

WorkshopData™

Car | Truck



Clearly better data.

HaynesPro® WorkshopData™

for cars, trucks and light commercial vehicles



HaynesPro®

HaynesPro is a member of the Haynes Publishing Group





WorkshopData™

Car | Truck

 **Tech**

 **Electronics**

 **Smart**

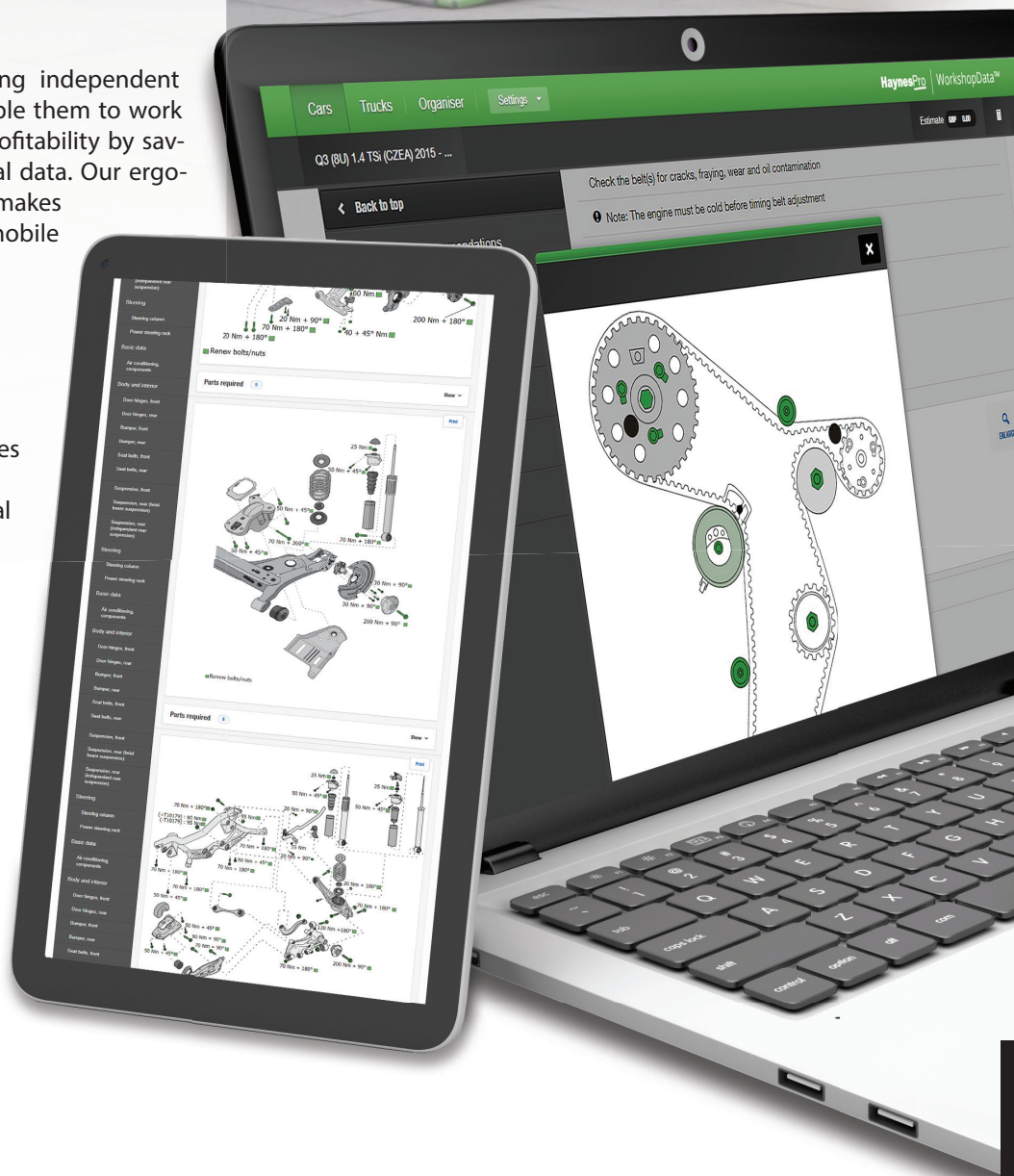
HaynesPro is part of the Haynes Publishing Group, world famous for their paperback workshop manuals. Since our launch in 1995, we have been serving the automotive market with the latest technical data for cars, trucks and light commercial vehicles.

HaynesPro is committed to providing independent workshops with products which enable them to work more efficiently and improve their profitability by saving time on finding essential technical data. Our ergonomically designed touch interface makes WorkshopData™ accessible on both mobile devices and desktops.

HaynesPro WorkshopData™ combines essential maintenance and repair data with detailed technical drawings, a unique electronics data module and intelligent diagnostics (VESA). It enables mechanics to diagnose, maintain and repair passenger cars, light commercial vehicles and trucks.

The information in HaynesPro WorkshopData™ is based on the manufacturer's original documentation.

For further information, please contact customer services at CS@haynepro.com or visit our website: haynepro.com.



Identification data

Identification data

FINDING YOUR VEHICLE IS EASY.

Identification code locations provide you with the recommended method to define your vehicle. HaynesPro Tech features various search options such as engine code, European Type Approval and VIN. Depending on the country, a number plate search is also available.

Features

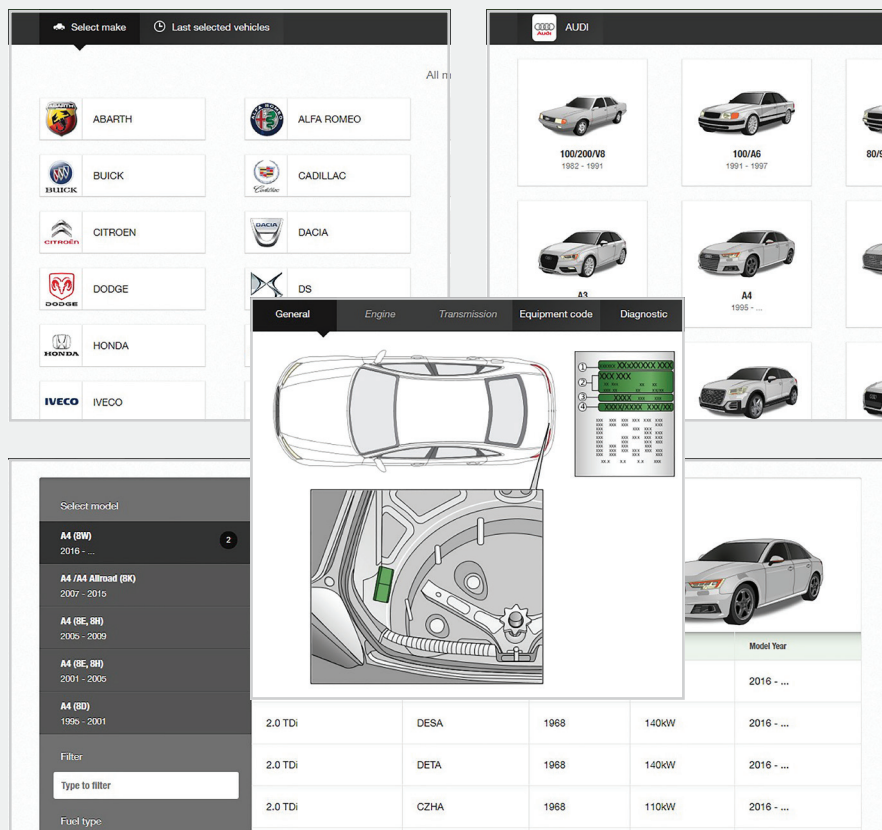
VIN and identification plate locations



VIN decoder



Equipment codes

The screenshot shows the HaynesPro Tech interface. On the left, there's a 'Select make' dropdown with a list of car brands including Abarth, Alfa Romeo, Buick, Cadillac, Citroen, Dacia, Dodge, DS, Honda, and Iveco. Below this is a 'Select model' section for the Audi A4, showing various model years and engine options. On the right, there's a grid of car models with their respective years and engine specifications. A central panel displays a car diagram with a green box highlighting the location of the identification code. Below the diagram, there's a table with columns for 'Model Year', 'Engine', 'Transmission', 'Equipment code', and 'Diagnostic'. The table lists several Audi A4 models with their respective specifications.

