

Technical product information

Topic	Mulsanne front suspension - control module parameter updates
Market area	Worldwide Bentley (1WBE)
Brand	Bentley
Transaction No.	2032620/2
Level	EH
Status	Approval
Release date	

New customer code

Object of complaint	Complaint type	Position
Running gear -> Shock absorber/suspension control	functionality	
Running gear -> Shock absorber/suspension control -> Self-levelling suspension	functionality -> without function / defect	

New workshop code

Object of complaint	Complaint type	Position
Running gear -> Self-levelling suspension, pitch and roll compensation -> Ride height / shock absorber control unit	functionality -> defective function sequence	
Running gear -> Self-levelling suspension, pitch and roll compensation -> Ride height / shock absorber control unit	functionality -> without function / defect	

Vehicle data

Mulsanne

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
3Y2*	2011	E		*	*	*
3Y2*	2012	E		*	*	*

Chassis numbers

Manufacturer	Filler	Type	Filler	MY	Factory	From	To	Prod from	Prod to
SCB	*	3Y	*	C	C	000001	016518		
SCB	*	ZH	*	C	C	000001	016518		

Documents

Document name
master.xml

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Customer statement / workshop findings

The air suspension warning light (Figure 1) is illuminated and/or event codes C103429 (Front left hand ride height sensor) and C103529 (Front right hand ride height sensor) are present within the air suspension control module.



Figure 1

Technical background

The parameters of the front ride height sensors are insufficient, this TPI describes the process which must be followed should the air suspension warning light be evident and/or the suspension control module event codes are logged relating to the front ride height sensors.



IMPORTANT: Please ensure that all VIN related campaigns are conducted prior to carrying out this TPI

Production change

All cars after VIN SCBBA63Y7CC016518 have the specified suspension parameters installed at the time of production.

Measure

NOTE: The condition of the vehicle batteries must be checked before carrying out any work stated within this document. Do not carry out this procedure unless the batteries are in a healthy state - Refer to Maintenance manuals - Batteries to Test

Before commencing with this procedure ensure you can connect to the Internet. DO NOT use a wireless Internet connection always use a suitable Internet cable

IMPORTANT: Please use Offboard Diagnostic Information System Service when carrying out this procedure as detailed within the onward instructions

1. Ensure a suitable battery charger (VAS 5903 or a charger with the same specification) is correctly connected to the vehicle electrical system for the duration of this procedure - Refer to workshop manual Rep.Gr 27 – Batteries to charge

- Should an incorrect specification battery charger be used, adequate voltage may not be maintained which can cause the software update to stop whilst in progress.



2. Switch on the vehicle ignition by following the onward instructions

- Locate the key reader, which is in the glovebox


- With the plastic cover removed, insert the single ignition key into the reader with the blade folded away until it 'clicks' into place and check the key is securely located within the reader

IMPORTANT: It is imperative that any adjoining keys or any other objects that are attached should be removed from the ignition key ring as shown in Figure 2, as extra weight may cause the key to withdraw from the reader



Figure 2

- Check the key is securely located within the reader
- Press the Start/Stop switch on the centre console to switch on the ignition

 Do not switch off the ignition until the software update is complete

- Ensure you are connected to your on - line network - Broadband. Use a hardwire connection for software updates Bluetooth connections are not advised.

IMPORTANT NOTE: When conducting software updates it is recommended to attach a visible warning sign to the vehicle warning other people within the dealership that an update is in progress, the ignition - battery charger and any associated equipment must not be removed or switched off whilst the update is in progress.

3. Before starting the software update ensure the drive dynamics switch is in Comfort mode (Figure 3) and the ride height is at the lowest setting as shown in Figure 4



Figure 3



Figure 4

- Connect the Bentley diagnostic tool VAS 6150A-VAS 6150B/C or 6160/A with Windows 7 software or later approved equipment to the vehicle On Board Diagnostic (OBD) socket
- From the Desktop launch the Offboard Diagnostic Information System Service by using the Diagstarter icon



-When prompted (Where applicable) - Select Offboard Diagnostic Information System and follow all on screen prompts



Please ensure that the correct level of Offboard Diagnostic Information System Service is installed the level should be 2.2.1 or higher

- Ensure the Using guided fault finding box is ticked (Figure 5) - follow all on screen prompts and allow the guided fault finding control module sweep to complete

