher, but must not be reduced.
- ◆ When using winter tyres, pressures should be increased by 0.2 bar.



Spare wheel

- Spare wheel with standard-size tyre

Inflate to maximum tyre pressure specified for the vehicle.

- Temporary (compact) spare wheel

The correct inflation pressure is indicated on the sidewall.



Note

- ◆ The tyre valves have to be sealed with valve caps. Otherwise, dirt could enter the valve, which will then become blocked and will no longer seal properly.
- ◆ On vehicles with steel rims and full-diameter wheel covers, check tyre valve extensions. Damage and dirt can cause leaks. Renew if necessary.

6.54 Winter tyres (factory-fitted)

On vehicles supplied from the factory with winter tyres, check the inflation pressures as part of the Delivery Inspection.

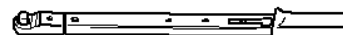
The warning sticker indicating the maximum permissible speed for the tyres must be affixed in a position where it is immediately visible to the driver.

6.55 Wheel bolts: tightening to specified torque

Special tools and workshop equipment required

◆ Torque wrench -V.A.G 1332-

V.A.G 1332



W00-0428

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Trim cap

Puller -A- for removing trim caps is included in vehicle tool kit.

Wheel bolts

The adapter for loosening and tightening anti-theft wheel bolts is included in vehicle tool kit.



Ensure that wheel bolts are tightened in diagonal sequence to the following tightening torque:

Tightening torque	Nm
Wheel bolts	120

- Place adapter back in vehicle tool kit after completing work.

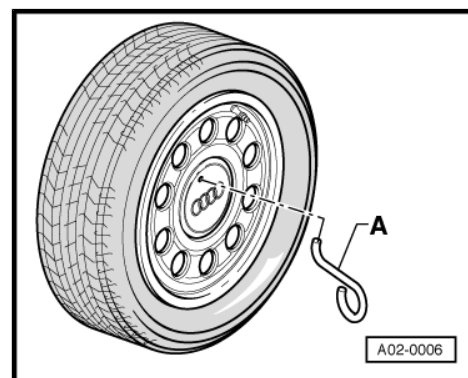
Fitting wheels correctly

- When fitting the wheels please observe the following rules to ensure that the wheels will remain securely fitted:
 - Always tighten the wheel bolts to the specified torque; excessive torque can distort the wheel bolt seats in the rim.
 - When fitting a wheel do not tighten the first wheel bolt immediately (e.g. with an impact wrench), as this would prevent the other bolts from centring the rim properly when they are screwed in. The rim could then come loose even though the bolts have been tightened to the specified torque.
 - Before fitting the wheels examine the seats of the wheel bolts and the contact surfaces between the rims and the hubs for rust and corrosion and clean it off these parts if necessary. Otherwise, after fitting the wheels, the clamping force of the wheel bolts may be impaired and the rims could come loose.



WARNING

- ◆ *If the points listed above are not observed the wheels can come loose and the wheel bolt seats can become distorted.*
- ◆ *This distortion may be so slight that it is not visible.*
- ◆ *Even this slight distortion of the wheel bolt seats can prevent the rims from being held firmly and will make them come loose repeatedly.*



A02-0006

6.56 Engine oil: filling up

The engine is filled with a high-quality multi-grade oil at the factory: this can be used all year round, except in extremely cold climates.

Viscosity grades

Select the viscosity grade of the oil according to the chart.

A - High-lubricity multi-grade oils, specification ⇒ [page 100](#)

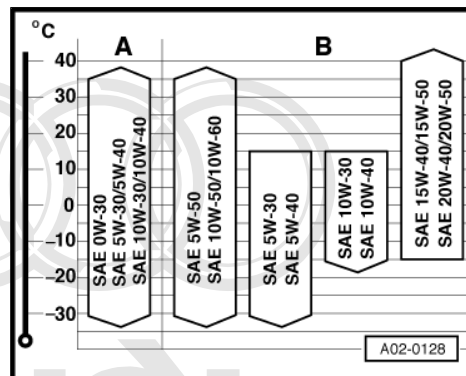
B - Multi-grade oils, specification ⇒ [page 100](#)

A - LongLife high-lubricity multi-grade oils, specification ⇒ [page 101](#)



Note

The oil does not need changing for brief variations of outside temperature beyond the temperature ranges shown.



6.56.1 Oil specifications

The specifications listed here must appear on the container either singly or together with other specifications.



Note

When topping up it is permissible to mix different types of oil.

6.56.2 Oil specifications for petrol engines (without LongLife)

A - High-lubricity multi-grade oils, specification „VW 500 00“ ¹⁷⁾ or high-lubricity multi-grade oils, specification „VW 502 00“ ¹⁸⁾

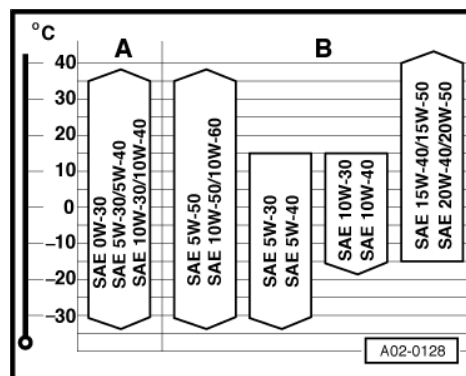
B - Multi-grade oils, specification „VW 501 01“ ¹⁷⁾

- Multi-grade oils, specification API-SF ¹⁹⁾ or API-SG ¹⁹⁾

17) The date given after the VW specification must not be earlier than 10/97.

18) The oils are particularly suitable for turbocharged petrol engines.

19) These oils should only be used if the approved engine oils are not available.



6.56.3 Oil specifications for TDI engines (without LongLife)

A - High-lubricity multi-grade oils, specification „VW 500 00“ ²⁰⁾ (only in combination with specification „VW 505 00“)

B - Multi-grade oils, specification „VW 505 00“ ²⁰⁾ „VW 505 01“ ¹⁷⁾

- Multi-grade oils, specification „VW 501 01“ ²⁰⁾ (only in combination with specification „VW 505 00“)

- Multi-grade oils, specification API-CD (should only be used for topping up if approved grades are not available)

20) The date given after the VW specification must not be earlier than 10/97.

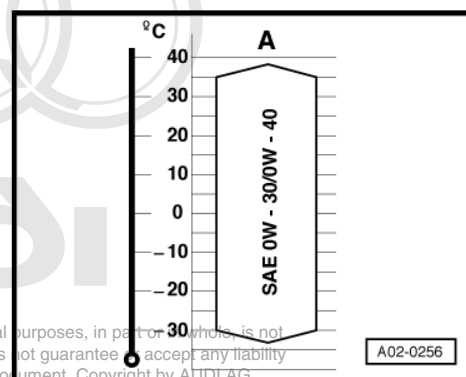
6.56.4 LongLife oil specifications for vehicles with petrol engine:

A - High-lubricity multi-grade oils, for flexible oil change intervals

New VW standard (specially developed, resistant to ageing) according to specification:

„VW 503 00“ Petrol engines / turbocharged petrol engines

„VW 503 01“ Turbocharged petrol engines from 154 kW (only Audi S3, Audi TT and Audi RS 4).