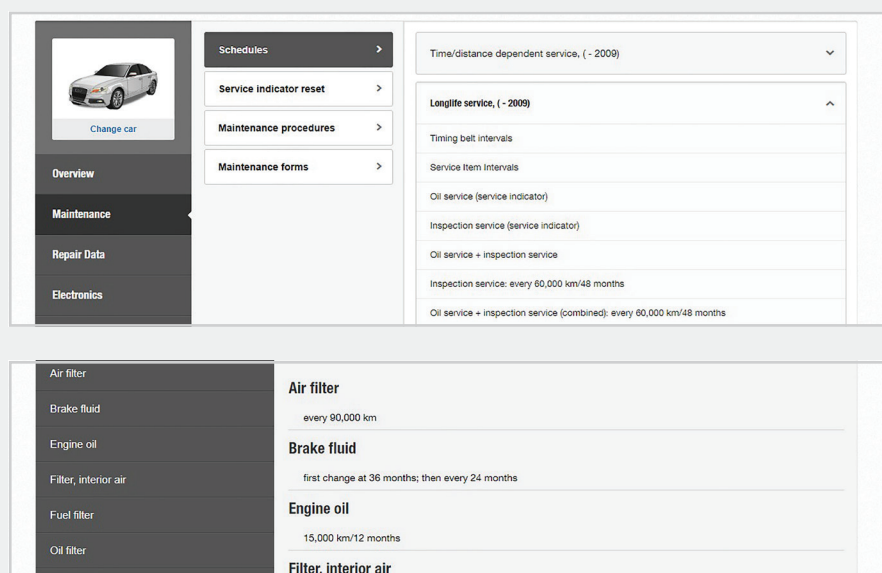
Maintenance

Maintenance

CLEAR, COMPREHENSIVE AND, ABOVE ALL, HELPFUL.

A single overview of the manufacturer's service intervals enables a quick selection of the required service.

Service item intervals allow quick access to maintenance information (time and distance) for specific components.



The screenshot shows the HaynesPro Tech interface for maintenance. On the left, there's a sidebar with a 'Change car' button and a list of categories: Overview, Maintenance, Repair Data, and Electronics. The main area is titled 'Schedules' and contains a list of service intervals. Below this, there's a table with columns for 'Service item', 'Interval', and 'Service item intervals'. The table lists several service items including Air filter, Brake fluid, Engine oil, Filter, interior air, Fuel filter, and Oil filter, along with their respective intervals and service item intervals.

Continued on next page

Continued from previous page

CarsTrucksOrganiserSettings

HaynesProWorkshopData™

A4 /A4 Allroad (BK) 2.0 TD (CAHA) 2008 – 2012EstimateGBP0.00

Maintenance SchedulePrint

Every 300,000 km/240 months (OE-01 03 00 12)...▼STANDARD TIME1.60EXTRA TIME2.00TOTAL TIME (H)3.60

Parts required4Hide ▲

Show mandatory parts onlyShow all spare partsUnit Price (GBP)Quantity

Engine oil	8.90	6	X
Oil filter	6.20	1.00	X
Timing belt		1.00	X
Timing belt set	128.40	1.00	X

Additional work8Hide ▼

OE: 20 34 19 50	Renew the fuel filter every 60,000 km	+ 0.40	+
OE: 23 24 19 60	Renew the air filter every 90,000 km	+ 0.20	+
OE: 15 24 19 60	Renew the timing belt(s) every 180,000 km Timing belt renewal intervals may be subject to updates and may differ regionally	+ 2.00	X
OE: 26 74 03 50	Diesel particulate filter: check the saturation with a diagnostic tool first check at 150,000 km; then every 30,000 km	+ 0.10	+
OE: 26 88 35 50	Selective catalytic reduction (SCR): check the fluid level; top up if necessary every 15,000 km	+ 0.10	+
OE: 37 62 55 50	CVT: renew the fluid every 60,000 km	+ 0.50	+
OE: 61 40 00 50	Braking system: renew the brake fluid first change at 36 months; then every 24 months	+ 0.50	+
OE: 85 18 19 50	Renew the dust and pollen filter every 30,000 km/24 months		

* Parts may be requiredRepair ManualsTechnical Drawings▲

Engine

			✓
			✓

Check the brake fluid level; top up if necessary *Go to Lubricants pageCheck the brake pad thickness *Go to Adjustment Data pageCheck the brake lines, hoses and connections for leaks and damage *



Suspension, wheels and tyresCheck the tread depth and wear pattern on all the tyres, including the spareFOLLOW UP Renew four tyres+ 1.20Go to Adjustment Data pageReset the tyre pressure monitoring system *Tyre pressure monitoring systemCheck the tyre sealant can expiry dateBell joints: check the condition (check for play)

Electrical SystemCheck the battery magic eye *Check the battery charge, using an appropriate battery tester *FOLLOW UP Check the battery fluid level; top up if required+ 0.10FOLLOW UP Charge the battery+ 0.10FOLLOW UP Renew the battery+ 0.90

Full maintenance schedules, which are printable for convenience, are provided for make – model – derivative, presented by intervals and broken down by subject (engine, brakes, etc.) or location (engine compartment, under the vehicle, etc.).

Additional work is also displayed, following the manufacturer's recommendations. All tasks have a corresponding OEM code and time. The total time is also displayed at the top and bottom of the page.

A unique feature is the availability of logical follow-up tasks which makes it easier to complete the work sheet.

Features		
Maintenance schedules (OEM-based)	✓	✓
Printable work sheets	✓	✓
Smart links to adjustment data	✓	✓
Links to parts	✓	✓
Follow-up tasks	✓	
Additional tasks	✓	✓
Service times	✓	✓
Service indicator reset manuals	✓	✓
Timing belt renewal intervals	✓	
Tyre pressure monitoring system procedures	✓	✓

Continued on next page



Continued from previous page

'SMART' LINKS

Where necessary, there are links to detailed and annotated technical drawings of components or adjustment values, as well as to subsections relating to additional aspects of the task.

There are instructions on how to disconnect and reconnect batteries, and on resetting service indicators and tyre pressure monitoring systems.

Available 'smart' links to main subjects:



Adjustment data



Lubricants and Fluids



Repair manuals



Repair Times



Technical Drawings

Available 'smart' links to other features and subjects:

- Body and paint report
- Vehicle inspection report
- Tyre inspection report

Steering				
Check the steering assembly for damage, wear and leaks *				<input checked="" type="checkbox"/>
Check the power steering fluid level; top up if necessary				<input checked="" type="checkbox"/>
Brakes				
Check the brake fluid level; top up if necessary *				<input checked="" type="checkbox"/>
Go to Lubricants page				
Check the brake pad thickness *				<input checked="" type="checkbox"/>
Go to Adjustment Data page				
Check the brake lines, hoses and connections for leaks and damage *				<input checked="" type="checkbox"/>
Suspension, wheels and tyres				
Check the tread depth and wear pattern on all the tyres, including the spare				<input checked="" type="checkbox"/>
FOLLOW UP Renew four tyres		<input type="checkbox"/> + 1.20		<input checked="" type="checkbox"/>
Check the tyre pressures; adjust if necessary				<input checked="" type="checkbox"/>
Go to Adjustment Data page				
Reset the tyre pressure monitoring system				<input checked="" type="checkbox"/>
Tyre pressure monitoring system				
Check the tyre sealant can expiry date				<input checked="" type="checkbox"/>
Ball joints: check the condition (check for play)				<input checked="" type="checkbox"/>
Electrical System				
Check the battery magic eye *				<input checked="" type="checkbox"/>
Check the battery charge, using an appropriate battery tester *				<input checked="" type="checkbox"/>
FOLLOW UP Check the battery fluid level; top up if required		<input type="checkbox"/> + 0.10		<input checked="" type="checkbox"/>
FOLLOW UP Charge the battery		<input type="checkbox"/> + 0.10		<input checked="" type="checkbox"/>
FOLLOW UP Renew the battery		<input type="checkbox"/> + 0.90		<input checked="" type="checkbox"/>
Check the function of the exterior lights *				<input checked="" type="checkbox"/>
Check the headlight alignment; adjust if necessary				<input checked="" type="checkbox"/>
Check the lighting system and horn functions *				<input checked="" type="checkbox"/>
Check the luggage compartment light(s) *				<input checked="" type="checkbox"/>
Check the function of the interior warning lights				<input checked="" type="checkbox"/>
Check the operation of the multimedia system *				<input checked="" type="checkbox"/>
Reset the service indicator				<input checked="" type="checkbox"/>
Service indicator reset				
Exterior				
Check the windscreen wipers and washing system *				<input checked="" type="checkbox"/>
Windscreen wipers: service position				
Check the windscreen wiper park position *				<input checked="" type="checkbox"/>
Check the headlight washing system				<input checked="" type="checkbox"/>
Check/lubricate the bonnet hinges and safety catch *				<input checked="" type="checkbox"/>
Check the entire underside of the vehicle for leaks, corrosion and damage *				<input checked="" type="checkbox"/>
Check all the exterior paintwork for corrosion and damage *				<input checked="" type="checkbox"/>
Check the body for corrosion and damage				<input checked="" type="checkbox"/>
Go to Body and Paint Report page				
General				
Test drive				<input checked="" type="checkbox"/>
TOTAL TIME (h)	EXTRA TIME	STANDARD TIME		
3.60	2.00	1.60	Add to Cost Estimate	

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Lubricants and fluids

ALL OIL AND FLUID SPECIFICATIONS IN ONE VIEW.

All conceivable specifications are provided here, conveniently linked to related data for ease of use, and featuring technical illustrations showing the location of filler and drain plugs.

