

technical data

guided walkthrough

A guided walkthrough of how to use Halfords Workshop (E3 Technical data from Carweb), for the initial setup of the application to find the data you require.

Includes a step-by-step guide on using the guided diagnostics.

Please click the links below to navigate to the required section you wish to view:

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To start using Halfords Workshop on your computer please click on this [technical data link](http://halfords.carwebuk.com/login.aspx) (<http://halfords.carwebuk.com/login.aspx>) and add this webpage to your favourites.



On the login page enter your supplied username and password. Then click Login.

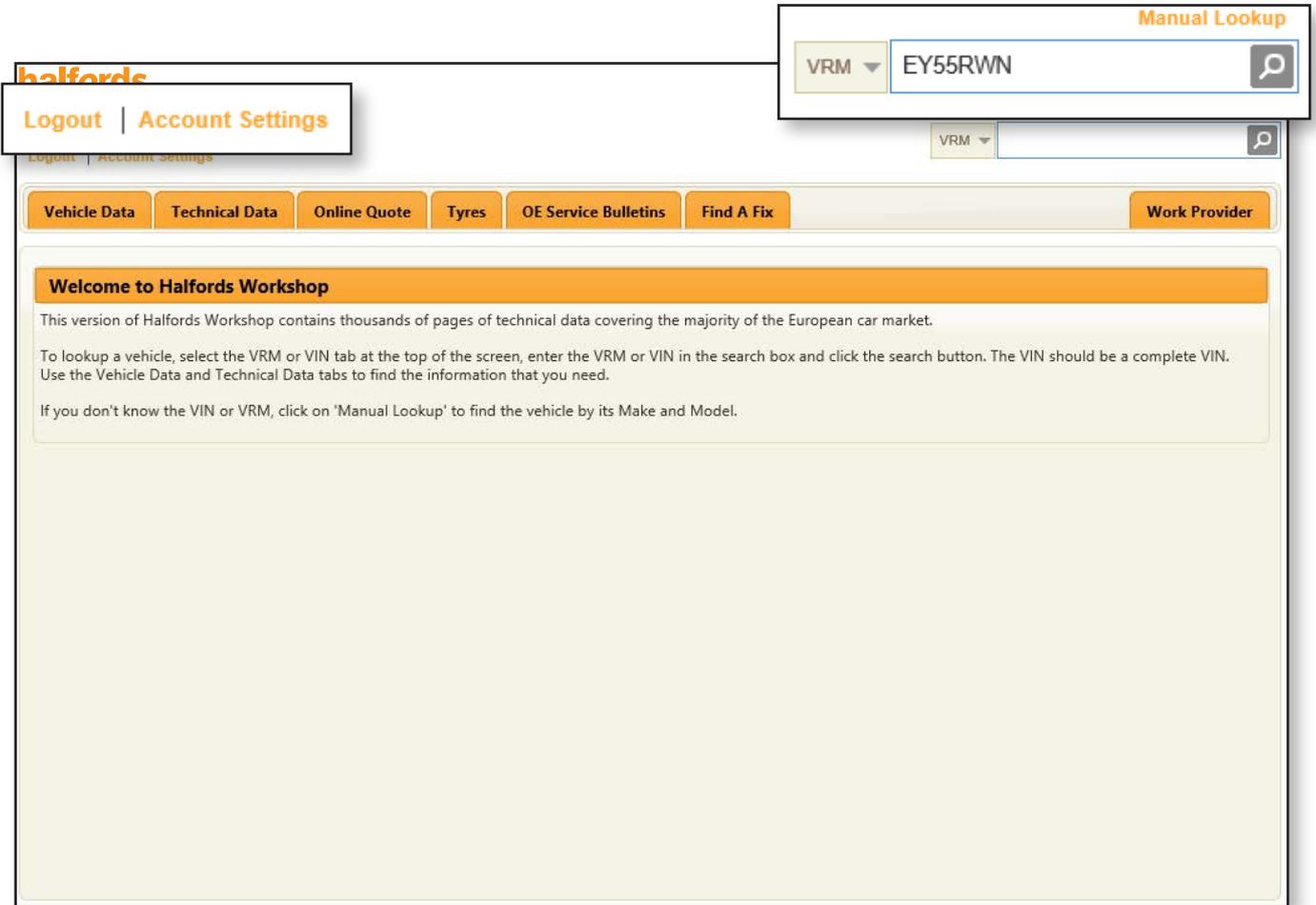


If you cannot login with your supplied username and password then please click on the contact support button , fill out your information with the comment “trouble logging in” and one of our technical support team will call you to offer assistance.

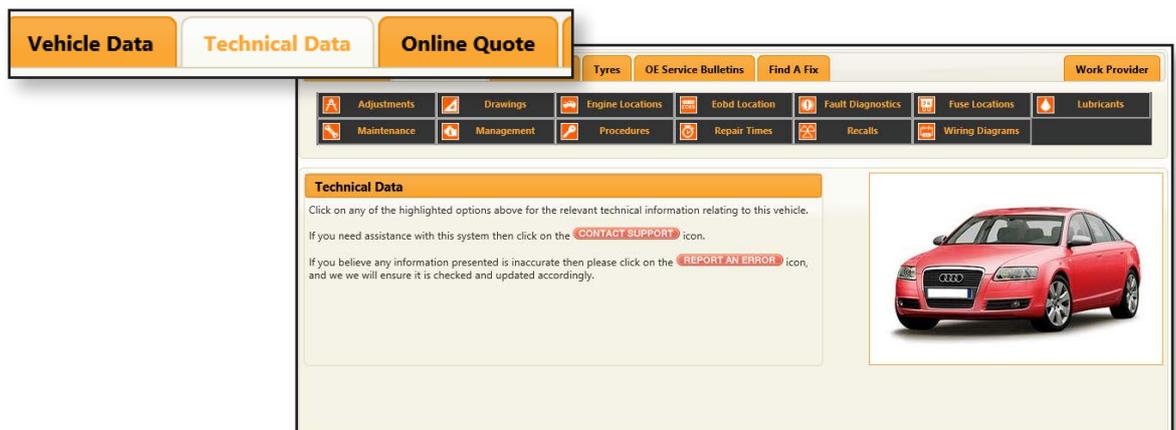


Once logged in you will then be on our welcome screen. From here you will be able to input a vehicle registration or VIN number (full 17 digit VIN required) to access the technical information in relation to the searched vehicle. There is also the option if required to manually look up a vehicle, to access click the manual lookup above the registration box, you will then have to select make, model and variant.

You also have access to your account settings. Account settings will allow you to adjust your labour rate and add your contact details so they will be printed on service sheets.



Once you have selected the vehicle either by the registration, VIN or manually you will then be presented with the technical data for the selected vehicle.

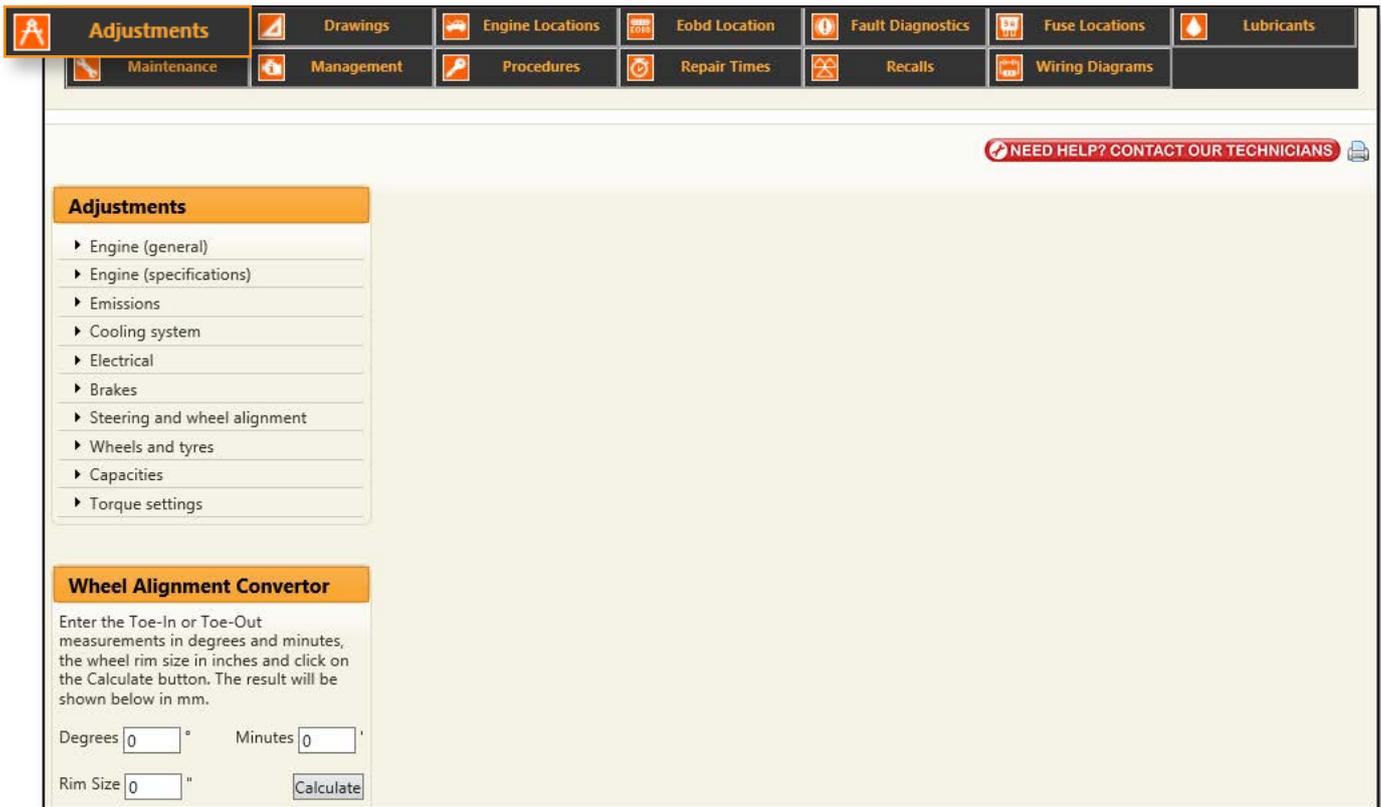


NEED HELP? CONTACT OUR TECHNICIANS

All pages within the system have access to our technical helpdesk. The helpdesk is manned by trained mechanics that aim to answer your queries within 30 minutes. Please use this option if you cannot find what you require or need technical help.