Protected by copyright. Copying for private or commercial purposes, in part or whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.56.5 LongLife oil specifications for vehicles with diesel engine:

A - High-lubricity multi-grade oils, for flexible oil change intervals

New VW standard (specially developed, resistant to ageing) according to specification:

„VW 506 00“ Diesel engines (not with unit injector)

6.56.6 Filling up engine oil

- Fill up with engine oil.

Capacities with filter change ⇒ ELSA maintenance table

Engines with turbocharger:

- When the engine oil and oil filter have been changed, it is important to note the following after starting the engine for the first time:
 - ◆ The engine must only run at idling speed as long as the oil pressure warning lamp in the dash panel is on. Do not rev up! If the engine is revved up the turbocharger can be damaged or fail completely.
 - ◆ The full oil pressure is not attained until the warning lamp has gone out, only then can the engine be revved up.

All engines:

- Finally, check engine oil level ⇒ [page 101](#).

6.57 Engine: checking oil level

Test requirements

- Engine oil temperature at least 60 °C.
- Vehicle must be level (horizontal).
- Wait a few minutes after switching off the engine to allow the oil to flow back into the sump.
- Pull out the dipstick, wipe with a clean cloth and insert again as far as it will go.

- Pull out the dipstick again and read off the oil level.

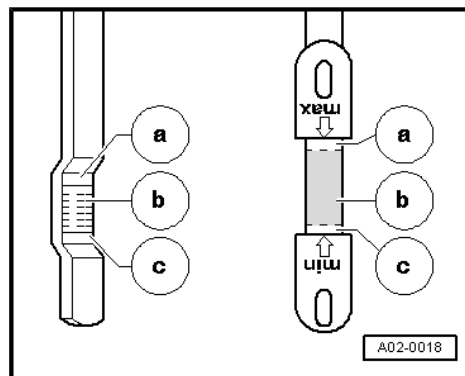
Markings on oil dipstick

- a - Oil must not be topped up.
- b - Oil can be topped up. The oil level may rise as far as area -a- after topping up.
- c - Oil must be topped up. The oil level is sufficient if it is somewhere in area -b- (grooved area) after topping up.



Note

The oil level must not be above marking -a- on the dipstick.



6.58 Brake fluid level (depends on brake pad wear): checking

Only use new genuine VW/Audi brake fluid in accordance with US standard „FMVSS 116 DOT 4“.



WARNING

- ◆ **Brake fluid is poisonous. It also has caustic properties and must therefore not be allowed to come into contact with paintwork.**
- ◆ **Brake fluid is hygroscopic, i.e. it absorbs moisture from the surrounding air. It must therefore always be stored in air-tight containers.**

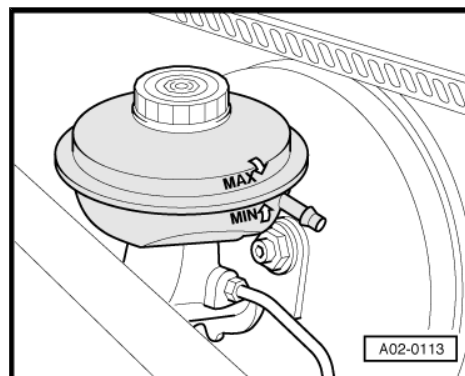
6.58.1 Delivery Inspection

- ◆ **The fluid level must be at the MAX mark.**



Note

The fluid level must not exceed the MAX marking, otherwise the fluid will overflow.



6.58.2 Inspection Service

When the vehicle is driven, the brake fluid level will drop slightly with use and as a result of the automatic adjustment of the brake pads.

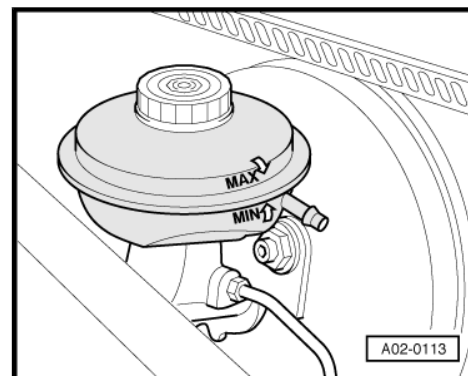
- When checking the brake fluid level, always take into account the amount of wear on the brake pads:

- If the brake pads are new or a long way from reaching the wear limit, the fluid level should be between the MIN and MAX marks.
- If the brake fluid level is at or slightly above the MIN marking and the brake pads have almost reached the wear limit, topping up is not required.



WARNING

If the fluid level has fallen below the MIN mark, check the brake system (repair measure) before adding brake fluid.



6.59 Brake fluid: changing (every 2 years)



WARNING

- ◆ *Brake fluid must on no account come into contact with liquids containing mineral oils (oil, petrol, cleaning agents). Mineral oils damage the plugs and sleeves in the brake system.*
- ◆ *The brake fluid reservoir must always be adequately filled to ensure that no air can enter the brake system from the reservoir.*
- ◆ *Brake fluid is poisonous and must under no circumstances be sucked through a tube using the mouth. Because of its caustic properties it must also not come into contact with paintwork.*
- ◆ *Brake fluid is hygroscopic, i.e. it absorbs moisture from the surrounding air. It must therefore always be stored in airtight containers.*
- ◆ *Use plenty of water to rinse away any brake fluid spillage.*
- ◆ *Always observe the relevant environmental regulations for disposal.*

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Only use new brake fluid -B 000 700 A- (corresponds to US standard FMVSS 116 DOT 4).

Changing the brake fluid with brake filling and bleeding equipment -VAS 5234- ➔ [page 105](#)

Changing brake fluid with brake filling and bleeding equipment - V.A.G 1869- as described below

6.59.1 Changing the brake fluid with brake filling and bleeding equipment -VW 1238/ B- or -V.A.G 1869-

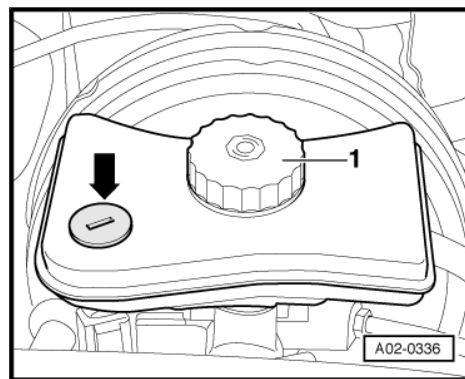
Special tools and workshop equipment required

- ◆ Brake filling and bleeding equipment -VW 1238- , - V.A.G 1238/1- or -V.A.G 1238/B-
- ◆ Upgrade kit and extraction unit -V.A.G 1869/4-

- Unscrew cap -1- from brake fluid reservoir.
- Unscrew plug -arrow- from brake fluid reservoir.
- Connect the extraction hose of -V.A.G 1869/4- to pipe in brake fluid reservoir.
- Use extraction hose included in -V.A.G 1869/4- to extract as much brake fluid as possible.
- Remove the extraction hose.
- Screw the plug onto the brake fluid reservoir.