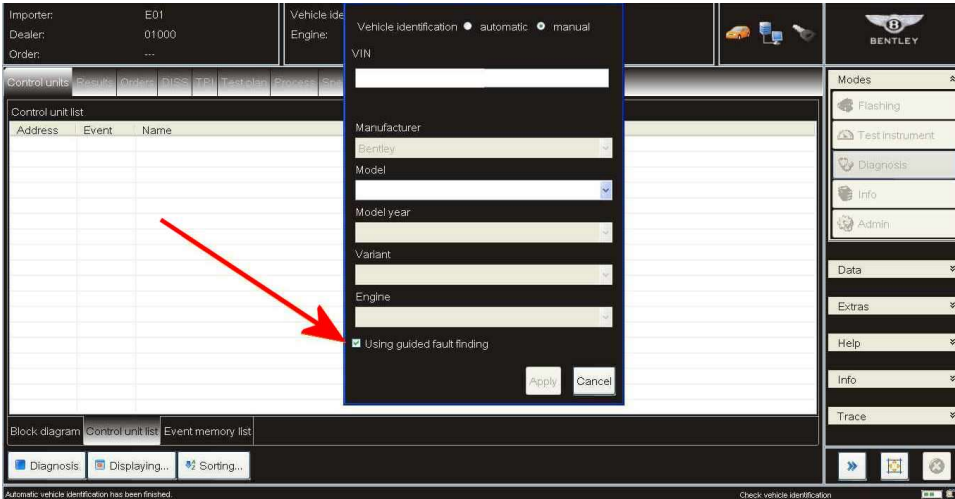


Figure 5

4. When requested to **Make a SVM Target/ Actual comparison?** Please select No (Figure 6)

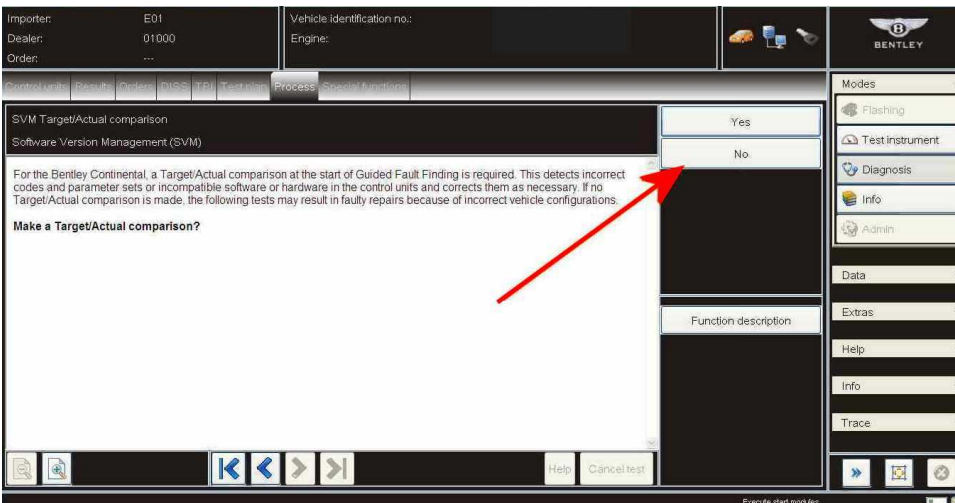


Figure 6

- Select – Special functions as shown in Figure 7 (point A)
- Select SVM - Problem related Hardware/Software Update (point B)
- Select Perform test (point C) and follow all on screen prompts

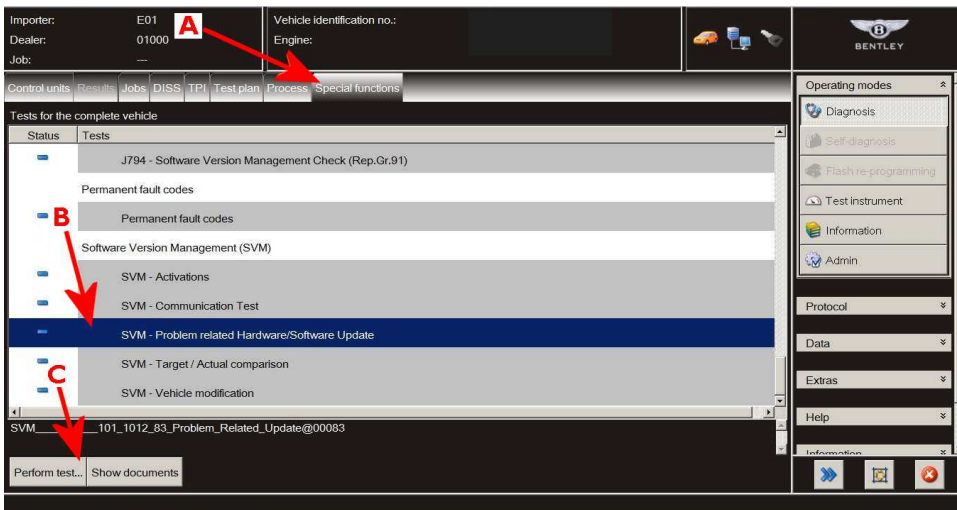


Figure 7

5. When prompted enter the SVM code **3Y034A0001P** into the box shown in Figure 8 (point A)
- Select Apply (point B)
- Follow the instructions on screen until **program end**