Adjustments

The Adjustments tab will give you access to specifications data including engine, capacities, brakes and torque settings.



Select required specifications data from the menu on the left. The information will then be displayed on the right.

Adjustments

- ▶ Engine (general)
- ▶ Engine (specifications)**
- ▶ Cooling system
- ▶ Electrical
- ▶ Brakes
- ▶ Steering and wheel alignment
- ▶ Wheels and tyres
- ▶ Capacities
- ▶ Torque settings

Wheel Alignment Converter

Enter the Toe-In or Toe-Out measurements in degrees and minutes, the wheel rim size in inches and click on the Calculate button. The result will be shown below in mm.

Degrees ° Minutes

Rim Size "

Engine (specifications)

Engine	
Firing order	1 - 3 - 4 - 2
Valve clearance	
Hydraulic	
Idle speed	860 ± 100 (rpm)
Fuel system	Bosch EDC 16
Unit injector system	
Low-pressure pump:	
Pressure	>10.5 / 4000 (bar/rpm)
Compression pressure	
Normal	25 - 31 (bar)
Minimum	19 (bar)
Differential limit between cylinders	5 (bar)
Oil pressure (at 80 °C)	2.0 / 2000 (bar/rpm)
Diesel particulate filter: maximum ash deposit mass	60 (g)

Drive belt layout

The diagram shows a drive belt layout with multiple pulleys of various sizes connected by belts. A 'PRINT' button is visible in the top left corner of the diagram window.

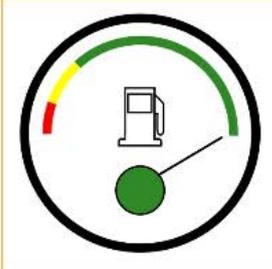
The auxiliary belt layout picture is found under the engine specifications. Any image can be clicked on to enlarge, with the ability to print.

Adjustments

- ▶ Engine (general)
- ▶ Engine (specifications)
- ▶ Emissions
- ▶ Cooling system
- ▶ Electrical
- ▶ Brakes

Steering and wheel alignment

Suspension
Equipment code: Refer to the identification label



Vehicle condition (Unloaded)

Suspension: Standard suspension

Toe-in, front (Per wheel)	0°09' ± 0°06' (°)
Toe-out on turns (Measured with wheels turned 20°)	1°12' ± 0°30' (°)
Camber, front	-0°52' ± 0°25' (°)
Maximum difference between the left-hand side and right-hand side	0°30' (°)
Bump steer, front	0°25' ± 0°07' (°)
Maximum difference between the left-hand side and right-hand side	0°08' (°)
Toe-in, rear	0°09' ± 0°05' (°)
Camber, rear	-0°50' ± 0°20' (°)
Maximum difference between the left-hand side and right-hand side	0°25' (°)
Thrust angle	10' (°)

Steering and wheel alignment

- ▶ Capacities
- ▶ Torque settings

Wheel Alignment Converter

Enter the Toe-In or Toe-Out measurements in degrees and minutes, the wheel rim size in inches and click on the Calculate button. The result will be shown below in mm.

Degrees ° Minutes

Rim Size "

1.1mm

Steering and wheel alignment data will normally be in minutes and degrees. There is also a wheel alignment converter that will convert the measurements to mm if required.

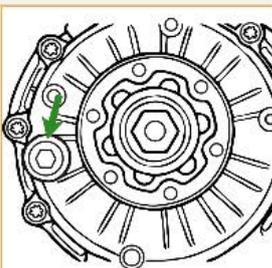
Adjustments

- ▶ Engine (general)
- ▶ Engine (specifications)
- ▶ Emissions
- ▶ Cooling system
- ▶ Electrical
- ▶ Brakes
- ▶ Steering and wheel alignment
- ▶ Wheels and tyres
- ▶ Capacities
- ▶ Torque settings

Capacities

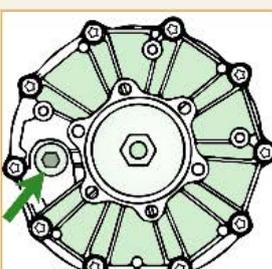
Engine
Engine sump, including filter 3.8 (l)
Cooling system 9.2 (l)

Differential: Front differential, (CVT), (01J, 0AN) 1.3 (l)
Differential, front



Plug location

Transmission: (Manual transmission), (01X), (2WD)
Manual transmission
Gearbox refill 3.0 (l)



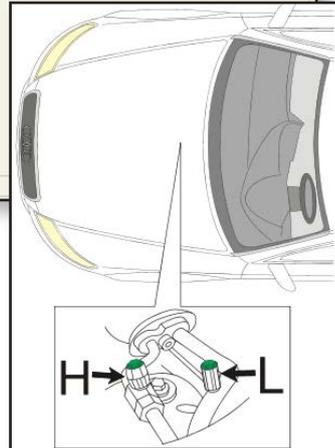
Plug location

Wheel Alignment Converter

Enter the Toe-In or Toe-Out measurements in degrees and minutes, the wheel rim size in inches and click on the Calculate button. The result will be shown below in mm.

Degrees ° Minutes

Rim Size "



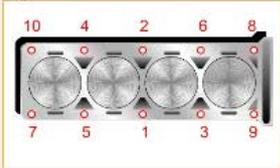
Capacities will return the amount of oils, fluids and air conditioning gas required for the vehicle. It also has a diagram of the air conditioning connections saving time when the ports are hidden.

Adjustments

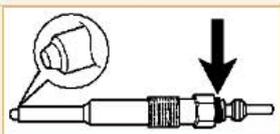
- ▶ Engine (general)
- ▶ Engine (specifications)
- ▶ Emissions
- ▶ Cooling system
- ▶ Electrical
- ▶ Brakes
- ▶ **Torque settings**
- ▶ Wheels and tyres
- ▶ Capacities
- ▶ Torque settings

Torque settings

Engine
Note: Always renew stretch bolts and self-locking nuts



Cylinder head	
Renew the bolts	
Stage 1	35 (Nm)
Stage 2	60 (Nm)
Stage 3	90 (°)
Stage 4	90 (°)
Big-end bearing cap <i>(Renew the bolt(s), threads lightly oiled)</i>	
Stage 1	30 (Nm)
Stage 2	90 (°)
Main bearing cap <i>(Renew the bolt(s), threads lightly oiled)</i>	
Stage 1	65 (Nm)
Stage 2	90 (°)
Sump	
Stage 1	5 (Nm)
Stage 2 <i>(Engine side)</i>	M7: 15 (Nm)
Stage 3 <i>(Engine side)</i>	M10: 40 (Nm)
Stage 4 <i>(Gearbox side)</i>	45 (Nm)
Engine oil drain plug	30 (Nm)
Engine oil drain plug	30 (Nm)
Oil filter	25 (Nm)



Wheel Alignment Converter

Enter the Toe-In or Toe-Out measurements in degrees and minutes, the wheel rim size in inches and click on the Calculate button. The result will be shown below in mm.

Degrees ° Minutes '

Rim Size "

Suspension

Steering wheel *(Renew the bolt)*

Front drive shaft to wheel bearing housing

Renew the bolt

Stage 1

Stage 2

Rear drive shaft to wheel bearing housing

Renew the bolt

Stage 1

Stage 2

Suspension: Refer to 'Technical drawings'

removal/installation

Timing belt: (M12: 65 Nm, M10: 45 Nm)

(Nm)

Bolt, gear selector rod

Use new bolt(s) (23 Nm)

Hexagonal bolts: (40 Nm)

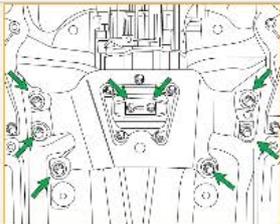
Gearbox mounting bolts: (23 Nm)

Drive shaft to gearbox flange:

Use new bolt(s) (70 Nm)

Starter motor: (65 Nm)

Cross member:



Use new bolt(s) (50 Nm)

Timing belt: removal/installation

Timing belt tensioner:

Stage 1: (20 Nm)

Stage 2: (45°)

Timing belt covers: (10 Nm)

Idler pulley:

Use a new bolt

Stage 1: (40 Nm)

Stage 2: (90°)

Guide pulley: (20 Nm)

Crankshaft pulley

Camshaft gearwheel

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Drawings

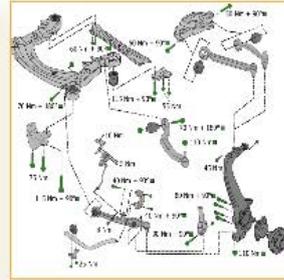
The Drawings tab will give you access to various diagrams including exploded component views with torque settings for steering, suspension and brakes.