Features

Qualities and viscosities



Capacities and torque settings



Location of filler and drain plugs



HaynesPro | WorkshopData™

A4 /M4 Allroad (8K) 2.0 TDI (CAHA) 2008 - 2012

Estimate 0.00

Lubricants and Fluids

[Back to overview](#) [Print](#)

Engine

Cooling system

Basic data

(Manual transmission), (0B2)

(Manual transmission), (0B1)

Rear differential, (0BC), (4WD)

Steering

(- 03/2012)

(04/2012 - 10/2013)

Denso, (6SEU14), (- 03/2012)

Denso, (7SEU17), (- 03/2012)

Denso, (6SAS14), (08/2011 -)

Denso, (6SES14), (03/2012 -)

Engine

Cooling system

Basic data

(Manual transmission), (0B2)

(Manual transmission), (0B1)

Rear differential, (0BC), (4WD)

Steering

(- 03/2012)

(04/2012 - 10/2013)

Denso, (6SEU14), (- 03/2012)

Denso, (7SEU17), (- 03/2012)

Denso, (6SAS14), (08/2011 -)

Denso, (6SES14), (03/2012 -)

(Manual transmission), (0B1)

Rear differential, (0BC), (4WD)

Steering

(- 03/2012)

(04/2012 - 10/2013)

Denso, (6SEU14), (- 03/2012)

Denso, (7SEU17), (- 03/2012)

Denso, (6SAS14), (08/2011 -)

Denso, (6SES14), (03/2012 -)

Engine

Engine oil SAE 5W-30 VW 507 00 All temperatures

- Engine sump, including filter 5.0 (l)
- Engine oil drain plug 30 (Nm)

Cooling system

Coolant (Water with 40% anti-freeze)	TL-VW 774G (G12++)	Above -25 °C
Coolant (Water with 50% anti-freeze)	TL-VW 774G (G12++)	Above -35 °C
Coolant (Water with 60% anti-freeze)	TL-VW 774G (G12++)	Above -40 °C

Cooling system 8.0 (l)

Basic data

Brake fluid VW 501 14

- Brake system 1.0 (l)

(Manual transmission), (0B2)

Gear oil VW G 055 532 A2

- Manual transmission
- Gearbox refill 4.8 (l)
- Plug location (Filler/level plug)

(Manual transmission), (0B1)

Steering

Power steering fluid VW G 004 000

(- 03/2012)

Refrigerant R134a

Denso, (6SES14), (03/2012 -)

Compressor oil VW G 052 300 A2

- Air-conditioning compressor oil 110 ± 10 (ml)

HaynesPro

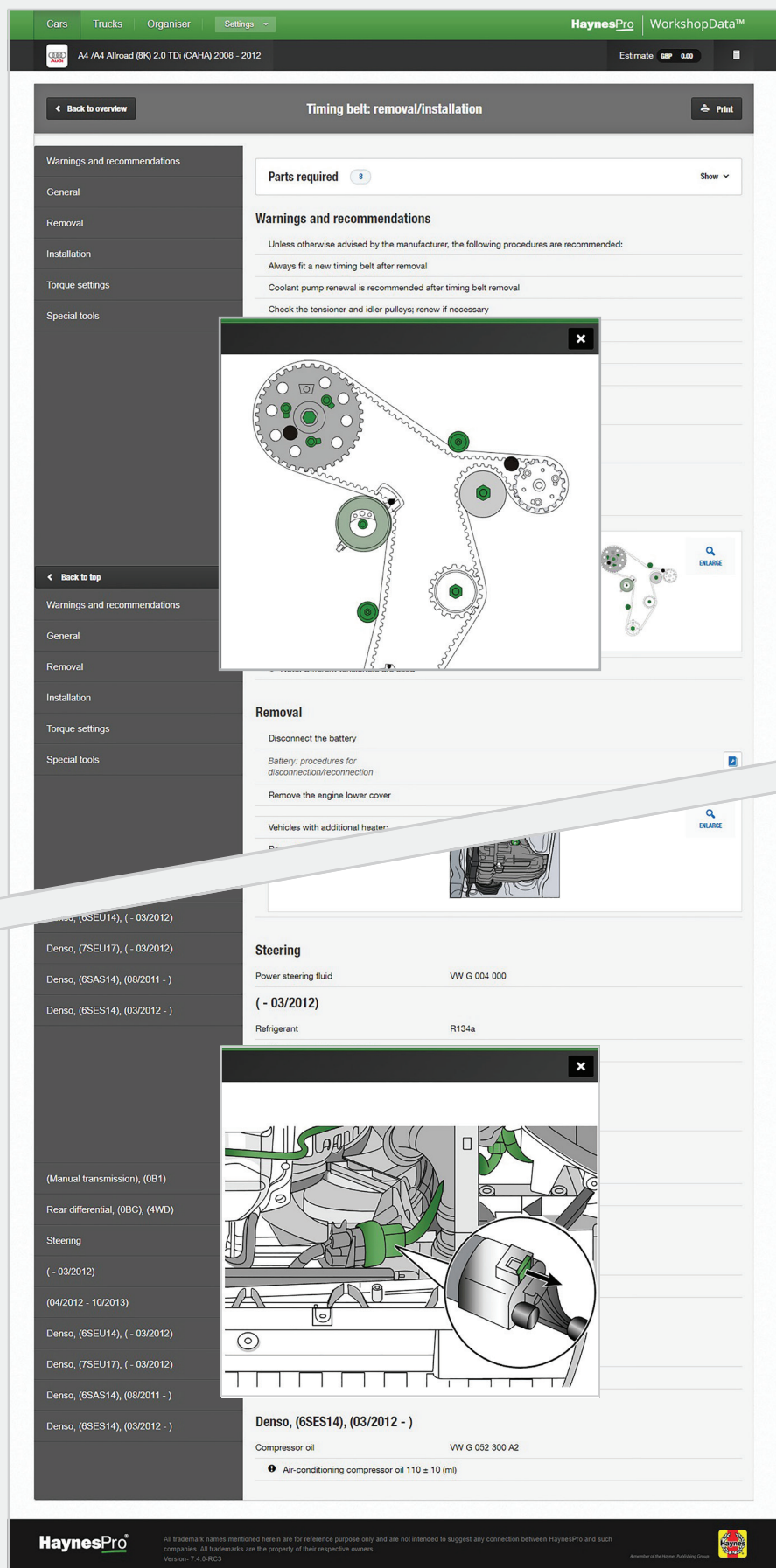
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Version: 7.4.5-RC3

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HaynesPro WorkshopData™

Timing belt: removal/installation

Parts required 8

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

Removal

Disconnect the battery

Battery: procedures for disconnection/reconnection

Remove the engine lower cover

Vehicles with additional heater:

Steering

Power steering fluid VW G 004 000

(- 03/2012)

Refrigerant R134a

Denso, (6SES14), (03/2012 -)

Compressor oil VW G 052 300 A2

• Air-conditioning compressor oil 110 ± 10 (ml)





Repair manuals

DETAILED, STEP-BY-STEP REPAIR AND SERVICE INSTRUCTIONS.

Tech features detailed, step-by-step repair and service instructions for those tasks which, while being relatively routine, require specific procedures for the car in question. Again, Tech provides technical illustrations and, where necessary, reference numbers identifying special tools. In this way, Tech helps boost productivity and improve workshop flow.

Features

		
Timing belt; removal / installation	✓	
Timing chain; removal / installation	✓	
Ancillary drive belt; removal / installation	✓	
Clutch: removal / installation	✓	✓
Manual transmission; removal / installation	✓	
Cooling system; drain / refill	✓	
Diesel particulate filter	✓	✓
Battery procedure	✓	
(Semi-) automatic transmission fluid level check and drain / refill	✓	✓
Tyre pressure monitoring system (TPMS)	✓	
Valve clearances	✓	
Injector: removal / installation	✓	



Continued from previous page

Repair times

A MORE REALISTIC TIMEFRAME.

HaynesPro expands official (OEM) repair times to take account of associated tasks, making its data more helpful and relevant in the real world. The module contains numerous included tasks for overlap calculation. By listing follow-up tasks we ensure that no labour times are overlooked. This helps to maximise workshop revenue.