WARNING

Do not reuse the old brake fluid that has been extracted.



- Connect -VW 1238/B- or -V.A.G 1869- , but do not switch on yet.

Vehicles with manual gearbox:

- Remove cap from bleeder screw on clutch slave cylinder.
- Open bleeder screw on clutch slave cylinder.
- Fit bleeder hose leading to brake fluid collector onto bleeder screw on clutch slave cylinder.
- Then switch on bleeder appliance and allow about 100 cm³ of brake fluid to drain out.
- Close bleeder screw and switch off bleeder appliance.
- Attach cap.

Continuation for all vehicles:

- Remove caps from bleeder screws.

Sequence for changing brake fluid in brake calipers:

- 1 - Front left-hand brake caliper
- 2 - Front right-hand brake caliper
- 3 - Rear left-hand brake caliper
- 4 - Rear right-hand brake caliper

- Remove caps from bleeder screws.

- Fit bleeder hose leading to brake fluid collector onto bleeder screw for relevant brake caliper.

- Switch on bleed equipment, open bleeder screw and allow about 200 cm³ of brake fluid to drain out.

Used brake fluid is pushed out of the system when new fluid is pumped in.

- Close bleeder screw.
- Perform the same procedure at the remaining bleeder screws.

Table - sequence for changing brake fluid / quantities

Front left	200 ml
Front right	200 ml
Rear left	200 ml
Rear right	200 ml
Total quantity ²¹⁾	1000 ml

21) Including brake fluid extracted from brake fluid reservoir and fluid changed in hydraulic clutch system

- Switch off bleed equipment.
- Fit caps back on bleeder screws on brake calipers.
- Disconnect hose from brake fluid reservoir.
- Check pedal pressure and free play of brake pedal. Free play: no more than $\frac{1}{3}$ of pedal travel
- During the final test drive, make sure that at least one ABS-controlled brake application is carried out (with noticeable pulsing of brake pedal).

6.59.2 Changing the brake fluid with brake filling and bleeding equipment -VAS 5234-

Special tools and workshop equipment required

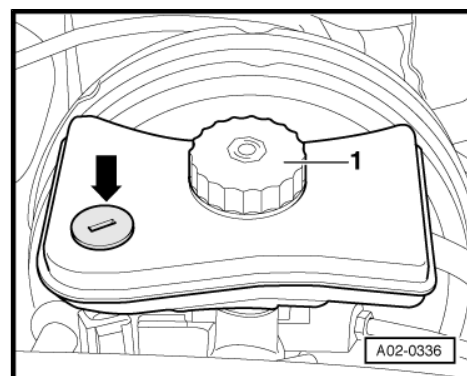
- ◆ Brake filling and bleeding equipment -VAS 5234-

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.



Observe operating instructions for -VAS 5234- !

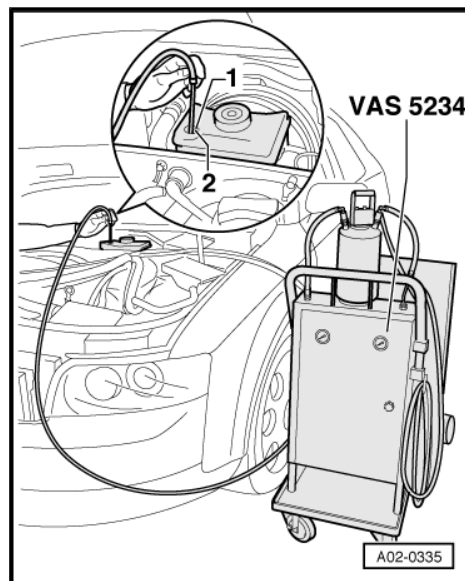
- Unscrew cap -1- from brake fluid reservoir.
- Unscrew plug -arrow- from brake fluid reservoir.



- Connect the extraction hose of -VAS 5234- to pipe -1- in brake fluid reservoir.
- Use extraction hose included in -VAS 5234- to extract as much brake fluid as possible.
- Remove the extraction hose.
- Screw the plug onto the brake fluid reservoir.


WARNING

Do not reuse the old brake fluid that has been extracted.

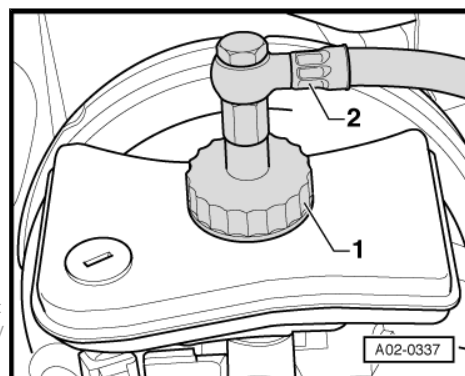


- Connect adapter -1- to brake fluid reservoir.
- Connect filling hose -2- included with -VAS 5234- to adapter.

Vehicles with manual gearbox:

- Remove cap from bleeder screw on clutch slave cylinder.
- Fit bleeder hose -1- leading to brake fluid collector onto bleeder screw on clutch slave cylinder.
- Switch on bleed equipment, open bleeder screw and allow about 100 cm³ of brake fluid to drain out.

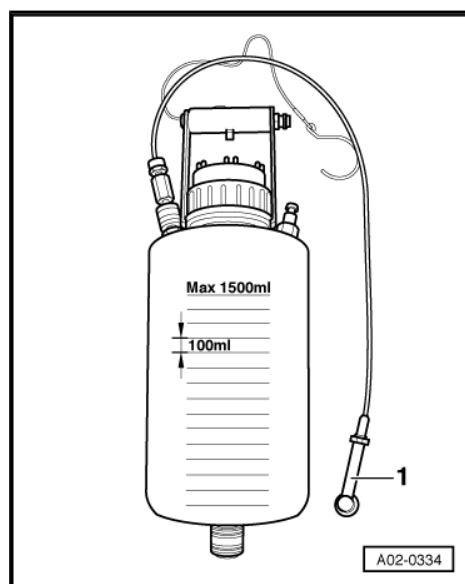
This document is a technical specification and is not intended for general use. It is not permitted to reproduce, in part or in whole, or to use it for any other purpose, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.



- Close bleeder screw and fit cap back on.
- Switch off bleed equipment.
- Repeatedly depress the clutch pedal.