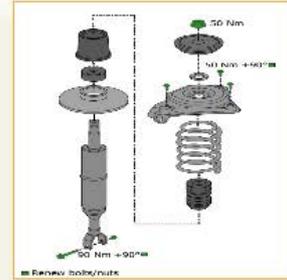
Select from the menu on the left to see diagrams available, clicking on the diagram on the right-hand section will enlarge the image for easier viewing & printing.

- Drawings**
- ▶ Brakes
 - ▶ Brakes: Front disc brakes, (FNRG-60)
 - ▶ Brakes: Front disc brakes, (FN3)
 - ▶ Brakes: Front disc brakes, (2FNR 42 AL)
 - ▶ Brakes: Rear disc brakes
 - ▶ Transmission
- Suspension: 2WD, Standard suspension (4WD)**
- ▶ Suspension: Air suspension, (2WD)
 - ▶ Suspension: Air suspension, (4WD)
 - ▶ Steering
 - ▶ Air conditioning
 - ▶ Body and interior

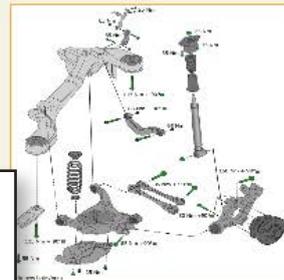
Suspension: Standard suspension, (2WD)



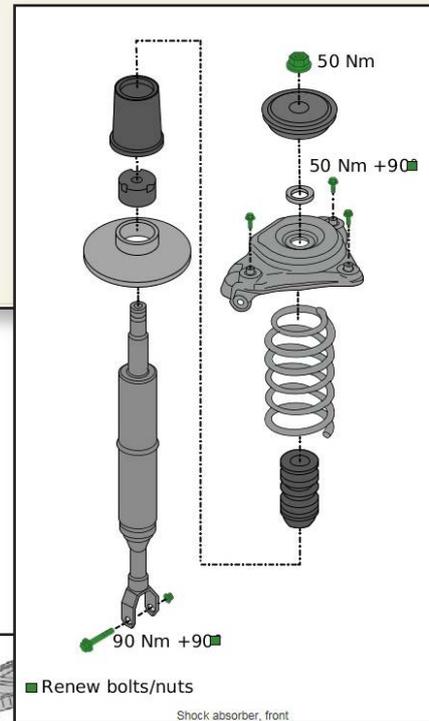
Suspension, components, front



Shock absorber, front

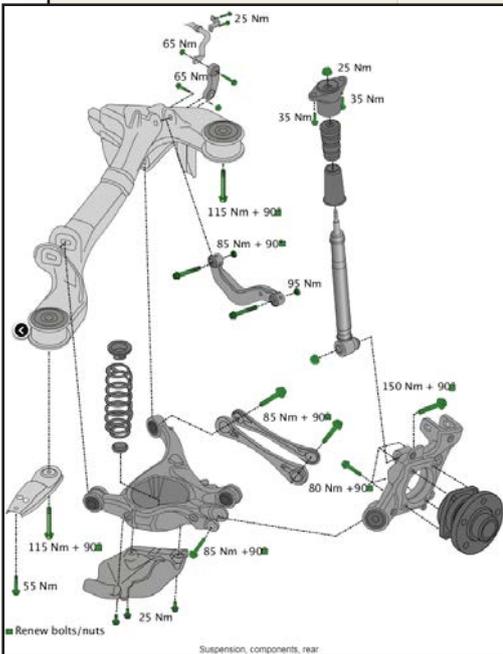


Suspension, components, rear



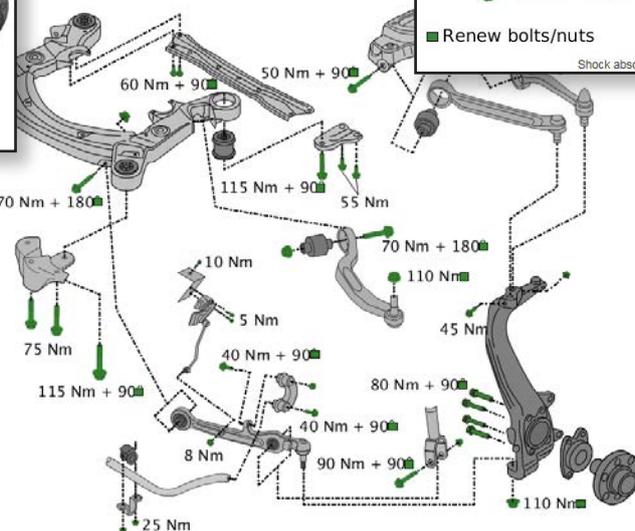
Renew bolts/nuts

Shock absorber, front



Renew bolts/nuts

Suspension, components, rear



Suspension, components, front

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Maintenance

The Maintenance tab will display the service indicator reset, timing belt interval, adjustment data for the services, intervals the components need replacing and printable service sheets Which included a check sheet for tyre pressures, condition, brakes and any technicians notes.

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Drawings
Engine Locations
Eobd Location
Fault Diagnostics
Fuse Locations
Lubricants

Maintenance
Management
Procedures
Repair Times
Recalls
Wiring Diagrams

NEED HELP? CONTACT OUR TECHNICIANS

Maintenance

Service procedures

- ▶ Service indicator reset
- ▶ Key programming
- ▶ Maintenance schedules - Guidance

Time/distance dependent service

- ▶ Timing belt interval
- ▶ Service Item Adjustments
- ▶ Service Item Intervals
- ▶ 10,000 miles/12 months
- ▶ 20,000 miles/24 months
- ▶ 40,000 miles/48 months
- ▶ 60,000 miles/72 months
- ▶ 80,000 miles/96 months
- ▶ 100,000 miles/120 months
- ▶ 120,000 miles/144 months
- ▶ 140,000 miles/168 months
- ▶ 160,000 miles/192 months
- ▶ 180,000 miles/216 months
- ▶ 200,000 miles/240 months
- ▶ 220,000 miles/264 months
- ▶ 240,000 miles/288 months
- ▶ Winter inspection
- ▶ Summer inspection

Longlife service

20,000 MILES/24 MONTHS

Show Check Sheet
 Show Times
 Show More Information

Depending on the vehicle's mileage and/or age the following work may also be required for this service. To determine the total parts list and total service time, select the additional work from the list below.

ADDITIONAL SERVICE ITEMS

- Renew the brake fluid *(every 24 months)*
- Renew the fuel filter *(every 40,000 miles)*
- Renew the air filter *(every 60,000 miles)*
- Renew the timing belt(s) *(every 80,000 miles/60 months; Timing belt renewal intervals may be subject to updates and may differ regionally)*
- Renew the timing belt tensioner pulley *(every 80,000 miles/60 months)*
- CVT: renew the oil *(every 40,000 miles)*
- Renew the dust and pollen filter *(every 20,000 miles/24 months)*

SERVICE CHECK SHEET

STANDARD TIME: 1.30 HOUR(S)

PARTS REQUIRED FOR SERVICE

Engine oil
Oil filter

* Indicates parts may be required

ENGINE COMPARTMENT

- Check the power steering fluid level; top up if necessary
- Check the headlight alignment; adjust if necessary
- Check the brake fluid level; top up if necessary
- Clean the plenum chamber

UNDER THE VEHICLE

- Check the steering assembly for damage, wear and leaks
- Check the tread depth and wear pattern on all the tyres, including the spare
- Check the fog light adjustment; correct if necessary

Maintenance

Service procedures

- ▶ Service indicator reset
- ▶ Key programming
- ▶ Maintenance schedules - Guidance

Time/distance dependent service

- ▶ Timing belt interval
- ▶ Service Item Adjustments
- ▶ Service Item Intervals

Engine Lubricants and Service Item Adjustments

Engine Lubricants

Engine	VW 507 00	SAE 5W-30	All temperatures
Engine oil			
Engine: Cooling system			
Coolant	TL-VW 774D		
Coolant (Water with 40% anti-freeze)	G12		Above -25 °C
Coolant (Water with 50% anti-freeze)	G12		Above -35 °C
Coolant (Water with 60% anti-freeze)	G12		Above -40 °C

Adjustments

Engine code

Capacity

Equipment code: Refer to the identification label

Disc thickness, front

Service Item Intervals

- Air filter**
every 60,000 miles
- Automatic transmission oil**
every 40,000 miles
- Brake fluid**
every 24 months
- Engine oil**
Every 10,000 miles/12 months
- Filter, interior air**
every 20,000 miles/24 months
- Fuel filter**
every 40,000 miles
- Oil filter**
Every 10,000 miles/12 months

Timing belt interval

TIME/DISTANCE DEPENDENT SERVICE

ENGINE

- * Renew the timing belt(s) *(every 80,000 miles/60 months; Timing belt renewal intervals may be subject to updates and may differ regionally)*
- * Renew the timing belt tensioner pulley *(every 80,000 miles/60 months)*

Service indicator reset

The Service Interval Indicator can only be reset with the VAS 5051/5052 or similar diagnostic tool

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NEED HELP? CONTACT OUR TECHNICIANS 

AT 19,000 MILES/24 MONTHS

Show Check Sheet
 Show Times
 Show More Information

Depending on the vehicle's mileage and/or age the following work may also be required for this service. To determine the total parts list and total service time, select the additional work from the list below.