Features

Overlap technology	✓	✓
Specific and generic times	✓	✓
Follow-up work	✓	✓
Links to parts	✓	✓

CarsTrucksOrganiserSettings

HaynesProWorkshopData™

44 / 44 Allroad (8K) 2.0 TDi (CAHA) 2008 - 2012EstimateGBP 899.00

Back to overview

Repair Times

Print

Total repair times

JOBS2

TOTAL TIME (h)7.10

PARTS REQUIRED3

Hide details

Add to work order

Jobs

Renew the timing belt kit and the coolant pump4.10

FOLLOW UPRenew the crankshaft front radial seal3.00

Parts required

Unit Price (GBP)Quantity

Water pump & timing belt set128.501.00

Tensioner, timing chain0.001.00

Shaft seal, crankshaft16.501.00

Fuel system

Exhaust system

Gearbox

Automatic transmission

Drivetrain

Electrical components

Steering

Front axle

Front suspension

Rear axle

Rear suspension

Wheels and tyres

Pedals

Brakes (Mechanical)

Brakes (Electric)

Cylinder head

Plywheel/flexplate

Flywheel

Crankshaft

Valve cover

Valve

Timing

1B01515000 Remove/refit the upper timing cover0.20

FOLLOW UP1B01541910 Repair the timing belt cover+0.10

1B01516000 Renew the upper timing cover0.20

FOLLOW UP1B01541910 Repair the timing belt cover+0.10

1B01541800 Check the timing belt cover; clean if necessary0.10

1B01541910 Repair the timing belt cover0.10

1B02001000 Check the timing belt condition and tension0.40

FOLLOW UP1B02003100 Renew the timing belt

FOLLOW UP1D04003000 Renew the coolant pump

1B02002400 Renew the timing belt

INCLUDEDClean sealing surface(s)

INCLUDEDRemove/refit water pump

INCLUDEDDrain/fill/check level of coolant

INCLUDEDRemove/refit right timing belt tensioner roller

INCLUDEDRemove/refit left timing belt tensioner roller

INCLUDEDRemove/refit engine timing belt tensioner pulley

INCLUDEDRemove/refit engine timing toothed belt

INCLUDEDRemove/refit lower timing belt cover

INCLUDEDRemove/refit upper toothed belt cover

INCLUDEDRemove/refit crankshaft vibration damper

INCLUDEDRemove/refit drive belt

INCLUDEDLoosen/tighten front lock carrier

INCLUDEDRemove/refit lower engine cover

INCLUDEDRemove/refit upper engine cover

FOLLOW UP1A20032000 Renew the crankshaft front radial seal+3.00

1B02002500 Renew the timing belt kit3.20

FOLLOW UP1A20032000 Renew the crankshaft front radial seal+3.00

1B02003000 Remove/refit the timing belt2.90

FOLLOW UP1D04003000 Renew the coolant pump+3.80

FOLLOW UP1A20032000 Renew the crankshaft front radial seal+3.00

1B02003100 Renew the timing belt+2.90

FOLLOW UP1D04003000 Renew the coolant pump+3.80

FOLLOW UP1A20032000 Renew the crankshaft front radial seal+3.00

1B02005900 Remove/refit the timing belt tensioner pulley3.00

FOLLOW UP1B02003100 Renew the timing belt+2.90

1B02006000 Renew the timing belt tensioner pulley3.00

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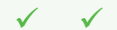
Technical drawings

OVER 100,000 HIGH-QUALITY TECHNICAL DRAWINGS.

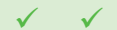
A picture is worth a thousand words. HaynesPro has over 100,000 high-quality technical drawings in its database. Far from being generic images, these are bespoke illustrations with featured parts highlighted for ease of identification and the option to link directly to a shopping cart in a parts catalogue. Torque settings are indicated in the drawing to ensure that the correct torque is used for the specified bolt/nut. There are also notifications for bolts/nuts which must be renewed and of any requirement for using locking compound.

Features

Links to parts



Torque settings



Brake, components, front, exploded view

Rear disc brakes, (CII 43)

Brake, components, rear, exploded view

(Manual transmission), (OB1, OB2)

Gear shift lever assembly

Gearbox mount

Differential

Propeller shaft

Rear differential, (OBC), (4WD)

Differential

(2WD)

Subframe, front

Suspension, front

Subframe, rear

Suspension, rear

Shock absorber, rear

(4WD)

Subframe, front

Suspension, front

Subframe, rear

Suspension, rear

Shock absorber, rear

(Estate, Saloon)

Steering column

Power steering rack

Electronic power steering rack

(Convertible)

Steering column

Power steering rack

Electronic power steering rack

Air conditioning

Air conditioning, components

(- 2012)

Seat belts, front

Seat belts, rear

Bumper, removal, front

Bumper, removal, rear

(Allroad), (- 2012)

Seat belts, front

Seat belts, rear

Bumper, removal, front

Bumper, removal, rear

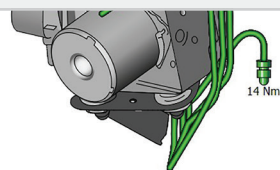
Steering column

Power steering rack

Electronic power steering rack

(Convertible)

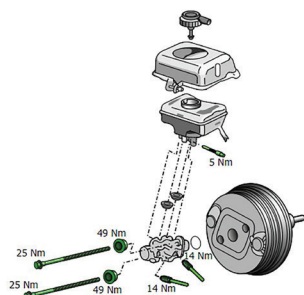
Steering column



Parts required 1

Show

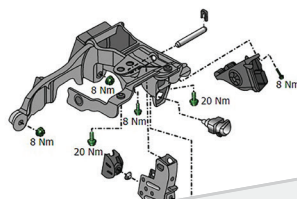
Print



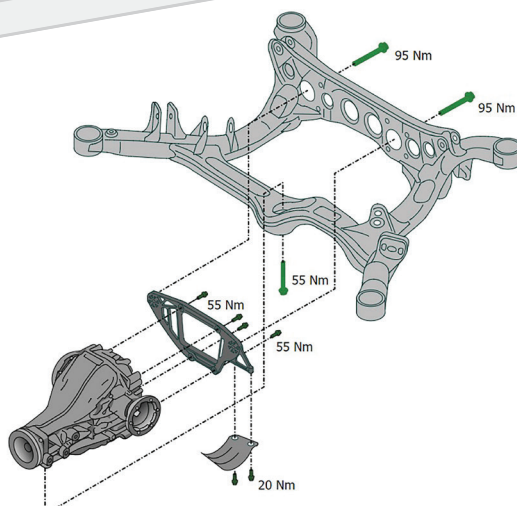
Parts required 4

Show

Print

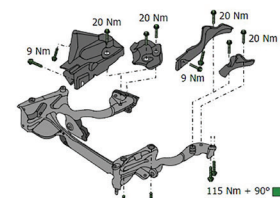


Print



(2WD)

Print



VESA MK II Guided Diagnostics

VESA MK II Guided Diagnostics

AN INNOVATIVE APPLICATION FOR ELECTRONICS DIAGNOSTICS.

Probably unrivalled in the after-market arena, VESA is an innovative electronics diagnostics application. It is based on vehicle CAN-Bus data and helps technicians diagnose faults and component errors. It takes an OEM's often bewildering and unfamiliar wiring schematic, converts it to a clearer, more readable format and then zooms in on the component and wiring under consideration.

Example A

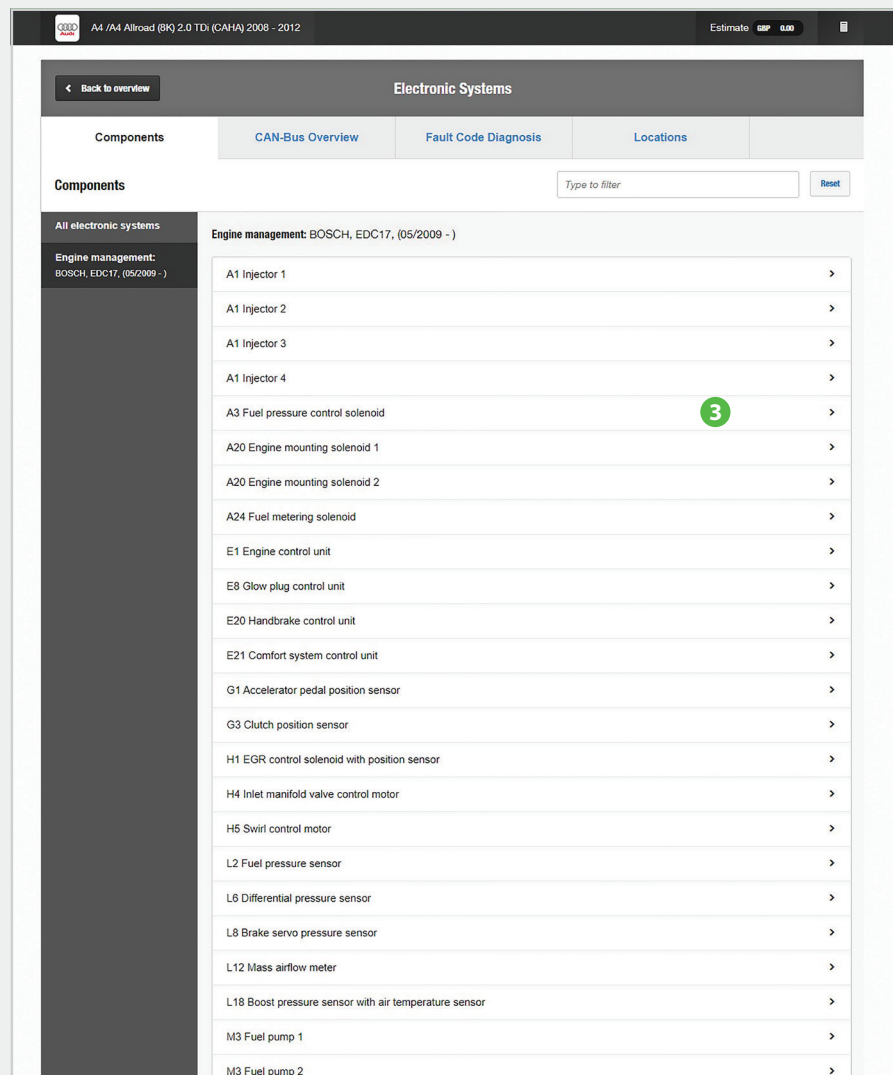
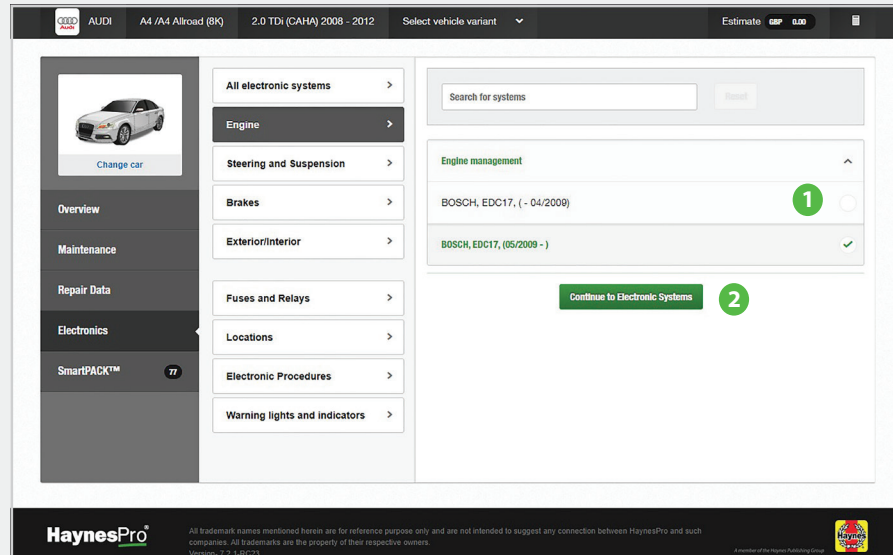
DIAGNOSTICS BY COMPONENT