Continuation for all vehicles:

- Remove caps from bleeder screws.



- Connect bleeder hose -1- attached to collector bottle to bleeder screw (front left), switch on bleeder equipment, open bleeder screw and allow approx. 200 ml of brake fluid to flow out. Close bleeder screw.

Repeat the procedure on the other front side of the vehicle.

- Connect bleeder hose -1- attached to collector bottle to bleeder screw (rear left), open bleeder screw and allow approx. 200 ml of brake fluid to flow out. Close bleeder screw.

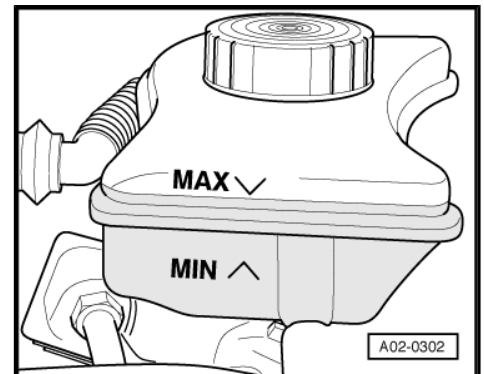
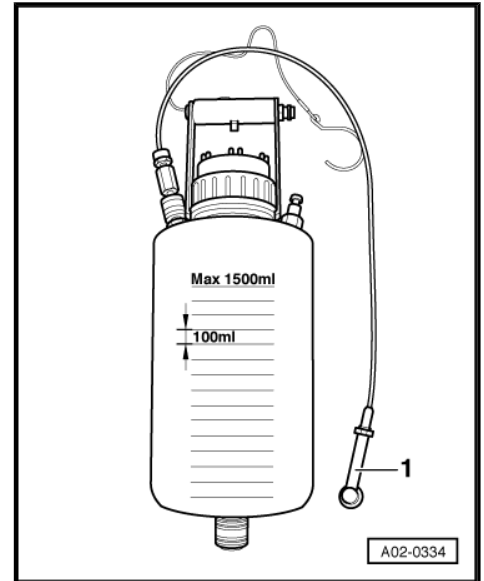
Repeat the procedure on the other rear side of the vehicle.

Table - sequence for changing brake fluid / quantities

Front left	200 ml
Front right	200 ml
Rear left	200 ml
Rear right	200 ml
Total quantity ²²⁾	1000 ml

22) Including brake fluid extracted from brake fluid reservoir and fluid changed in hydraulic clutch system

- Fit caps back on bleeder screws on brake calipers.
- Move filling lever on -VAS 5234- to position -B- (see operating instructions).
- Detach filling hose from adapter.
- Unscrew adapter from brake fluid reservoir.
- Check brake fluid level and correct as necessary.
- Screw cap onto brake fluid reservoir.
- Check pedal pressure and free play of brake pedal. Free play: no more than $\frac{1}{3}$ of pedal travel
- During the final test drive, make sure that at least one ABS-controlled brake application is carried out (with noticeable pulsing of brake pedal).



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.60 Headlights: checking settings and adjusting if necessary

The following checking and adjustment procedures apply to all countries. However, national legislation and guidelines for individual countries must be adhered to.

6.60.1 Requirements for checking and adjusting

- Tyre pressures OK.
- Lenses must not be damaged or dirty.
- Reflectors and bulbs OK.
- Vehicle correctly loaded.

Loading: With one person or 75 kg on the driver's seat and the vehicle otherwise unloaded (unladen weight).

The unladen weight is the weight of the vehicle ready for operation with full fuel tank (at least 90 %) including the weight of all equip-

ment normally carried (e.g. spare wheel, tools, jack, fire extinguisher, etc.).

If the fuel tank is not at least 90% full put in additional weight as follows:

- Read fuel level in fuel tank from the fuel gauge. Calculate additional weight according to the following table and place weight into boot.

Capacity table

Fuel level on fuel gauge	Additional weight in kg
1/4	45
1/2	30
3/4	15
full	0

Example:

When the fuel tank is half full, an additional weight of 30 kg must be placed in the luggage compartment.



Note

As an additional weight it is best to use a fuel canister filled with water: 5 litres of water weigh approx. 5 kg.

Roll vehicle several metres or depress front and rear springs fully several times so that springs settle correctly.

- Vehicle and headlight adjuster must be on a level surface. ⇒ Headlight adjuster operating instructions
- Vehicle and headlight adjuster must be aligned.

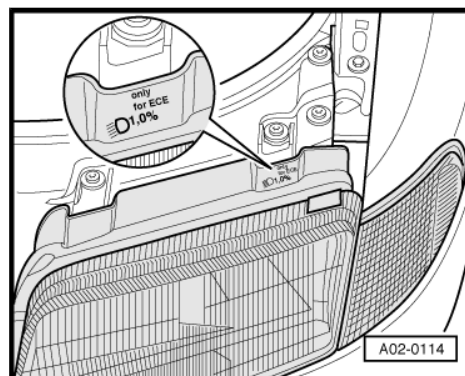
Ensure that the headlight adjuster is positioned 30 cm in front of the headlight.

- Dip setting must be adjusted.

A „%“ value is marked on top of headlight. This indicates the dip setting that the headlights must be adjusted to. The percentage value is for a range of 10 m. At a dip setting of, for example, 1.0% (for vehicles with headlight range control), this converts to 10 cm. permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Vehicles with manually adjustable headlight range control:

- The knurled wheel for headlight range control must be in position -0-.



6.60.2 Checking adjustment of headlights

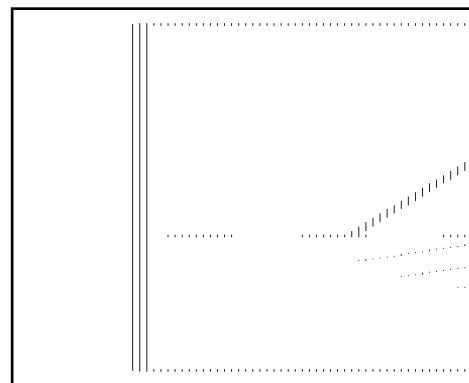
With new test screen without 15° setting line

- Switch on ignition.
- Switch on dipped headlights.

- ◆ The horizontal light-dark border should coincide with the setting line -1- on the test surface.
- ◆ The break-away point -2- between the horizontal section of the light-dark border on the left and the rising section on the right should coincide with the vertical line running through the central point -3-. The bright spot in the centre of the beam should be to the right of the vertical line.