ADDITIONAL SERVICE ITEMS	
Renew the brake fluid (every 24 months)	<input type="checkbox"/>
Renew the fuel filter (every 38,000 miles)	<input type="checkbox"/>
Renew the air filter and clean the housing (every 57,000 miles)	<input type="checkbox"/>
Renew the timing belt(s) (every 75,000 miles/60 months; Timing belt renewal intervals may be subject to updates and may differ regionally)	<input type="checkbox"/>
Renew the timing belt tensioner pulley (every 75,000 miles/60 months)	<input type="checkbox"/>
CVT: renew the oil (every 38,000 miles)	<input type="checkbox"/>
Renew the dust and pollen filter (every 19,000 miles/24 months)	<input type="checkbox"/>

PARTS REQUIRED FOR SERVICE	
Engine oil	
Oil filter	

SERVICE CHECK SHEET		
* Indicates parts may be required	STANDARD TIME:1.30 HOUR(S)	TOTAL TIME:1.30 HOUR(S)

ENGINE COMPARTMENT	
Check the power steering fluid level; top up if necessary	<input type="checkbox"/>
Check the headlight alignment; adjust if necessary	<input type="checkbox"/>
Check the brake fluid level; top up if necessary	<input type="checkbox"/>
Clean the plenum chamber	<input type="checkbox"/>

UNDER THE VEHICLE	
Check the steering assembly for damage, wear and leaks	<input type="checkbox"/>
Check the tread depth and wear pattern on all the tyres, including the spare	<input type="checkbox"/>
Check the entire underside of the vehicle for leaks, corrosion and damage	<input type="checkbox"/>
Check the lower engine cover for damage	<input type="checkbox"/>
Underside of vehicle: check the tightness of all the fastenings	<input type="checkbox"/>
Check the fog light(s) adjustment; correct if necessary	<input type="checkbox"/>
Check the brake pad thickness	<input type="checkbox"/>
Check the brake lines, hoses and connections for leaks and damage	<input type="checkbox"/>
Differential(s): check for leaks	<input type="checkbox"/>
Check the tyre pressures; adjust if necessary	<input type="checkbox"/>
Check the tyre pressure monitor batteries	<input type="checkbox"/>

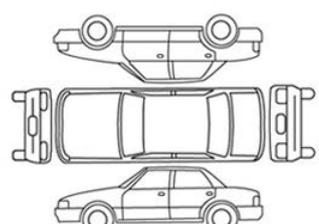


Click this icon to print the service sheet.

You can include additional work by ticking the boxes on the right-hand side next to each job line. This will then add the additional repair time (where applicable) to the total service time.

To print a service sheet please click on the print icon. This will ensure that you get the correct printed service sheet to be filed for each customer.

The vehicle check sheet will allow the technician to record tyre condition, vehicle condition, brake measurements and allow for any other advisories to be recorded.

VEHICLE CHECK SHEET					
Tyre Condition:					
	Pressures		Tread Depth (mm)		
	Before	After	Inside	Middle	Outside
L/F	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
R/F	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
R/R	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
L/R	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Spare	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Brake Disc/Drum Measurement:					
					Min/Max
L/F	<input type="text"/> mm	R/F	<input type="text"/> mm	<input type="text"/>	F
L/R	<input type="text"/> mm	R/R	<input type="text"/> mm	<input type="text"/>	R
Vehicle Condition:					
					
D=Dent S=Scratch B=Broken M=Missing					
Comments:					
Technicians Signature:					

 **Procedures**

The Procedures tab give access to step by step guides on repair and servicing tasks including timing belt/chain, electronic parking brakes, battery disconnection and reconnection. The procedures include removal, installation, special tools and included torque settings.

Adjustments Drawings Engine Locations Eobd Location Fault Diagnostics Fuse Locations Lubricants
 Maintenance Manag **Procedures** Repair Times Recalls Wiring Diagrams

Procedures

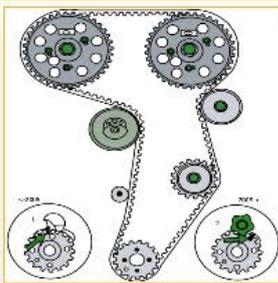
- Automatic transmission: emergency park release
- Ancillary drive belt: removal/installation
- Battery: procedures for disconnection/reconnection
- Body
- Brake system: bleeding
- Clutch: removal/installation
- CVT: level and drain/refill (01J, 0AN)
- CVT: removal/installation (01J, 0AN)
- Differential: level check (01J)
- Electronic parking brake (EPB) procedures
- Fuel system mechanical
- Key programming
- Manual transmission: removal/installation (01X), (2WD)
- Self-levelling suspension: jacking up mode
- Service indicator reset

Timing belt: removal/installation

Warnings and recommendations

Unless otherwise advised by the manufacturer, the following procedures are recommended:
 Always fit a new timing belt after removal
 Coolant pump renewal is recommended after timing belt removal
 Check the tensioner and idler pulleys; renew if necessary
 Never turn the engine in the direction opposite to that of normal operation
 Check the belt(s) for cracks, fraying, wear and oil contamination
 Note: The engine must be cold before timing belt adjustment
 Note: Avoid bending, torsion or traction

General



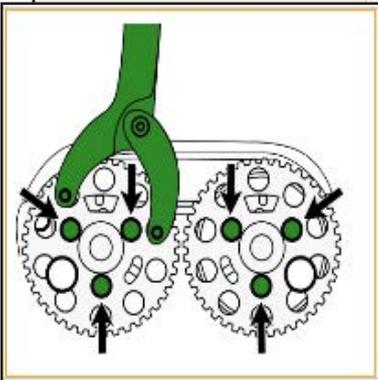
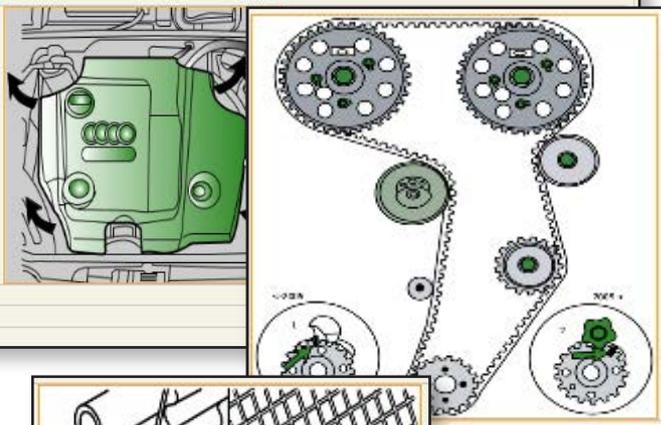
Always check the timing marks before timing belt removal

Timing belt: removal/installation

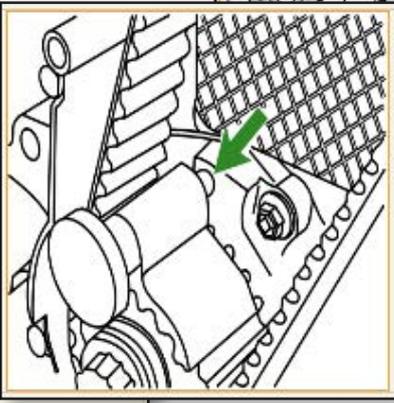
- Wheel alignment settings
- Windscreen wipers: service position
- General information: Air conditioning
- General information: Airbags

Removal

Place the front in the service position
 Remove the dipstick



Special tools



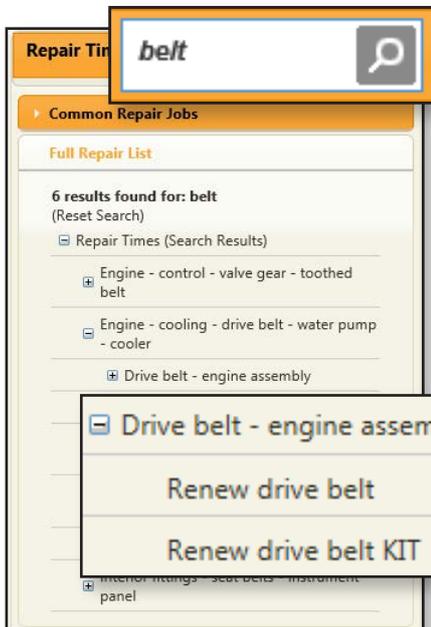
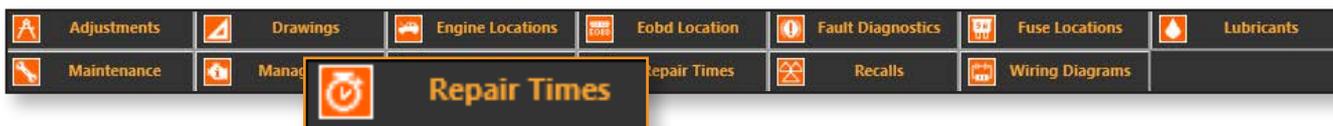
Torque settings

Timing belt tensioner:
 Stage 1: (20 Nm)
 Stage 2: (45°)
 Timing belt covers: (10 Nm)
 Idler pulley:
 Use a new bolt

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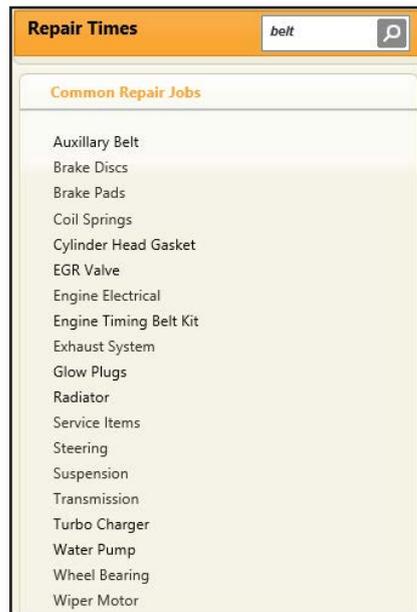
 **Repair Times**

The Repair Times tab will give access to manufacturers repair times. There is the full repair tree, a quick search option and common repair jobs.