[Engine tab]

1. Select systems
2. Confirm selected systems

[Electronic systems page]

3. Select component



Continued on next page

Continued from previous page

HaynesPro A4 /A4 Allroad (BK) 2.0 TDI (CAHA) 2008 - 2012 Estimate GBP 0.00

Component diagnosis : A3 - Fuel pressure control solenoid

Print X

Wiring diagram ECU pin and connector Location Picture Component information Initialisation procedures

Diagnosis 1/2

1: Check the supply voltage (pin 2).
Turn the ignition on. Measure the voltage on pin 2. Is it between 12 and 14.4 V?

Turn the ignition on. Measure the voltage on pin 2 (O7 Fuse SB7). Is it between 12 and 14.4 V?

Measure the resistance between pins 2 and 2 (O7 Fuse SB7). The resistance should be less than 1 ohm. Check all wires and replace if necessary. See the diagram below for details on wire colours, connectors, welds and locations (if applicable).

2: Check the connectivity of pin 1.

Pin number	Wire colour	Component	Pin number	Wire colour
1	Brown/Blue	E1 Engine control unit	B 45	Brown/Blue
2	Grey/Violet	A24 Fuel metering solenoid	2	Grey/Violet
2	Grey/Violet	O7 Fuse SB7	2	Grey/Violet

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[Diagnosis page]

- Answer the questions with *yes* or *no* until the component diagnosis is completed
- or click in the wiring diagram to access the information for the selected component or fuse/ground point

HaynesPro A4 /A4 Allroad (BK) 2.0 TDI (CAHA) 2008 - 2012 Estimate GBP 0.00

Component diagnosis : O7 - Fuse SB7

Print X

Wiring diagram ECU pin and connector Location Picture Component information Initialisation procedures

Diagnosis 1/1

1: Check the supply voltage (pin 1).
Turn the ignition on, crank or start the engine. Measure the voltage on pin 1. Is it between 12 and 14.4 V?

Pin number	Wire colour	Component	Pin number	Wire colour
1	Red/Grey	O7 Fuse SB10	1	Red/Grey
1	Red/Grey	O7 Fuse SB2	1	Red/Grey
1	Red/Grey	O7 Fuse SB5	1	Red/Grey
1	Red/Grey	O7 Fuse SB6	1	Red/Grey
1	Red/Grey	O7 Fuse SB8	1	Red/Grey



Example B

DIAGNOSTICS BY FAULT CODE

[Overview page]

1. Add a fault code or multiple fault codes, separated by commas
2. Select a system

[Electronic systems page]

3. Select a fault code description or select *Combined diagnosis of the above*

Audi A4 /A4 Allroad (8K) 2.0 TDi (CAHA) 2008 - 2012

Maintenance schedules

Fault codes

p0100, p0101, p0108

Search

1

Most used

Repair Times

Timing Belt

Adjustment Data

SmartPACK™

TSBs (Technical Service Bulletins)

Recalls

Cases

HaynesPro

Audi A4 /A4 Allroad (8K) 2.0 TDi (CAHA) 2008 - 2012

Fault codes

p0100, p0101, p0108

Search

Reset

Search results: p0100, p0101, p0108

Fault code description:

P0100 - Mass airflow meter 1 circuit/open

P0101 - Mass airflow meter 1 circuit range/performance

P0108 - MAP sensor/barometric pressure sensor circuit high

p0100, p0101, p0108 -

Electronic Systems

Engine management

BOSCH, EDC17, (- 04/2009)

BOSCH, EDC17, (05/2009 -)

SmartCASE™

No results found

A4 /A4 Allroad (8K) 2.0 TDi (CAHA) 2008 - 2012

Electronic Systems

Components

CAN-Bus Overview

Fault Code Diagnosis

Locations

Fault Code Diagnosis

p0100, p0101, p0108

Search

EOBD Locations

Fault code description:

P0100 - Mass airflow meter 1 circuit/open

P0101 - Mass airflow meter 1 circuit range/performance

P0108 - MAP sensor/barometric pressure sensor circuit high

p0100, p0101, p0108 -

P0100

Mass airflow meter 1 circuit/open

P0101

Mass airflow meter 1 circuit range/performance

P0108

MAP sensor/barometric pressure sensor circuit high

Combined diagnosis of the above

1

Mass airflow meter

Show Diagnosis

2

Boost pressure sensor with air temperature sensor

Show Diagnosis

3

Continued on next page



Continued from previous page

3 (F30, F31, F80) 330e PHEV (B48 B20A) 2015 - ...
Estimate GBP 0.00

Fault Code Diagnosis : L1 - MAP sensor

Wiring diagram
ECU pin and connector
Location
Picture
Component information
Initialisation procedures

Diagnosis 1/3

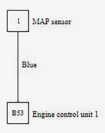
1: Check the supply voltage (pin 1).

Turn the ignition on. Measure the voltage on pin 1. Is it between 4.8 and 5.2 V?

Turn the ignition on. Measure the voltage on pin B 53 (E1 Engine control unit). Is it between 4.8 and 5.2 V?

4

Measure the resistance between pins 1 and B 53 (E1 Engine control unit). The resistance should be less than 1 ohm. Check all wires and replace if necessary. See the diagram below for details on wire colours, connectors, welds and locations (if applicable).



2: Check the connection to ground (pin 2).

3: Check the connectivity of pin 3.

Pin number	Wire colour	Component	Pin number	Wire colour
1	Blue	E1 Engine control unit	B 53	Blue
2	Black/Yellow	E1 Engine control unit	B 48	Black/Yellow
3	Yellow	E1 Engine control unit	B 49	Yellow

1 2 3 5

[Diagnosis page]

- Answer the questions with **yes** or **no** until the component diagnosis is completed;
- and / or click here to go to the next fault code diagnosis

Features

Features		
Diagnostics wizard	✓	✓
Wiring diagrams for engine management, ABS and ESP	✓	✓
Wiring diagrams for EPS, air conditioning, climate control	✓	
Fault codes (manufacturer's and EOBD)	✓	
Fault code link to Smart module	✓	
Component and grounding point location	✓	✓
ECAS (Electronically controlled air-suspension)		✓

A4 /A4 Allroad (8K) 2.0 TDI (CAHA) 2008 - 2012
Estimate GBP 0.00

Fault Code Diagnosis : L18 - Boost pressure sensor with air temperature sensor

Wiring diagram
ECU pin and connector
Location
Picture
Component information
Initialisation procedures

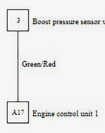
Diagnosis 1/4

1: Check the supply voltage (pin 3).

Turn the ignition on. Measure the voltage on pin 3. Is it between 4.8 and 5.2 V?