 Note

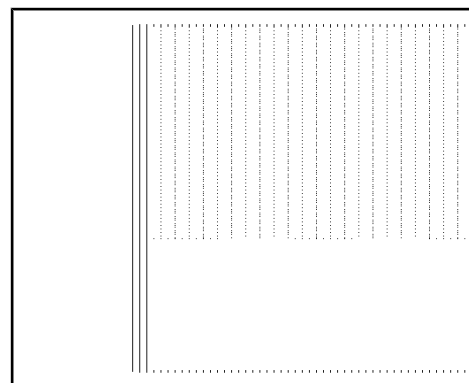
- ◆ *To make it easier to find break-away point -2-, cover and uncover left half of headlight (as seen in direction of travel) a few times. Then check dipped beam again.*
- ◆ *If dipped beams have been adjusted correctly the centre point of the main beam should lie on central point -3-.*



Using previous type of test screen

If using an old test screen with a 15 ° setting line, the adjustment procedure is the same as for the new test screen. To avoid incorrect settings, ignore the 15 ° setting line.

- If the headlight setting is incorrect adjust the headlights as follows:
- ◆ Vehicles with gaseous discharge headlights ⇒ [page 109](#)
- ◆ Vehicles with halogen headlights ⇒ [page 109](#)



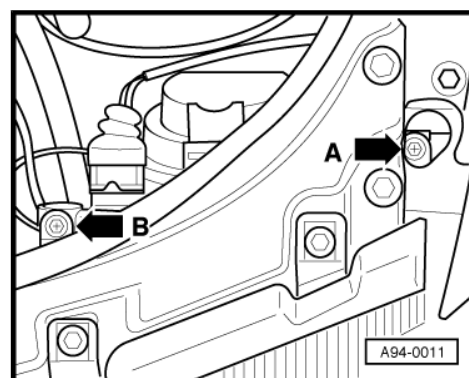
6.60.3 Adjusting headlights - Vehicles with halogen headlights

- Note the requirements for checking and adjusting ⇒ [page 107](#).
- Adjust setting using a suitable screwdriver (do not damage adjuster wheel) or hexagon key.

Manufacturer Bosch	Manufacturer Valeo
A - Lateral adjustment	A - Height adjustment
B - Height adjustment	B - Lateral adjustment

 Note

- ◆ *The manufacturer's details are shown on the lenses.*
- ◆ *The illustration shows the left headlight. On the right headlight, the adjuster screws are in a symmetrically opposite position.*



This document, in whole or in part, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

6.60.4 Adjusting headlights - Vehicles with gaseous discharge headlights

- Note the requirements for checking and adjusting ⇒ [page 107](#).
- Connect -V.A.G 1551- ⇒ [page 27](#).
- Switch on ignition.



- Switch on dipped headlights.

Indicated on display ²³⁾:

V.A.G - SELF-DIAGNOSIS 1 - Rapid data transfer	HELP
---	------

V.A.G - SELF-DIAGNOSIS 2 - Flash code output	HELP
---	------

23) Appears alternately

- Enter „1“ for „Rapid data transfer“.

Indicated on display:

Rapid data transfer Enter address word XX	HELP
--	------

- Enter „55“ to select the address word „Headlight range control“ and confirm entry with key.

Indicated on display:

4B0907357 HEADLIGHT RANGE CTRL X009 - > Code 00005	WSC 02389
--	-----------

- Press key.

Indicated on display:

Rapid data transfer Select function XX	HELP
---	------

- Enter „02“ for function „Interrogate fault memory“ and confirm with key.

Indicated on display:

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

No fault recognised!

- Press key.

or

Indicated on display:

X faults recognised!

When the printer is switched on, the stored faults are displayed and printed one after the other.

- The faults must be eliminated once the last fault has been displayed and printed.
- Press key.

Indicated on display:

Rapid data transfer Select function XX	HELP
---	------

- Enter „05“ for function „Erase fault memory“ and confirm with key.

Indicated on display:

Rapid data transfer Fault memory is erased!	->
--	----

- Press key.

Continuation:

Indicated on display:

Rapid data transfer Select function XX	HELP
---	------

- Enter „04“ for the function „Start basic setting“ and confirm with the key.

Indicated on display:

Basic setting Input display group number XXX	Q
---	---

- Enter „001“ to select „Display group number 001“ and confirm entry with key.

Indicated on display:

System in basic setting Waiting	1 ->
------------------------------------	------

The headlights are moved into the setting position.

Indicated on display:

System in basic setting Set headlight	1 ->
--	------

 Note

The headlights are now in the setting position. Adjust the headlights. Basic setting function 1 switches off automatic range control and fault „Headlights not set“ will be stored in fault memory.

- Adjust setting using a suitable screwdriver (do not damage adjuster wheel) or hexagon key.

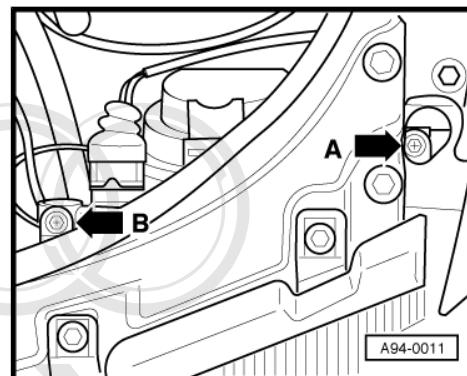
A - Adjuster screw for lateral setting

B - Height adjuster screw

 Note

The illustration shows the left headlight. On the right headlight, the adjuster screws are in a symmetrically opposite position.

- Press  key.



Indicated on display:

Rapid data transfer Enter address word XX	HELP
--	------

- Enter „04“ for the function „Start basic setting“ and confirm with the  key.

Indicated on display:

Basic setting Input display group number XXX	Q
---	---

- Enter „002“ to select „Display group number 002“ and confirm entry with  key.

Indicated on display:

System in basic setting Ctrl pos. learnt	2 ->
---	------

 Note

The control unit has now "learnt" this position as reference position. The fault „Headlights not set“ in the fault memory will be erased and the automatic range control function will be restored.

- Press  key.

Indicated on display:

Rapid data transfer Select function XX	HELP
---	------

- Enter „06“ to select „End data transfer“ and confirm entry with  key.

6.60.5 Adjusting fog lights

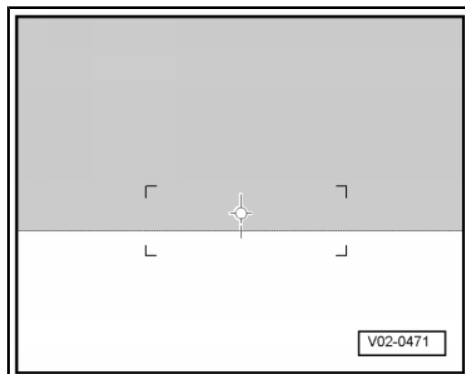
Fog lights incorporated in headlights

Fog lights are set automatically when headlights are adjusted.