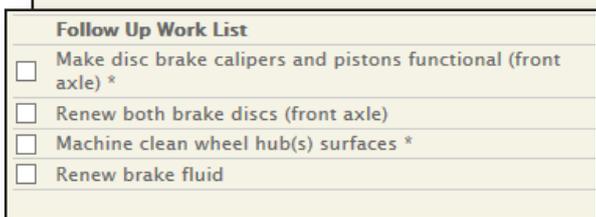
Using the search box will narrow down results within the full repair list. It is best to keep the search term simple (see example left). For belt it has narrowed the return to all sections where it has found belt. This makes it easier to select drive belt from the list.

On the right is the Common Repair Jobs list. This list includes jobs that garages complete every day making it faster to select everyday repair times.



Repair Time Estimate			
Description	Time	Labour	
Renew brake pads (front axle)	0.70	£50.00	
			VAT 20.00%
			Subtotal £35.00
Included List			
Remove/refit left road wheel (front axle)			
Remove/refit right road wheel (front axle)			
Loosen/tighten left brake caliper (front axle)			
Loosen/tighten right brake caliper (front axle)			
Remove/refit left brake pads (front axle)			
Remove/refit right brake pads (front axle)			
Check condition and tightness of brake calipers			
Check brake caliper pistons for ease of movement			
Retighten wheel bolts/nuts using torque wrench			
Follow Up Work List			
<input type="checkbox"/>	Make disc brake calipers and pistons functional (front axle) *		
<input type="checkbox"/>	Renew both brake discs (front axle)		
<input type="checkbox"/>	Machine clean wheel hub(s) surfaces *		
<input type="checkbox"/>	Renew brake fluid		
	Total time (hour)	0.70	
	Price	£35.00	
	VAT	£7.00	
	Total Price	£42.00	

The repair time estimate will include a list of what is involved to complete the job, the time for the job, your set labour rate (this is amendable in account settings) and the total labour cost.



Total time (hour)	0.70
Price	£35.00
VAT	£7.00
Total Price	£42.00

There is the option to add extra work in the repair estimate. This will add the repair time for the extra job and also work out the overlap time from the main job giving more accurate repair time estimates.

Engine Locations

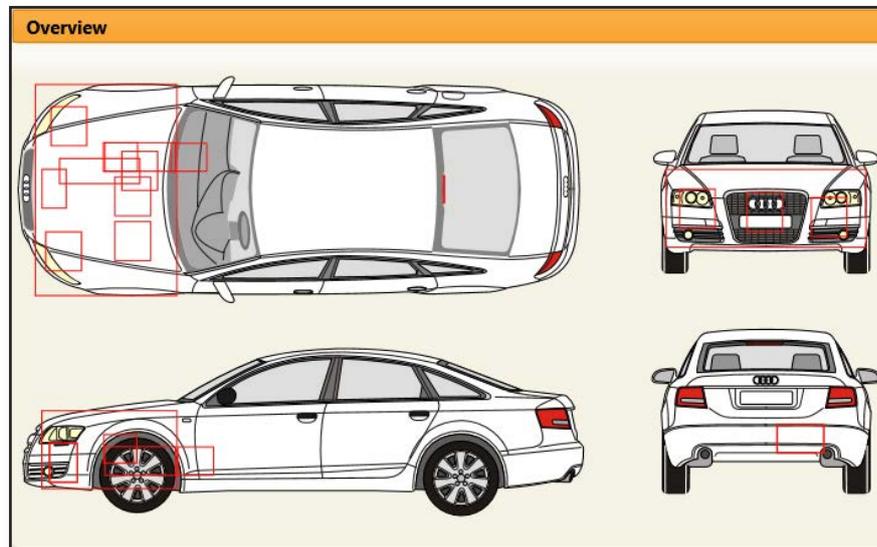
Engine Locations works in conjunction with the fault diagnostics tab to give visual locations of sensors and actuators used within the management system.



Engine Locations

▶ Click to View **Engine compartment**

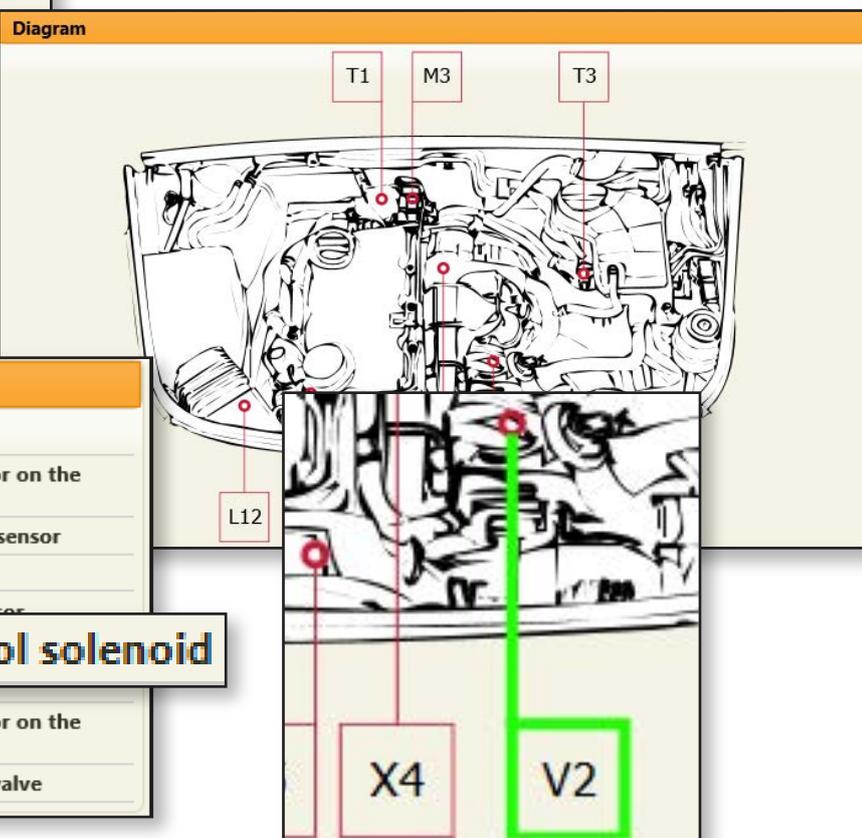
- Coolant temperature sensor
- ▶ Click to View **Fuel temperature sensor**
- ▶ Click to View **Hall Effect/MRE sensor on the crankshaft**
- ▶ Click to View **MAP and air temperature sensor**
- ▶ Click to View **Hall Effect/MRE sensor on the camshaft**
- ▶ Click to View **Mass airflow meter**
- ▶ Click to View **Exhaust gas temperature sensor in front of the particulate filter**
- Oxygen sensor in front of the catalytic converter**
- ▶ Click to View **Exhaust gas temperature sensor behind the particulate filter**
- ▶ Click to View **EGR temperature sensor**
- ▶ Click to View **Injector**



Select the area or component you wish to view from the menu on the left hand side.

Engine Locations

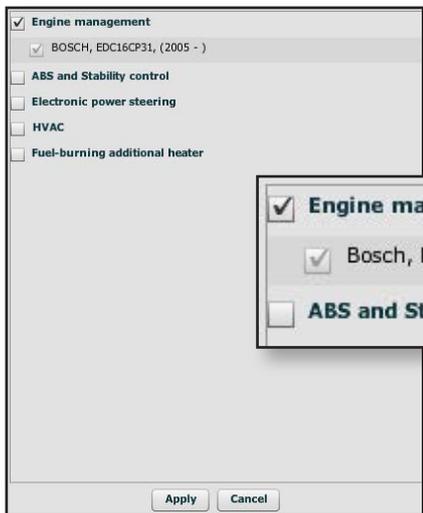
- ▶ Return to Overview
- Hall Effect/MRE sensor on the camshaft
- Coolant temperature sensor
- Mass airflow meter
- Fuel temperature sensor
- EGR control solenoid**
- Fuel pump
- Hall Effect/MRE sensor on the crankshaft
- Air filter bypass flap valve



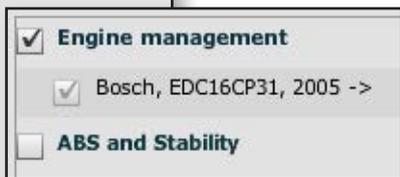
Clicking on the left hand menu will highlight the location of the component on the diagram.

Fault Diagnostics

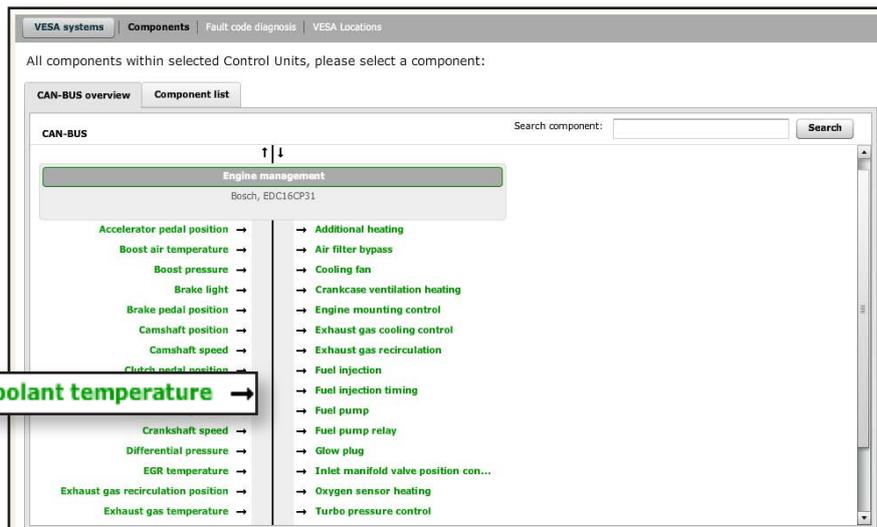
The Fault Diagnostics tab give you access to guided fault diagnostics for engine management, ABS and stability, HVAC, electric steering and auto transmissions if available. The ability to enter a fault code and get back diagnostics for components and wiring in relation to the fault code..