Turn the ignition on. Measure the voltage on pin A 17 (E1 Engine control unit). Is it between 4.8 and 5.2 V?

Measure the resistance between pins 3 and A 17 (E1 Engine control unit). The resistance should be less than 1 ohm. Check all wires and replace if necessary. See the diagram below for details on wire colours, connectors, welds and locations (if applicable).



2: Check the connection to ground (pin 1).



Comfort wiring diagrams

CLEAR, 'LOCALISED' WIRING SCHEMATICS.

Features

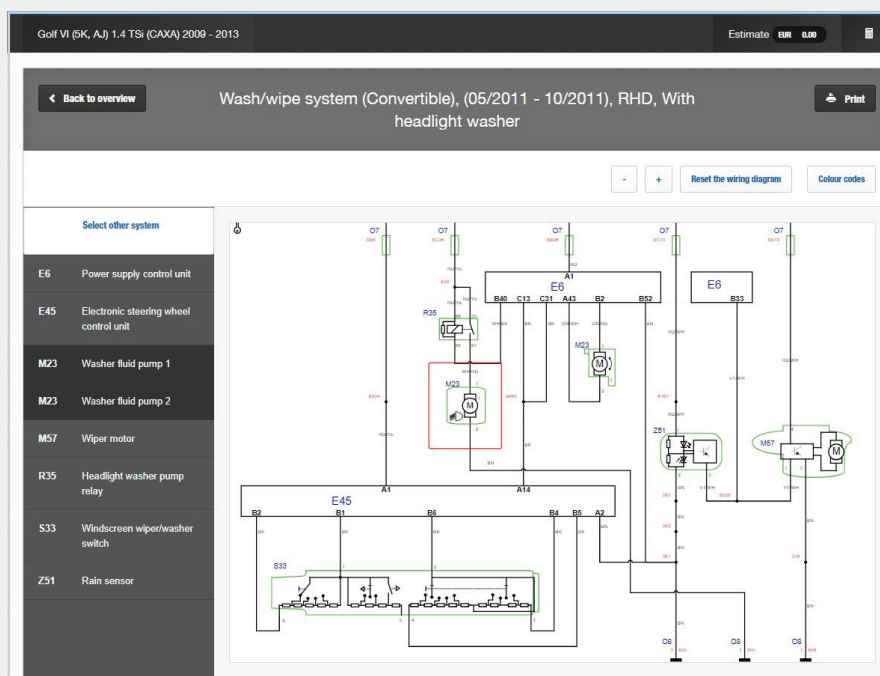
Wiring diagrams covering e.g. door locks, windows, airbags, exterior lights, starting/charging and wash/wiper systems



Pan and zoom functionality



Highlight functionality to trace corresponding wires and components



Fuses and relays



Fuses and relays

CLEAR FUSE LOCATION AND IDENTIFICATION FEATURE.

Ever helpful, HaynesPro has created an Electronics module packed with essential information, typified by this clear fuse location and identification feature. Fuse boxes may be installed in various locations on a vehicle, making them more difficult to find. Using the data in Fuses and Relays minimises the time spent on searching.

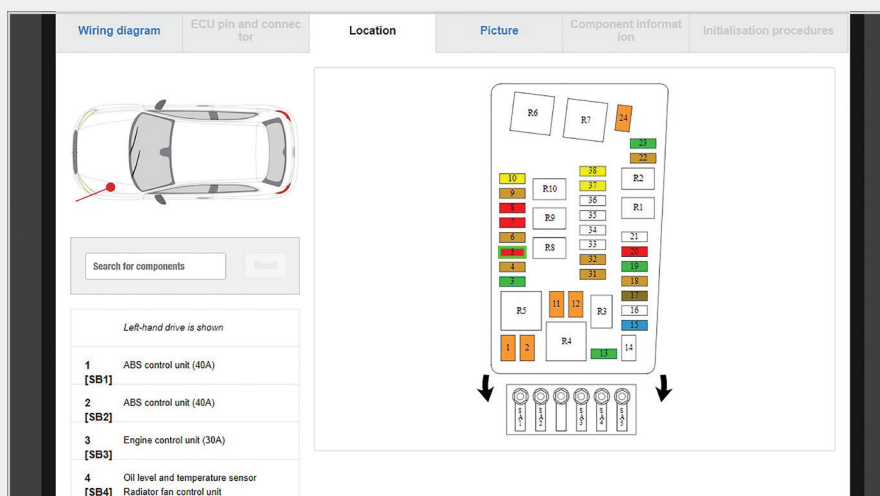
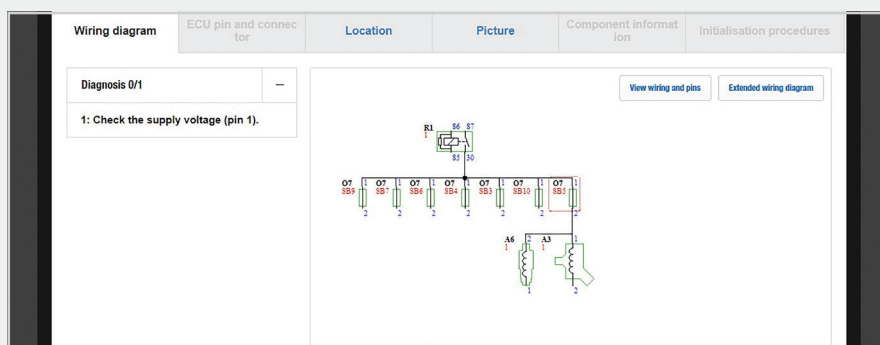
Fuse locations are also accessible directly from the wiring diagram.

Features

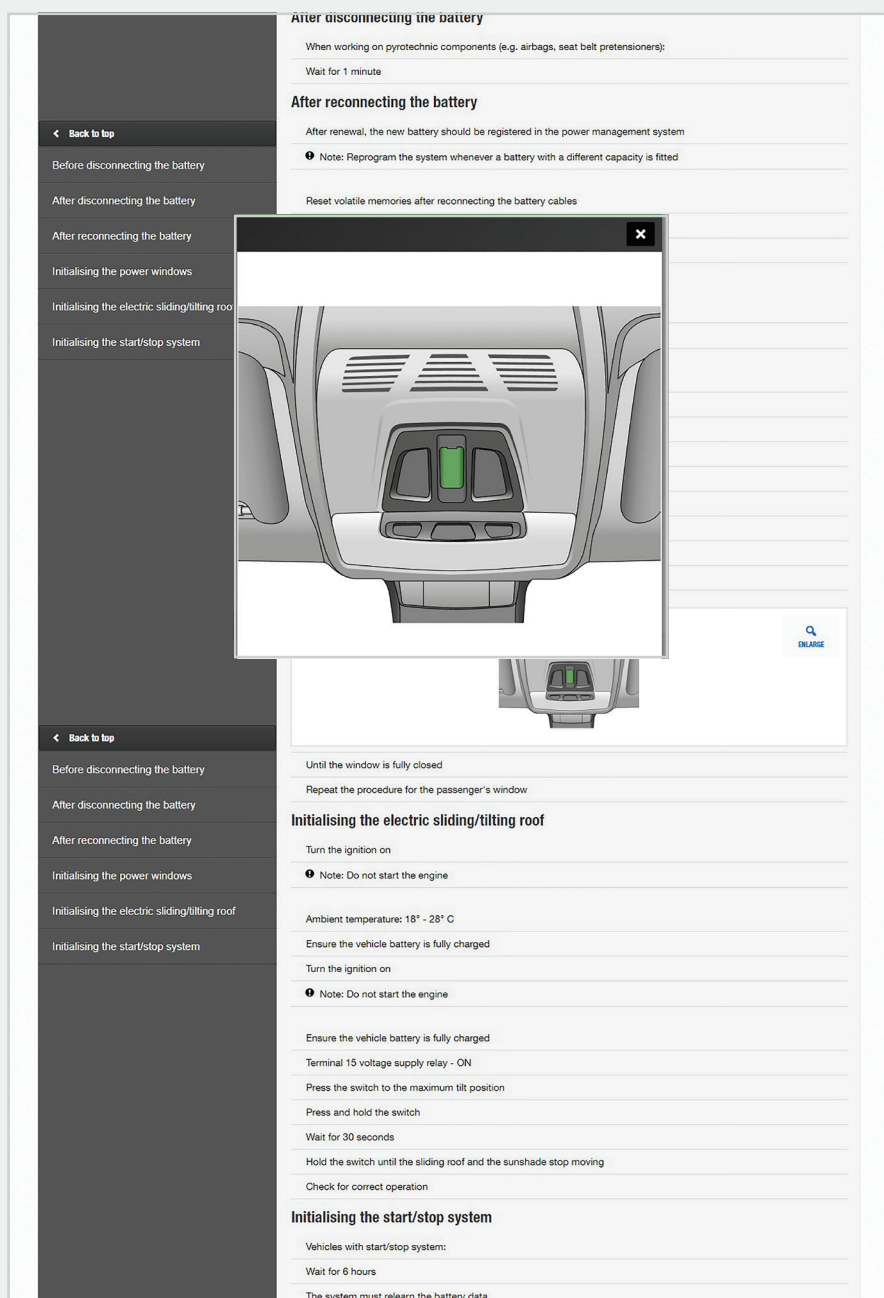
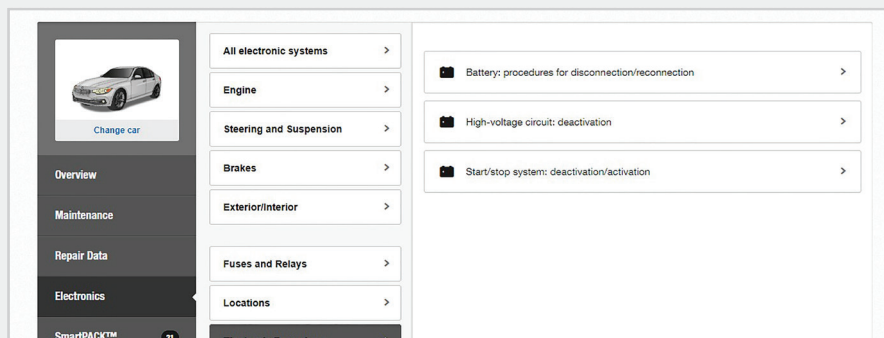
Fuse and relay box locations