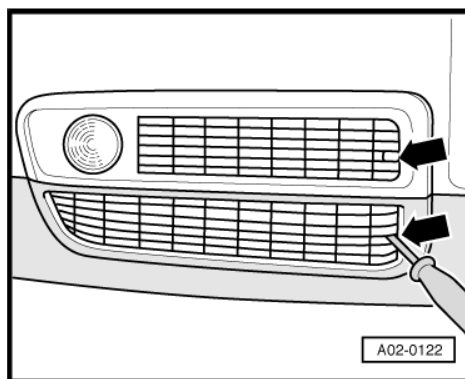
Fog lights incorporated in bumper

Dip setting:

- ◆ Fog lights 20 cm
- Check whether the upper light-dark border touches the setting line horizontally over the complete width of the test screen.



- Disengage retainer clips for air intake grille at top and bottom -arrows- using a screwdriver, then remove grille.

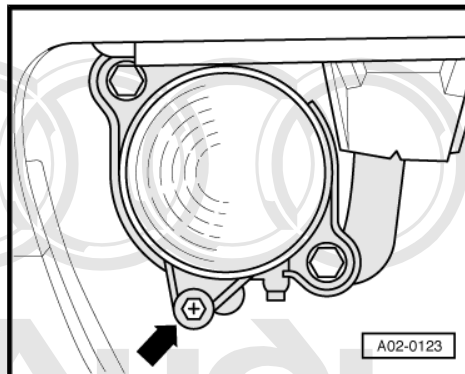


- Turn the adjuster screw -arrow- to adjust the range. Lateral adjustment is not possible.



Note

The illustration shows the right fog light. On the left fog light, the adjuster screw is in a symmetrically opposite position.



6.60.6 Other additional lights: adjusting

Additional lights from other systems which have been retrofitted must be checked and adjusted according to the applicable guide lines.

6.61 Road test

To what extent the following can be checked depends on vehicle equipment and local conditions (urban/country).

The following points must be checked during the road test:

- ◆ Engine: performance, misfiring, idling speed, acceleration
- ◆ Clutch: pulling away, pedal pressure, odours
- ◆ Gear selection: ease of operation, gear lever position
- ◆ Automatic gearbox: selector lever position, shift lock / ignition key removal lock, shift behaviour, dash panel insert display

- ◆ Brake pedal and handbrake: operation, travel and effectiveness, pulling to one side, juddering, squeal, ABS function
- ◆ Steering: operation, steering free play, steering wheel centralised when wheels are in straight-ahead position
- ◆ Sliding/tilting sunroof: operation
- ◆ Cruise control system: operation
- ◆ Radio: quality of reception, GALA, interference
- ◆ Driver Information System (DIS): functions
- ◆ Air conditioner: operation
- ◆ Vehicle: moving off line when travelling straight ahead (level road)
- ◆ Imbalance: wheels, drive shafts
- ◆ Wheel bearings: noises
- ◆ Engine: hot starting behaviour



Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

7 Type plate, vehicle identification number

A - Type plate

- The type plate is located on the bulkhead.
- Vehicles for certain export countries have no type plate.

B - Vehicle identification number

- Is stamped on rear bulkhead of engine compartment.

7.1 Information encoded in vehicle identification number:

WAU	ZZZ	8D	Z	Y	A	059 785
Manufacturer's mark	Filler characters	Type	Filler characters	Model year 2000	Production location	Serial number

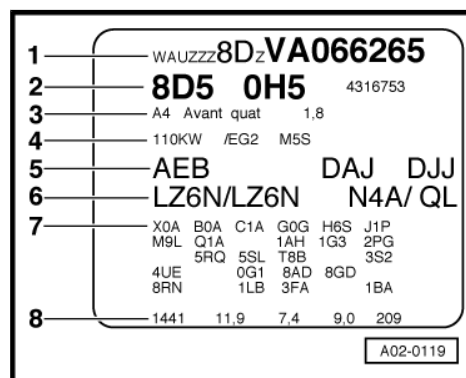
Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

7.2 Vehicle data sticker

The vehicle data sticker can be found in the customer's Service Schedule, and also on the vehicle in the spare wheel well or on the luggage compartment floor.

The sticker contains the following vehicle data:

- 1 - Vehicle identification number
- 2 - Model identification code/ production control number
- 3 - Model code
- 4 - Engine output/ emissions standard/ gearbox
- 5 - Engine and gearbox code letters (not specified on some export models)
- 6 - Paint number/ interior equipment identification number
- 7 - Identification numbers for optional extras
- 8 - Unladen weight/ fuel consumption/ CO₂ emission level (not specified on some export versions)



7.3 Engine code and engine number



Note

The „engine code“ is also stated on the vehicle data stickers in the Service Schedule and in the spare wheel well or on the luggage compartment floor.

4-cyl. 2V petrol engines AHL, ARM, ANA:

The engine number („engine code letters“ and „serial number“) is located near engine/gearbox joint (left side).

There is also a sticker with „engine code“ and „serial number“ attached to the toothed belt cover.

4-cyl. 2V petrol engines ADP:

The engine number („engine code letters“ and „serial number“) is located on the left side of the cylinder block.

There is also a sticker with „engine code“ and „serial number“ attached to the toothed belt cover.

4-cyl. 5V petrol engines:

The engine number („engine code letters“ and „serial number“) is located on the left side of the cylinder block.

There is also a sticker with „engine code letters“ and „serial number“ attached to the cylinder head cover.



Note

The engine code is also stamped on the front engine lifting eye (can be seen by removing the cover above the injectors).

4-cyl. 5V petrol engines (turbocharged):

The engine number („engine code letters“ and „serial number“) is located on the left side of the cylinder block.

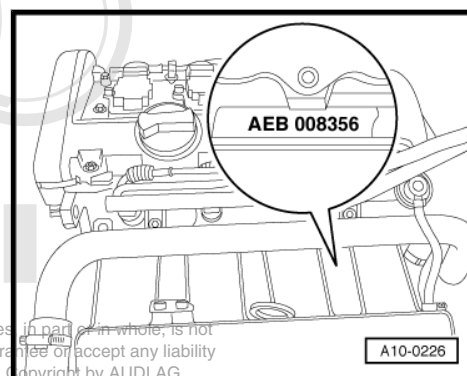
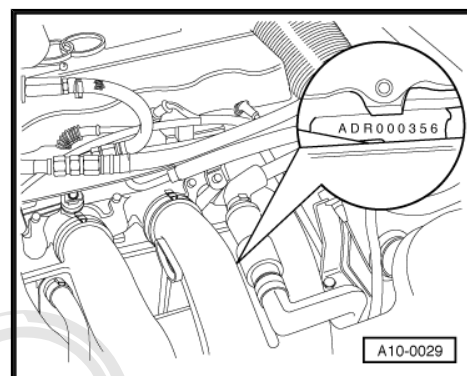
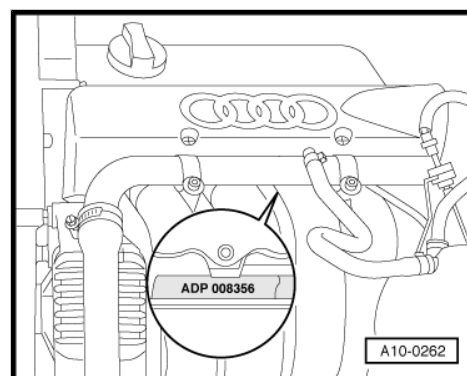
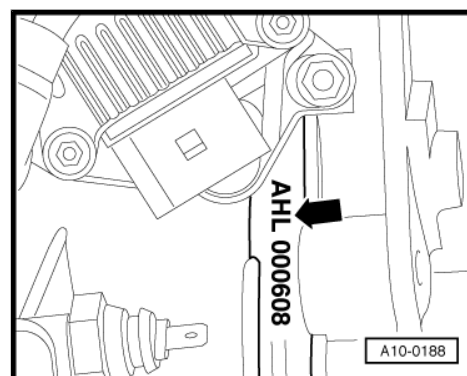
There is also a sticker with „engine code letters“ and „serial number“ attached to the cylinder head cover.