Once you have selected the fault diagnostics you will need to select what system you wish to work on, there may also be multiple selections for the system you wish to look at. It is best practice to un-tick the systems not required. Click the apply at the bottom to move on to the overview.

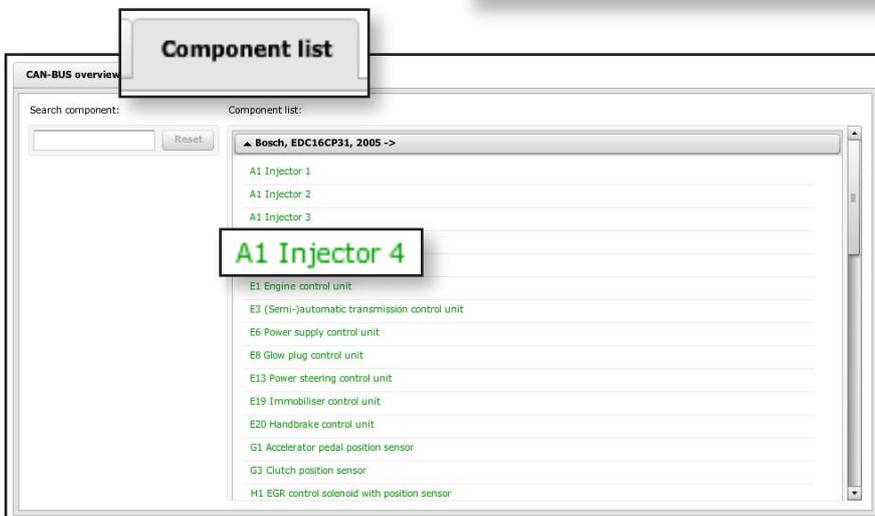


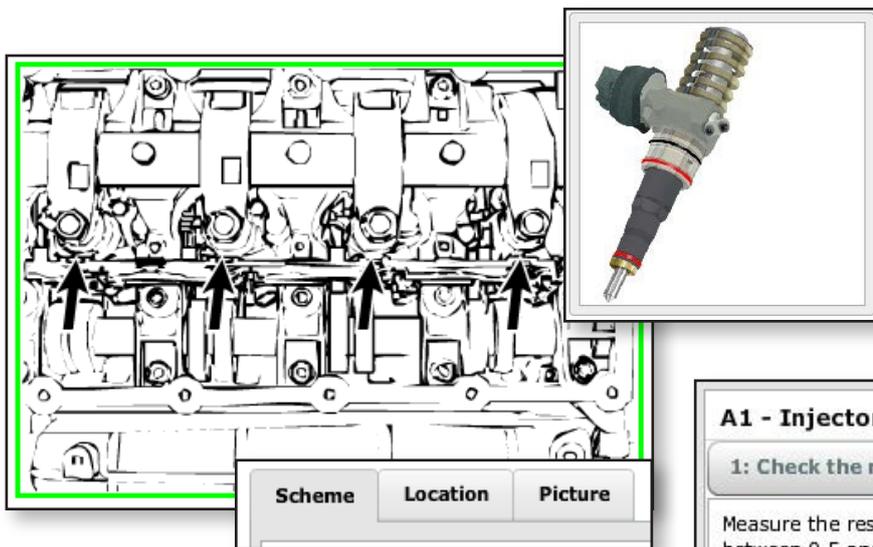
The CAN-BUS overview shows sensors into the ECU on the left and units controlled by the ECU on the right. You can select a component from here if required. Selecting coolant temperature will return the wiring and diagnostics for the coolant temperature sensor.



Coolant temperature →

There is also the option to use the component list. This will show you a text list of all the components in the selected system. Selecting the text will return the wiring and diagnostics for that component.





The tabs at the top of the diagram allow you to select between the location diagram, a generic picture of the selected component or the wiring diagram (scheme).

On the right hand side of the wiring diagram you will find the test sequence for that component and associated wiring. The test sequences will explain what to do and what results to expect. Once you have answered this with a yes or no the system will move you on to the next step which will involve further tests on that section or move you on to the next test.

A1 - Injector 3

1: Check the resistance

Measure the resistance between pins 1 and 2. Is it between 0.5 and 1.5 Ω?

Yes

No

Replace the injector.

2: Check the connectivity of pin 1.

3: Check the connectivity of pin 1.

4: Check the connectivity of pin 2.

Component diagnosis: **A1 - Injector 3** (« Show all

Scheme Location Picture

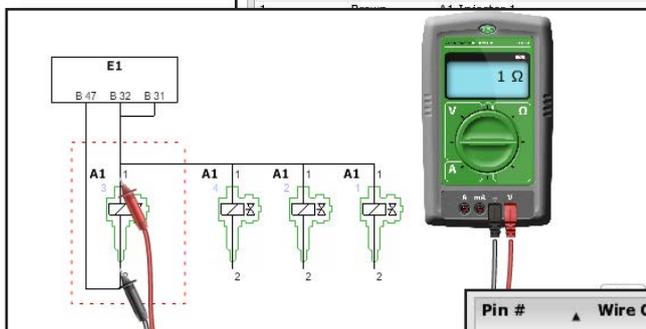
Pin #	Wire Colour	Component	Pin #	Wire Colour
1	Brown	E1 Engine control unit	B 31	Brown/Yellow
1	Brown	A1 Injector 2	1	Brown
1	Brown	A1 Injector 4	1	Brown
1	Brown	A1 Injector 1	1	Brown
1	Brown	E1 Engine control unit	B 32	Brown/Yellow
2	Yellow	E1 Engine control unit	B 47	Brown/Red

1: Check the resistance

2: Check the connectivity of pin 1.

3: Check the connectivity of pin 1.

4: Check the connectivity of pin 2.

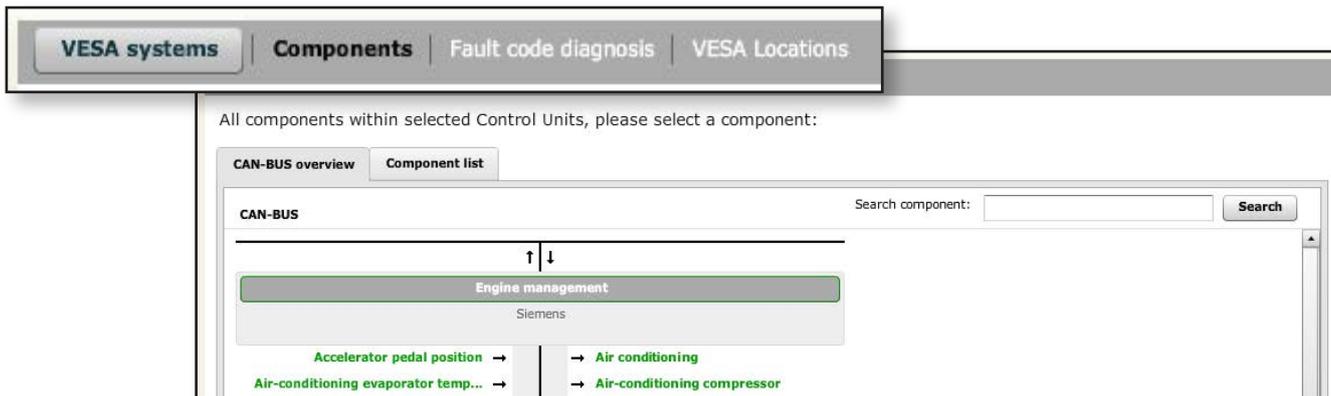


When the test sequences are selected the wiring diagram will show a multi meter with where the connections are made and the readings to expect.

The bottom section will list the colours of the wires, pin numbers at the component and the other end of the wire.