Fuse and relay overview



Electronic Procedures



Battery: procedures for disconnection/reconnection



DISCONNECTING/ RECONNECTING A BATTERY USED TO BE A STRAIGHTFORWARD TASK.

In modern vehicles, the procedure is more complicated. The technician needs to know what procedures to follow after reconnecting a battery. This will prevent the customer having to return the vehicle to the workshop due to errors in systems such as parking assistance or power windows. Due to the growing number of hybrid vehicles on the market, technicians also need specific instructions on how to work safely on these vehicles.

Other available procedures:



High-voltage circuit: deactivation



Start/stop system: deactivation/activation



Locations

ONE OF THE CLEAR GOALS OF HAYNESPRO'S DATA IS TO REDUCE THE NUMBER OF UNBILLABLE HOURS.

With our Locations feature, we ensure that the required component, control unit or ground point can be found immediately. All locations are accessible from the local wiring diagrams.

Available locations:

 EOBD Connector

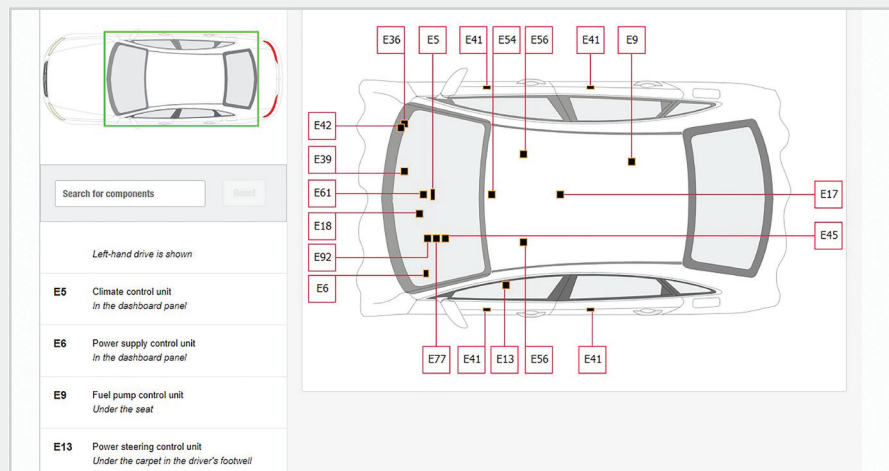
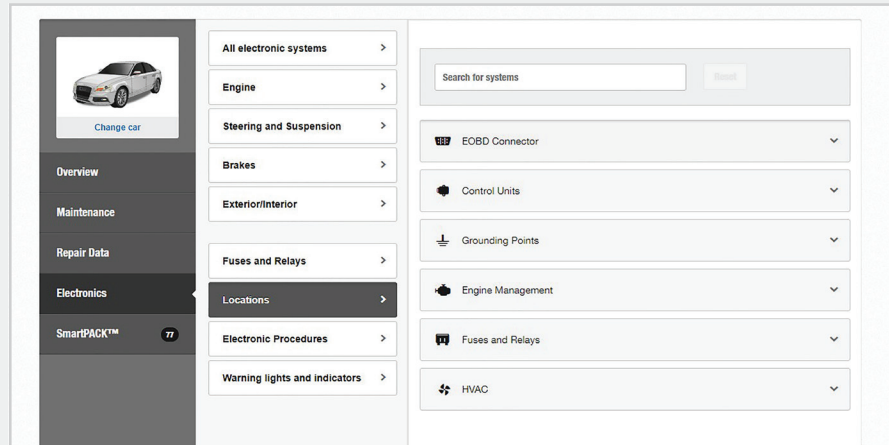
 Control Units

 Grounding Points

 Engine Management

 Fuses and Relays

 HVAC

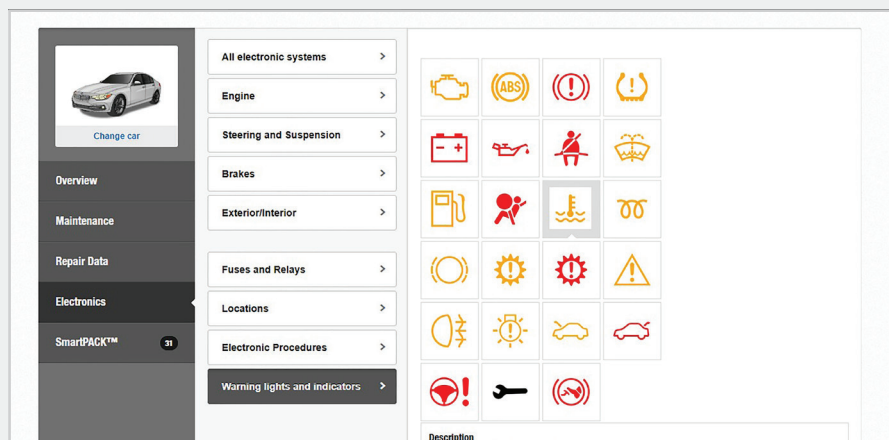


Warning lights and indicators

AN EXTENSIVE LIST OF POSSIBLE WARNING LIGHTS.

Specific to each manufacturer, with a short description and solution.

- Make-specific overview of available warning lights
- Covering both the European and the US car park



SmartFIX™

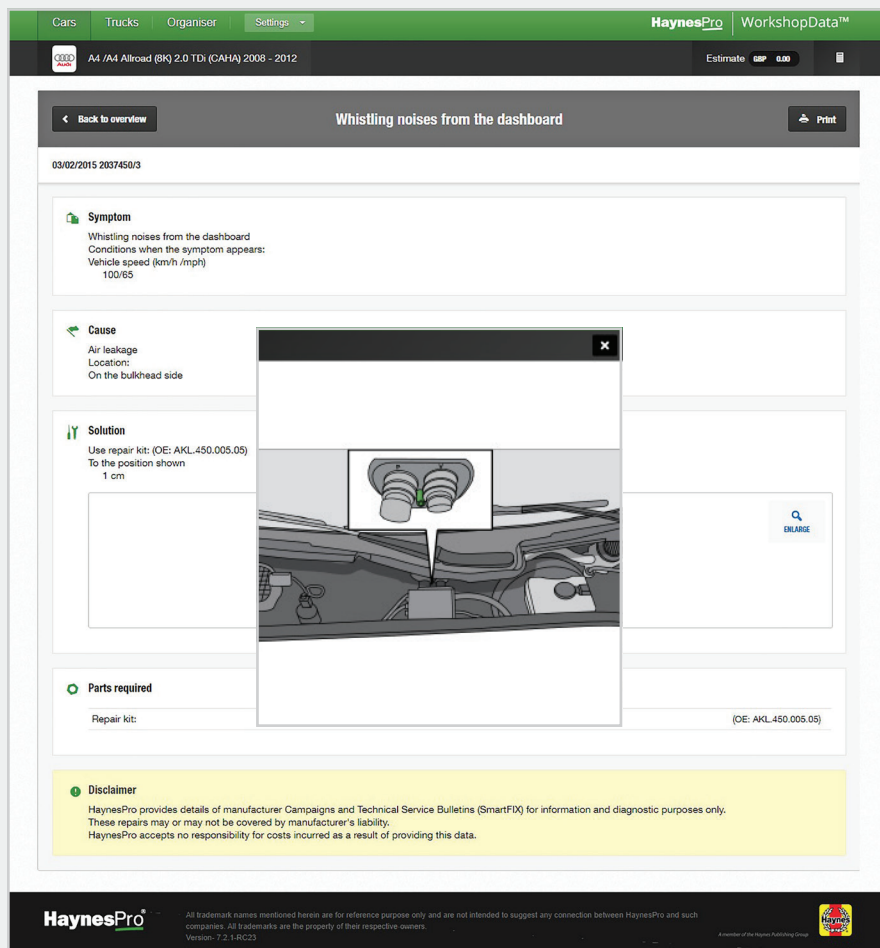


Technical Service Bulletins & Recalls (SmartFIX™)

INFORMATION THAT ADDS REAL VALUE FOR PROFESSIONAL TECHNICIANS.