Note

The engine code is also stamped on the front engine lifting eye (can be seen by removing the cover above the injectors).

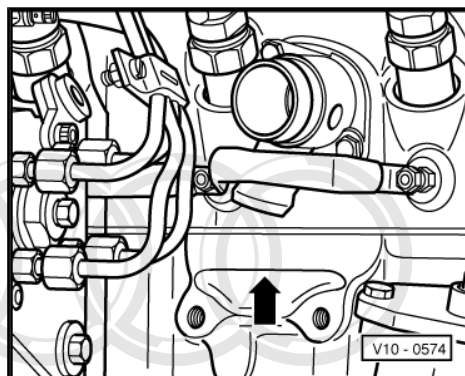
4-cyl. TDI engines:



Protected by copyright. Copying for private or commercial purposes in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

The engine number („engine code letters“ and „serial number“) is located on the cylinder block between injection pump and vacuum pump -arrow-.

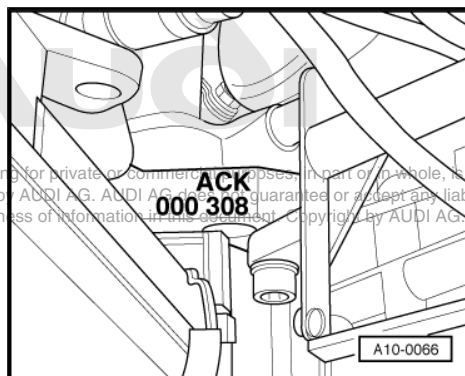
V6 petrol engines:



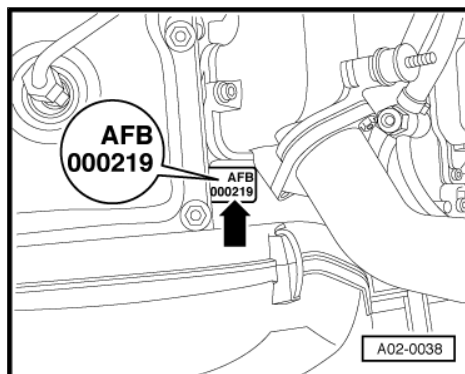
The engine number („engine code letters“ and „serial number“) is stamped onto the right inner side of the cylinder block between cylinder head and hydraulic pump.

V6 TDI engines:

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.



The engine number („engine code letters“ and „serial number“) is stamped onto the right inner side of the cylinder block between cylinder head and injection pump.



8 Lifting the vehicle



WARNING

- ◆ *To avoid damaging the vehicle underbody and to prevent the vehicle from tipping, the vehicle should only be lifted at the points shown in the illustration.*
- ◆ *Never start engine and engage gear with vehicle lifted, so long as even one driven wheel has contact with the floor. There is a risk of accident if this is not observed.*
- ◆ *If work is to be performed under the vehicle, it must be securely supported by suitable stands.*

8.1 Trolley jack

Always use suitable rubber or wooden blocks to avoid damage.

A trolley jack may only be applied at the lifting points as illustrated.

On no account should vehicle be lifted at engine sump, gearbox or on front or rear axle, as this may cause serious damage.

Lifting points for trolley jack ⇒ [page 117](#)

8.2 Lifting platform

Before driving on to a lifting platform ensure there is sufficient clearance between low-lying vehicle components and lifting platform. Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorized by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Lifting points for lifting platform ⇒ [page 117](#)

8.3 Lifting points for lifting platform and trolley jack

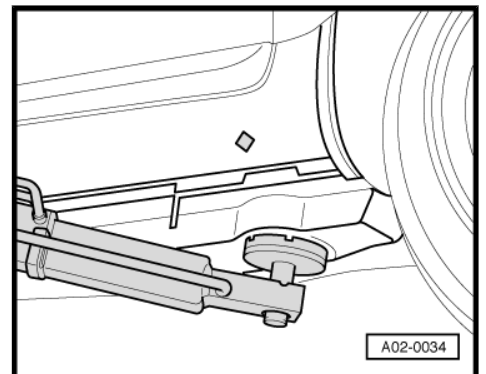
Front:

On longitudinal floor panel level reinforcement with the marking for the jack.



WARNING

On no account must front of vehicle be raised on vertical reinforcement of side member.



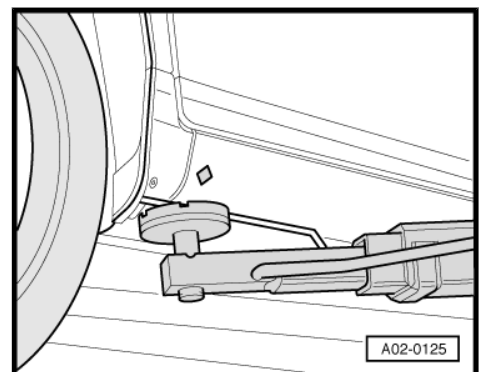
Rear:

On vertical reinforcement of side member level with the marking for the jack.



Note

The jacking plate must not touch the mounting bracket for the trailing arm, as this could damage the suspension.



9 Tow-starting/towing

- Attach tow rope or tow bar only to the following towing eyes:

9.1 Towing eyes

9.1.1 Front towing eye

The front towing eye is located behind the air intake grille (bottom right) in bumper.

- Detach air intake grille after pulling the retaining tab -arrow-.



Note

When re-installing the air intake grille make sure the two locating lugs are inserted correctly in the guide sleeves.