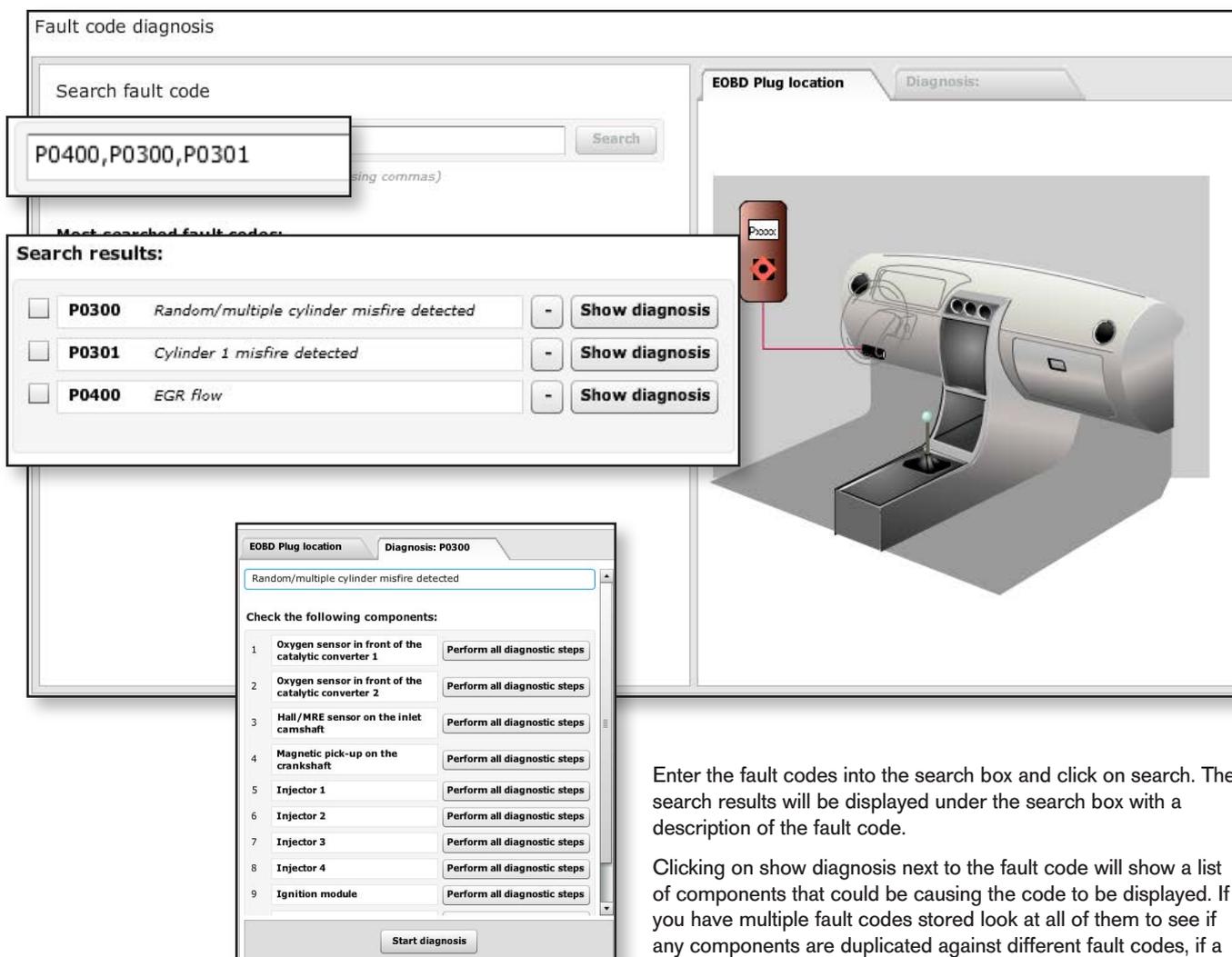
Pin #	Wire Colour	Component	Pin #	Wire Colour
1	Brown	E1 Engine control unit	B 31	Brown/Yellow
1	Brown	A1 Injector 2	1	Brown
1	Brown	A1 Injector 4	1	Brown
1	Brown	A1 Injector 1	1	Brown
1	Brown	E1 Engine control unit	B 32	Brown/Yellow
2	Yellow	E1 Engine control unit	B 47	Brown/Red

The section on the grey bar allows you to change systems by clicking on the VESA systems tab, access components, input fault codes for diagnostics and locations of the fuses, control units and grounding points.



Fault code diagnosis

Allows up to seven fault codes to be entered for description, components that could be causing the fault and diagnosis on that component. It will also show the location of the EOBD connector on the right.



Enter the fault codes into the search box and click on search. The search results will be displayed under the search box with a description of the fault code.

Clicking on show diagnosis next to the fault code will show a list of components that could be causing the code to be displayed. If you have multiple fault codes stored look at all of them to see if any components are duplicated against different fault codes, if a component is in more than one fault code then this would be the first component to check.

Click on perform all diagnostic steps to go to the wiring diagrams and test sequences for that component.

VESA Locations

Clicking on VESA locations will allow you to find the location of control units, fuses and grounding points. Select the system you wish to display.

Fuses and Relays

EOBD Connector

Engine Management

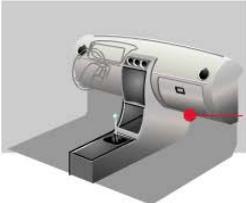
Control Units

Top view

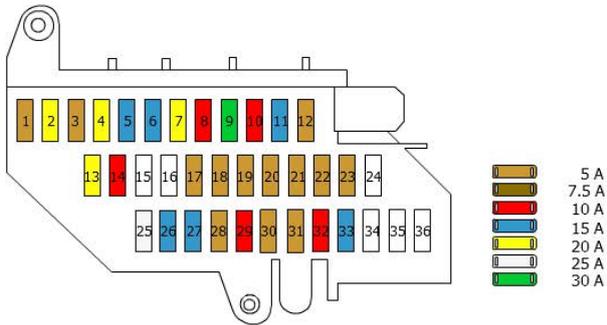
Passenger compartment (Behind the glovebox)

Luggage compartment (Right)

Luggage compartment (Left)

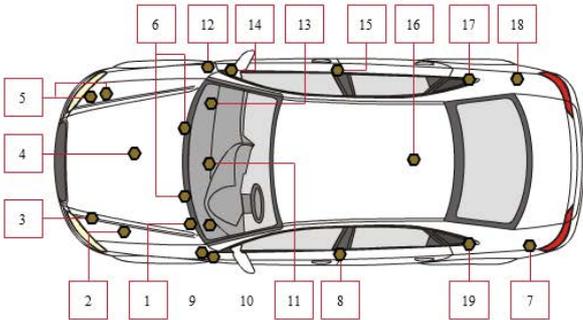


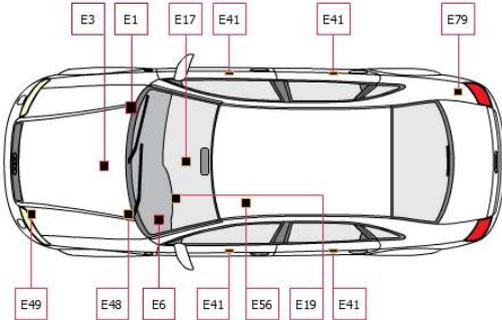
- 1 Keyless entry receiver
Traffic Message Channel (TMC) antenna
(15A also used)
- 2 Cigarette lighter
- 3 Tyre pressure monitor control unit
- 4 12V socket
- 5 Power supply control unit 2
- 6 Front passenger's door control unit
Door control unit, rear right
- 7 Sliding roof control unit



Grounding Points

- 1 Plenum chamber, left side
- 2 Longitudinal member, front left
- 3 Engine compartment, left side
- 4 Engine
- 5 Engine compartment, right side
- 6 Bulkhead
- 7 Luggage compartment, left side
- 8 Left B-pillar
- 9 Left A-pillar
- 10 Behind the dash panel, left side
- 11 Behind the dash panel, in the centre
- 12 Right A-pillar
- 13 Behind the dash panel, right side
- 14 Right lower A-pillar
- 15 Right B-pillar
- 16 Roof



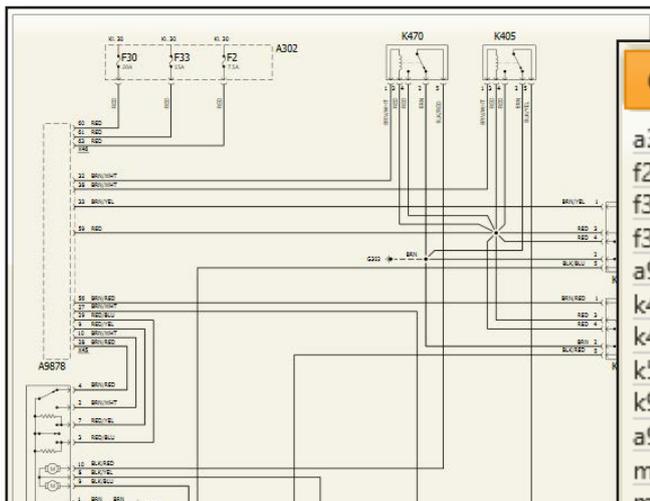


- E1** Engine control unit
In the plenum chamber
- E3** (Semi-)automatic transmission control unit
On the gearbox
- E6** Power supply control unit
Behind the driver's side storage compartment
- E17** Airbag control unit
Under the centre console
- E19** Immobiliser control unit
On the steering column
- E41** Door control unit
- E48** Wiper control unit
In the plenum chamber
- E49** Garage door operation control unit

Reset zoom and pan Zoom:

Wiring Diagrams

The Wiring Diagrams tab gives access to comfort wiring (if available) including locks, blower motors and headlights. If the diagram you require is not listed please use the support button to discuss with our technical team.



Components	
a302	Fuse box
f2	Fuse
f33	Fuse
f30	Fuse
a9878	Body control unit
k470	Driver's side door lock relay
k405	Release relay
k56	Anti-theft relay
k96	Lock relay
a9002	Driver's door lock assembly
m617	Passenger's door lock motor
m64	Rear right door lock motor
m235	Fuel filler flap lock motor
m80	Rear left door lock motor
m774	Boot lid lock motor

Lubricants

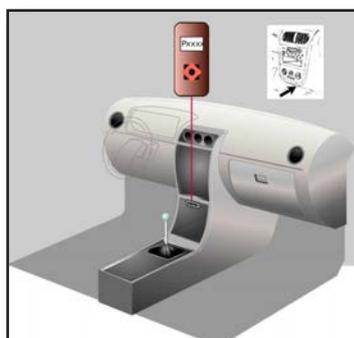
Manufacturers specification for oils and fluids.