WorkshopData offers instant access to a multitude of Technical Service Bulletins (TSBs) **sourced from original equipment manufacturers (OEM)**.

Our team of technical authors carefully adapts the TSBs we receive to best suit the user's needs. With a simple mouse click, the technician can instantly check the availability of Technical Service Bulletins for a given vehicle.



The screenshot displays the HaynesPro WorkshopData interface. At the top, there are navigation tabs for 'Cars', 'Trucks', 'Organiser', and 'Settings'. The main header shows 'HaynesPro | WorkshopData™'. Below this, a search bar contains the vehicle information 'A4 /A4 Allroad (8K) 2.0 TDI (CAHA) 2008 - 2012'. The main content area is titled 'Whistling noises from the dashboard' and includes a 'Print' button. The content is organized into sections: 'Symptom' (Whistling noises from the dashboard, Conditions when the symptom appears: Vehicle speed (km/h /mph) 100/65), 'Cause' (Air leakage, Location: On the bulkhead side), 'Solution' (Use repair kit: (OE: AKL450.005.05) To the position shown 1 cm), 'Parts required' (Repair kit: (OE: AKL450.005.05)), and a 'Disclaimer' (HaynesPro provides details of manufacturer Campaigns and Technical Service Bulletins (SmartFIX) for information and diagnostic purposes only. These repairs may or may not be covered by manufacturer's liability. HaynesPro accepts no responsibility for costs incurred as a result of providing this data.). A large image of the dashboard area is shown in the center, with a callout box indicating the location of the repair. The bottom of the interface features the HaynesPro logo and a disclaimer: 'All trademark names mentioned herein are for reference purpose only and are not intended to suggest any connection between HaynesPro and such companies. All trademarks are the property of their respective owners. Version: 7.2.1.RC23. A member of the Haynes Publishing Group.'

WHAT MAKES HAYNESPRO SMARTFIX™ STAND OUT?



Data complies with the original OEM documentation (covering TSBs from 2008 onwards).



Single point of access to detailed information on faults, workarounds and defects usually only known to vehicle manufacturers.



Links to industry standard identification, providing an effective interface with other databases.



Smart links to other data categories (specifications, procedures, references).



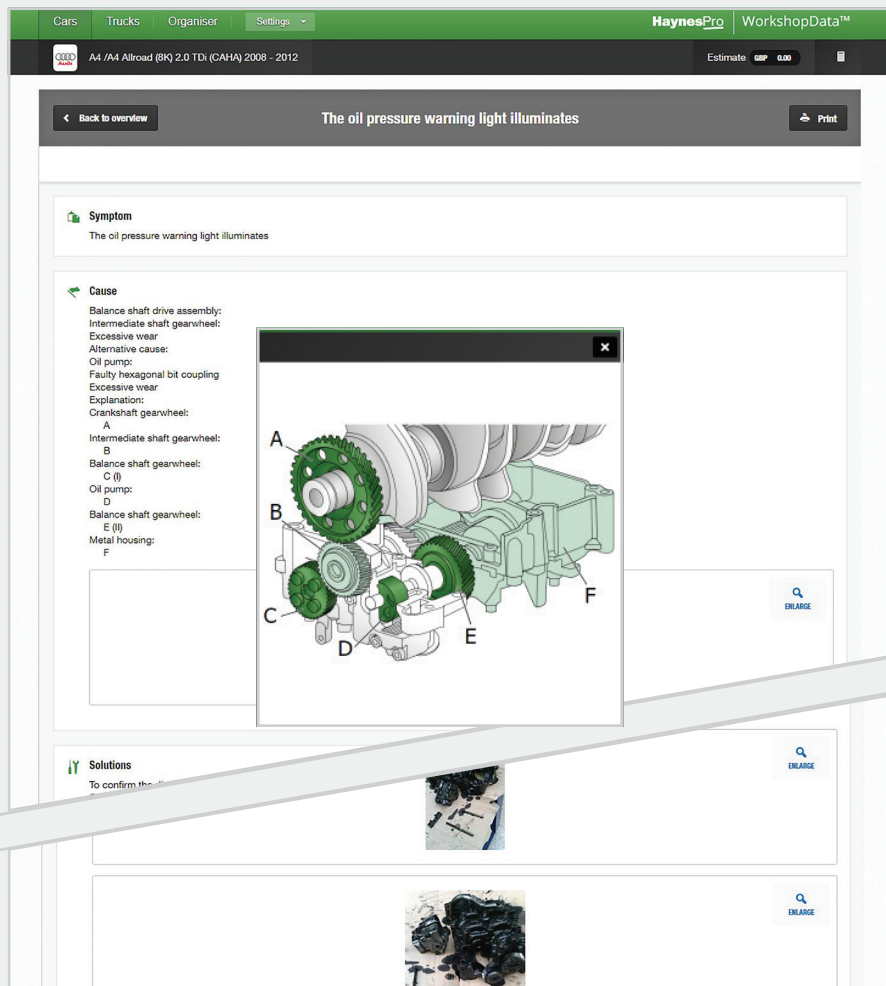
The time spent on rectifying known issues is reduced. Based on the available information, the workshop can decide whether to rectify the issue in-house or to refer the work to an approved dealer.



Accessible via a fault code search.



SmartCASE™



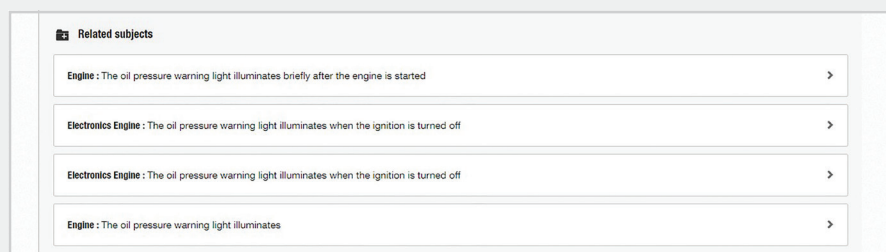
Verified fixes and tips (SmartCASE™)

SAVING TIME AND MONEY.

This Smart feature **extends HaynesPro's coverage** from OEM-based technical data to information **sourced from industry experts and renowned helpdesk organizations.**

SmartCASE™ is a unique database module containing cases, with verified fixes and tips, for vehicles on the European market. It helps the independent workshop to check quickly for solutions to problems for a selected vehicle, so saving time and money.

As with all HaynesPro products, it offers clearly formulated and appropriate solutions, enabling every technician to work with the data.



Related subjects

Every bulletin has suggestions for other solutions for similar problems.

WHAT MAKES HAYNESPRO SMARTCASE™ STAND OUT?



Extension of OEM coverage



Over 5100 unique bulletins covering 43 brands



Accessible via a fault code search



General features

Filter results

Users can filter TSBs, Cases or Recalls by specifying vehicle area (engine, steering etc.), fault code, noise, defect, or operating condition.

Example

Filter criteria: *Vehicle area - Brakes*

Filter results

Brakes

Vehicle area

Brakes

Electronics

Engine

Exterior/Interior

Steering and Suspension

Cars Trucks Organiser Settings

Audi A4 /A4 Allroad (8K) 2.0 TDI (CAHA) 2008 - 2012 Select vehicle variant Estimate 0.00

SmartPACK™

Filter results

Brakes

Vehicle area

Brakes

Electronics

Engine

Exterior/Interior

Steering and Suspension

Transmission

Search results: 0 Vehicle area "Brakes"

SmartCASE™

Electronic parking brake malfunction

The electronic parking brake warning light illuminates

Recall data

Reduced braking efficiency (01/10/2014, WAUZZZ8K0DA045573 - WAUZZZ8K0DA178051, 01/01/2012 - 27/08/2014, OE: R/2014/098)

Technical Service Bulletins

The brake pad wear indicator warning light illuminates (10/03/2015, OE: 2037697/2)

Clicking noise from the brake pedal (02/11/2014, OE: 2038847/1)

Fault code search

Users can find WorkshopData™ Smart bulletins via **fault code search** on the overview page.

Fault codes

P1643

SmartCASE™

High idle speed

VOLKSWAGEN Golf V (1K) 1.4 2003 - 2006

Fault codes

P1643

Search

Reset

Search results: P1643

Fault code description: P1643, 18051, 4683 - Central electric control unit

Electronic Systems

Central electric control unit

P1643 18051 4683

This fault code may be linked to a component that is not part of the available systems or the fault code is not available for the selected car.

SmartCASE™

High idle speed

Fault code: P1643

Recall data

No results found

Technical Service Bulletins