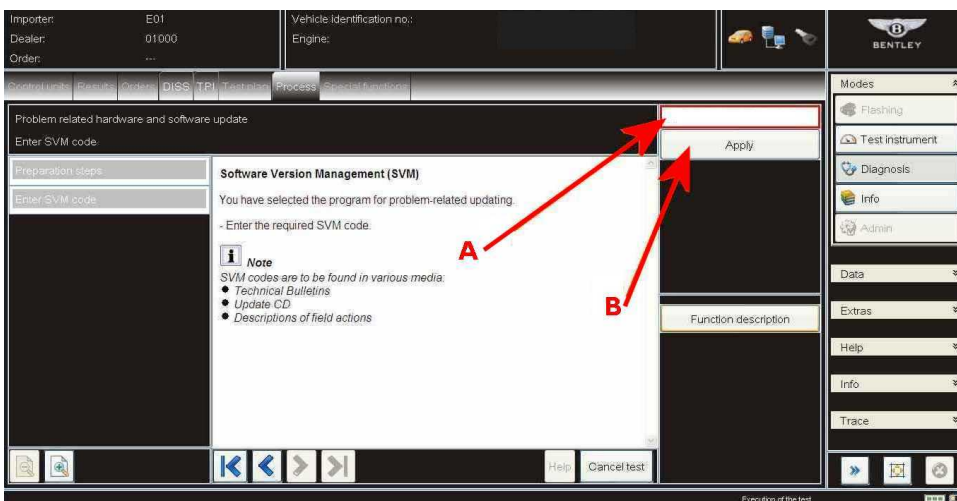


Figure 8

6. The Adaptive suspension Ride height calibration now requires updating please follow the remaining instructions
- Referring to Figure 9 - Navigate to the Block diagram screen - Select NIV 34 – Ride Control System (Point A)

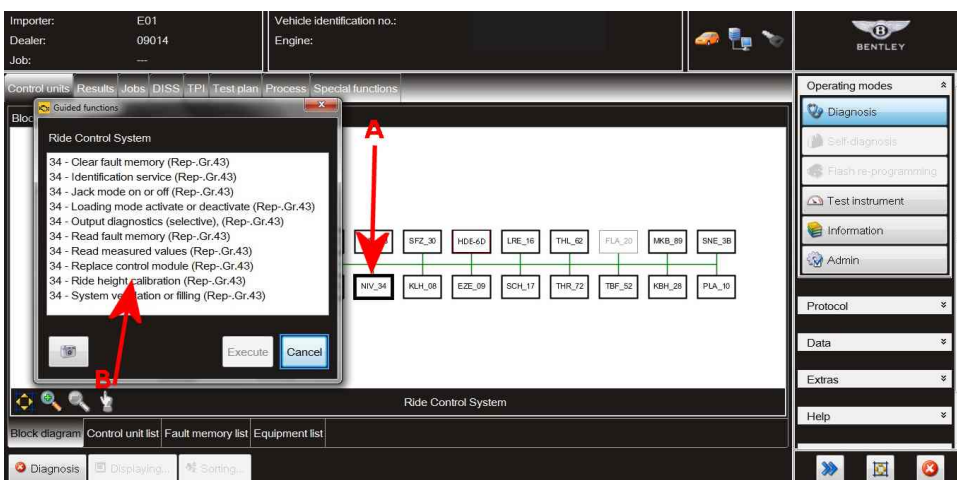


Figure 9

- Select 34 - Ride height calibration (Rep.Gr.43) – (Point B)

NOTE: When Conducting the Ride height calibration please select *Comfort mode* using the Drive dynamic switch as shown in Figure 10



Figure 10

- Follow all remaining instructions to carry out the Ride height calibration

- Should code C110300 Sensor for automatic distance control, misadjusted be evident please run - 13 Basic settings for the ACC and clear any related ACC fault codes

Warranty accounting instructions

Warranty Type	910 or 110
Labour operation code	01 29 00 05
Damage Service Number	43 19
Damage code	00 40
Time	50 Time units