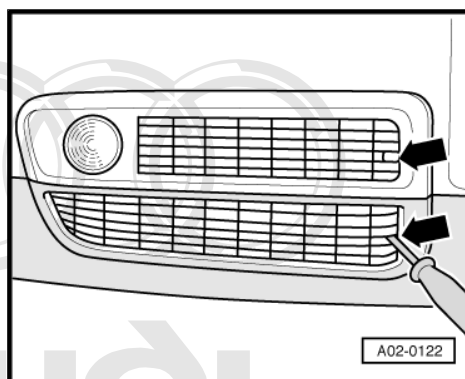
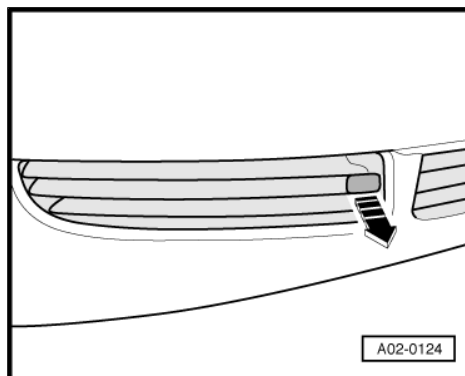
Audi S4:

- Disengage retainer clips for air intake grille at top and bottom -arrows- using a screwdriver, then remove grille.



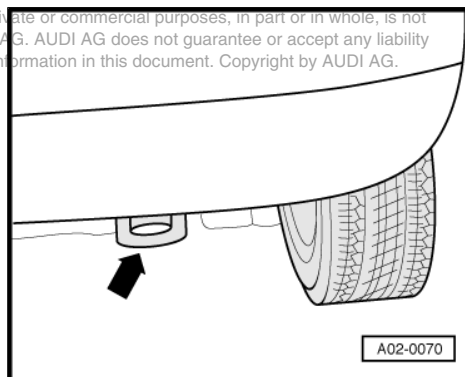
Note

When re-installing the air intake grille make sure the two locating lugs are inserted correctly in the guide sleeves.



9.1.2 Rear towing eye

The rear towing eye -arrow- is located below the rear bumper (right side).



9.2 Notes on towing and tow-starting



Note

- ◆ *The tow-rope should be slightly elastic to reduce the risk of damage to both vehicles. It is advisable to only use synthetic fibre ropes or ropes of similar elastic material. However, it is safer to use a tow bar.*
- ◆ *Always avoid excessive towing forces and do not jerk. During towing operations on unsurfaced roads there is always a danger that the attachment parts will be over-stressed and damaged.*
- ◆ *The vehicle should only be tow-started if it is not possible to start the engine using jump leads.*

If the vehicle has to be towed or tow-started, please note the following points:

- ◆ Legal regulations concerning towing must be observed.
- ◆ Both drivers must be familiar with towing procedures. ~~Inexperienced drivers should not attempt to tow-start or tow.~~
Information supplied by Audi AG for private or commercial purposes, in part or in whole, is not guaranteed or accepted by Audi AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.
- ◆ When using a tow rope, the driver of the towing vehicle must engage the clutch very gently when moving off and changing gear.
- ◆ The driver of the vehicle being towed must ensure that the tow-rope is always taut.
- ◆ Both vehicles must switch on their hazard warning lights, unless otherwise specified by local regulations.
- ◆ The ignition must be switched on so that the steering wheel is free and the turn signals, horn and windscreen wiper and washer system can be used.
- ◆ Because the brake servo only works when the engine is running, considerably more pressure is required on the brake pedal when the engine is not running.
- ◆ As power-assisted steering does not work when the engine is not running, more force is required to turn the steering wheel when the engine is off.
- ◆ If there is no lubricant in the manual or automatic gearbox, the vehicle must be towed with the driven wheels raised off the ground.

When tow-starting vehicles with manual gearbox, please note the following points:

- Before moving off, engage 2nd or 3rd gear, press clutch pedal and hold.
- Switch on ignition.
- When both vehicles are moving, release clutch pedal.
- As soon as the engine starts, depress clutch and move gear lever to neutral to avoid running into the towing vehicle.

**Note**

- ♦ *Vehicles with a catalytic converter (petrol engines only) must not be tow-started over a distance of more than 50 m if the catalytic converter has already reached operating temperature. Otherwise, unburnt fuel may enter the catalytic converter and cause damage.*
- ♦ *For technical reasons, it is not possible to tow-start a vehicle with an automatic gearbox.*

When towing a vehicle with front-wheel drive and automatic gearbox the following points must also be noted:

- Selector lever must be in position „N“.
- Do not tow vehicle at a speed of more than 50 km/h.
- The maximum towing distance is 50 kilometres.

If towing over greater distances, the vehicle must be lifted at the front.

Reason: When the engine is not turning the gearbox oil pump will not work - the gearbox will therefore not be adequately lubricated for higher speeds or longer distances.

When using a breakdown vehicle, the vehicle can only be towed with the front wheels raised.

Reason: If vehicle is towed when raised at rear, the drive shafts will turn backwards. As a result, the planetary gears in the automatic gearbox will then turn at such high speeds that the gearbox will be severely damaged in a short time.

Protected by copyright. Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability for damages arising from the use of the information in this document. Copyright by AUDI AG.

When towing a vehicle with four-wheel drive and manual gearbox the following points must also be noted:

- Do not tow vehicle at a speed of more than 50 km/h.
- The maximum towing distance is 50 kilometres.

When using a breakdown vehicle, the vehicle being towed can be suspended (either at front or rear).

**Note**

If it is not possible to tow the vehicle normally, it must be transported by a special transporter or trailer. This also applies to distances greater than 50 kilometres.

When towing a vehicle with four-wheel drive and automatic gearbox the following points must also be noted:

- Selector lever must be in position „N“.
- Do not tow vehicle at a speed of more than 50 km/h.
- The maximum towing distance is 50 kilometres.

When using a breakdown vehicle, the vehicle being towed must not be suspended (either at front or rear).

**Note**

If it is not possible to tow the vehicle normally, it must be transported by a special transporter or trailer. This also applies to distances greater than 50 kilometres.

10 Vehicle tests carried out as part of inspection services and maintenance

We recommend using the dialogue receipt and inspection unit VAS 5000 and the performance test stand V.A.G 1858 for the vehicle tests.

Brake test

For information on carrying out brake tests on front-wheel drive and four-wheel drive vehicles refer to the appropriate "Brake system" workshop manual.

Performance test

Please carry out the performance tests on the performance test stands recommended by Audi. These performance test stands take into account the corrective figures for automatic gearbox and four-wheel drive. Vehicles with four-wheel drive must only be tested on a four-wheel performance test stand. The four-wheel performance test stand V.A.G 1858 has adjustable roller sets to be able to test vehicles with a different wheel base.

Not permitted for use for legal, technical or commercial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any liability with respect to the correctness of information in this document. Copyright by AUDI AG.

Speedometer test

During the speedometer test the vehicle is driven by its own wheels. Vehicles with four-wheel drive must only be tested on a four-wheel test stand.

Shock absorber test

For information on shock absorber tests refer to the appropriate workshop manual on "Running gear".