Lubricants	ENGINE			
<ul style="list-style-type: none"> ▶ Engine ▶ Engine: Cooling system ▶ Brakes ▶ Transmission: (Manual transmission), (01X), (2WD) ▶ Transmission: (CVT), (01J, 0AN) ▶ Differential: Front differential, (CVT), (01J, 0AN) ▶ Suspension ▶ Steering ▶ Air conditioning ▶ Capacities 	Engine oil	VW 507 00	SAE 5W-30	All temperatures

Oils & lubricants recommendation needs to be found using the Lex System and not the lubricants section on the Carweb portal – the Lex System carries a 100% guarantee with our supplier against incorrect recommendations.

Eobd Location

Clicking this tab will display a diagram with the location of the EOBD connector.



NEED HELP? CONTACT OUR TECHNICIANS

All pages within the system have access to our technical helpdesk. The helpdesk is manned by trained mechanics that aim to answer your queries within 30 minutes. Please use this option if you cannot find what you require or need technical help.

[Back to Contents](#)

Vehicle Data

Technical Data

Online Quote

Tyres

OE Service Bulletins

Find A Fix

Vehicle Data

Access to up to 150 fields of data including registration dates, engine data (includes engine code), number of keepers and vehicle weights.

Vehicle Registration Mark (Current)	EY55RWN
Combined VIN	WAUZZZ4FX6N067861
VIN Number (DVLA)	WAUZZZ4FX6N067861
Combined Make	AUDI
DVLA Make	AUDI
Marque Description	AUDI
Combined Model	A6 TDI SE TDV
DVLA Model	A6 SE TDI
Model Range Description	A6
Model Series	MK3 (4F) (C6)
Model Variant Description	TDI SE TDV
Date Of Manufacture	27/09/2005
DVLA Year Of Manufacture	2005
Date Of First Registration	27/09/2005
Date Of First Registration In The UK	27/09/2005
Used Before First Registration - Marker	False
Model Introduction Date To UK	01/10/2005
Country of Manufacture	GERMANY
Imported From Outside EU	False
Export Marker	0
Imported From Northern Ireland	False
Cherished Transfer Marker	False
Body Style	4 DOOR SALOON
Body Style Description	SALOON
Colour	GREY
Colour (Previous) - Number Of	0
CO (g/km) - Petrol	175
Combined Engine Capacity	1968
Combined Forward Gears	6
Combined Transmission	MANUAL
Engine Manufacturer	AUDI
Engine Model Code	BRE
Combined Engine Model Code	BRE
Engine Location	FRONT

**Tyres**

Tyre data including standard and optional fitments, sizes, pressures, load index and speed ratings.

Tyre Information**Tyre Options - Check current vehicle tyres before fitting****Standard Tyre Option**

Front Tyres:
225/50 R17 94 Y
Restrictions: Load restrictions apply
Standard Pressure: 32 psi/2.2 bar

Rear Tyres:
225/50 R17 94 Y
Restrictions: Load restrictions apply
Standard Pressure: 29 psi/2.0 bar

Online Quote

Online Quote tab allows you to compile a complete work estimate using manufacturers repair times coupled with the OE parts and prices. This will allow you to quote your customers for the full job. These quotes can then be saved and recalled at a later date.

Select required job or service from the repair times tree.

Repairs and Servicing

▶ **Servicing**

Common Repair Jobs

- Auxillary Belt
- Brake Discs
- Brake Pads
- Coil Springs
- Cylinder Head Gasket
- EGR Valve
- Engine Electrical
- Engine Timing Belt Kit
- Exhaust System
- Glow Plugs
- Radiator
- Service Items
- Steering
- Suspension
- Transmission
- Turbo Charger
- Water Pump
- Wheel Bearing
- Wiper Motor

If the repair job you need is not listed above, use the quick search to find the job or look in the full repair list below.

▶ **Full Repair List**

▶ **MOTs**

▶ **Unlisted Jobs and Parts**

The job will be generated including the repair time, OE part number and the OE part price.

Work Estimate

Description	Time	Labour	Qty	Subtotal
Renew radiator	2.20			£110.00
Parts/Extra Items				
Radiator, engine cooling (OEM Part No: 4F0121251Q)		<input checked="" type="checkbox"/>	1 @	£ 168.93
Antifreeze		<input checked="" type="checkbox"/>	1 @	£ 5.00

Total time (hour) 2.20

Parts Price £173.93

Labour Price £110.00

Pre VAT Total Price £283.93

Total VAT – 20.00% £56.79

Total Price £340.72

Notes: Time is shown in Hours and hundredths of Hours e.g 1 Hour 30 mins. Please check and confirm correct part numbers with your supplier.

The quote can be saved by completing the drivers name, contact details and vehicle mileage. The quote can be recalled at a later date by re-inputting the registration and going to Viewed Saved Quotes at the top of the online quote page.

Customer Details

Driver Name:

Contact Number:

Exact Mileage:

Address Line 1:

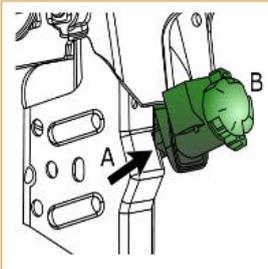
Postcode:

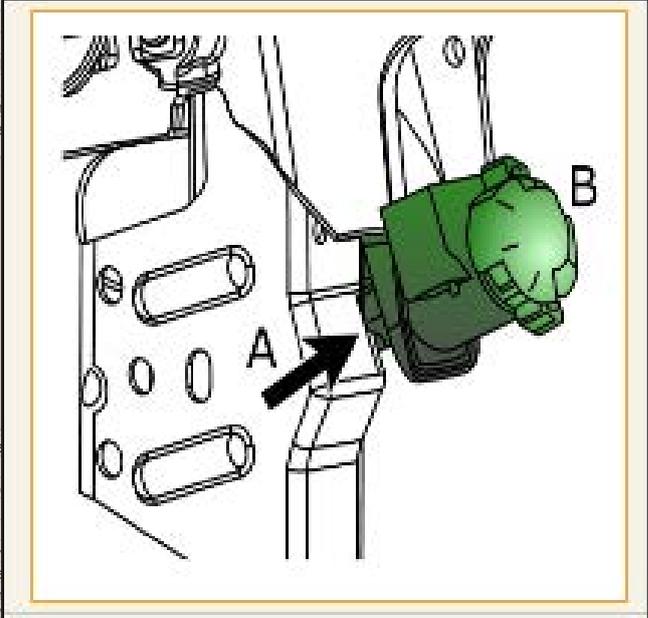
Email Address:

OE Service Bulletins

OE Service Bulletins tab gives you access to the manufactures technical service bulletins including the symptom, cause and solution including diagrams and fault codes.

OE Service Bulletins
<ul style="list-style-type: none"> ▶ Whining noise from the transmission at 60 - 70 km/h Vehicle Criteria: - 4WD ▶ The engine does not start; The remote control keys do not operate ▶ The engine warning light illuminates ▶ The self-levelling suspension warning light illuminates; Self-levelling suspension malfunction ▶ Vehicle judder when moving off transmission switches to limp mode Vehicle Criteria: Transmission Type - Automatic transmission Transmission Code - 09L ▶ The ABS/ESP warning light illuminates ▶ Vehicle judder Vehicle Criteria: Transmission Type - CVT - RHD

The ABS/ESP warning light illuminates
<p>Symptom The ESP warning light illuminates Possible fault code: P0571</p> <p>Cause Incorrect brake light switch adjustment</p> <p>Solutions Remove the driver's side storage compartment Check the brake light switch voltage A diagnostic tool must be used for this operation If the values are correct Follow the procedure: Push the plunger in until it stops A Turn the knob anti-clockwise to full lock Release the plunger Note: Do not press the brake pedal during Turn the knob clockwise to full lock and</p>

<p>Refit the driver's side storage compartment Delete all the fault codes A diagnostic tool must be used for this operation</p> <p>Repair time Remove the driver's side storage compartment Refit the driver's side storage compartment Check the brake light switch voltage (Timing) Delete all the fault codes (OE Code: 01 50)</p>



Find A Fix

Find A Fix tab is a collaboration of garages and technical desks throughout Europe inputting faults, symptoms, causes and solutions with test sequences. Including any stored fault codes and diagrams. If someone else has already had the fault it saves you the diagnostic time.

Find A Fix
<ul style="list-style-type: none"> ▶ The engine speed increases; The engine oil level increases; The engine oil is contaminated with fuel ▶ Abnormal engine noise; The oil pressure warning light illuminates; Power loss; Excessive exhaust smoke ▶ Blower malfunction ▶ Climate control malfunction ▶ Fluctuating idle speed ▶ Fluctuating idle speed; Engine vibration ▶ Fluctuating idle speed (cold engine); High idle speed (warm engine); exhaust smoke ▶ Hot air comes out of the vents ▶ Intermittent illumination of the ABS/ESP warning lights ▶ Jerky movement from the engine

<p>Symptom The electronic parking brake warning light illuminates Electronic parking brake control unit Fault codes: 02433 02432 0981 0980</p> <p>Cause Faulty electronic parking brake control unit</p> <p>Solutions Check the electrical continuity between Right-hand side: Pin 1 - Brake actuator electric motor Pin 12 - Electronic parking brake control unit Pin 2 - Brake actuator electric motor Pin 27 - Electronic parking brake control unit Left-hand side: Pin 1 - Brake actuator electric motor Pin 14 - Electronic parking brake control unit Pin 2 - Brake actuator electric motor Pin 29 - Electronic parking brake control unit If no fault is found Brake actuator electric motor: Measure the resistance If no fault is found Remove the luggage compartment side panel trim Renew the electronic parking brake control unit</p>
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