Technical product information

Topic	Vehicle vibration / humming at idle - Active engine mount leak - Active engine mount replacement
Market area	Russische Föderation (5RU),Australia E04 Bentley rest Asia and Australia (6E04),China 796 VW Import Comp. Ltd (Vico), Beijing (6796),Germany E02 Bentley rest Europe (6E02),Japan E03 Bentley Japan (6E03),Korea, (South) E08 Bentley South Korea (6E08),United Arab Emirates E06 Bentley Middle East and Africa (6E06),United Kingdom E01 Bentley UK (6E01),United States E05 Bentley USA and rest America (6E05)
Brand	Bentley
Transaction No.	2060418/2
Level	EH
Status	Approval
Release date	

New customer code

Object of complaint	Complaint type	Position
vehicle service -> IT systems -> SVM (software version management)	functionality -> cannot be started	
whole vehicle -> assemblies -> engine assembly	noise, vibration -> noise	

Vehicle data

Bentayga

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4V14A9	2017	E		*	*	*
4V14A9	2018	E		*	*	*
4V14A9	2019	E		*	*	*
4V14A9	2020	E		*	*	*
4V14G9	2020	E		*	*	*

Chas is numbers

Manufacturer	Filler	Type	Filler	MY	Factory	From	To	Prod from	Prod to
*	*	*	*	*	*	000001	027866		

Documents

Document name
master.xml

Customer statement / workshop findings

Vehicle vibration / humming noise at idle

Technical background

Right hand Active Engine Mount (AEM) failed, oil may also be leaking from the AEM (Figure 1). This failure mode is only seen on W12 engine installations and is only apparent at idle

Figure 1

Current software is incompatible with AEM part numbers 4M0 199 255/6 BH.

When the AEM's are replaced with the above part numbers, the AEM control module must be reprogrammed or replaced as detailed within the onward instructions

Production change

New software and AEM combination was introduced from VIN SJAAH14V1LC027866.

Measure

In the event of a failure / complaint as detailed, then replace the right and left hand AEM with 4M0 199 255 BH and 4M0 199 256 BH

- Refer to Rep.Gr.10 Engine mounts – To remove and fit

Additionally changes must be made to the AEM control module, apply the onward instructions

- Ensure that both AEM's are now fitted with part numbers 4M0199255/6 BH

- Check and confirm the Hardware version number of address *00BA Assembly Mounting*, the hardware version must be H10.

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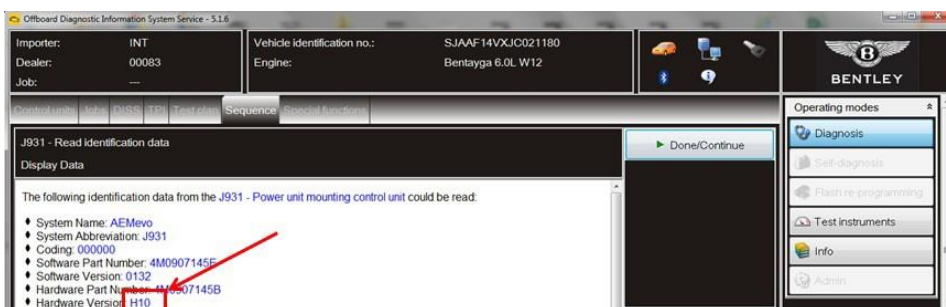Figure 2 shows the Hardware version number at H10

Figure 2

- Should the Hardware version number not be H10, you must replace the AEM control module with part number 4M0 907 145 E.

Rep.Gr 10 → Electrohydraulic engine mounting control unit - To remove and fit

If the control unit is at H10 proceed straight to the Reprogramming control module section of this TPI.

Reprogramming control module

Update the software of the AEM control module - Diagnostic address 00BA as follows:

1. Select and run Guided fault finding

• Within the Special functions tab select SVM – Problem related Hardware/Software update then select Perform test (Figure 3).
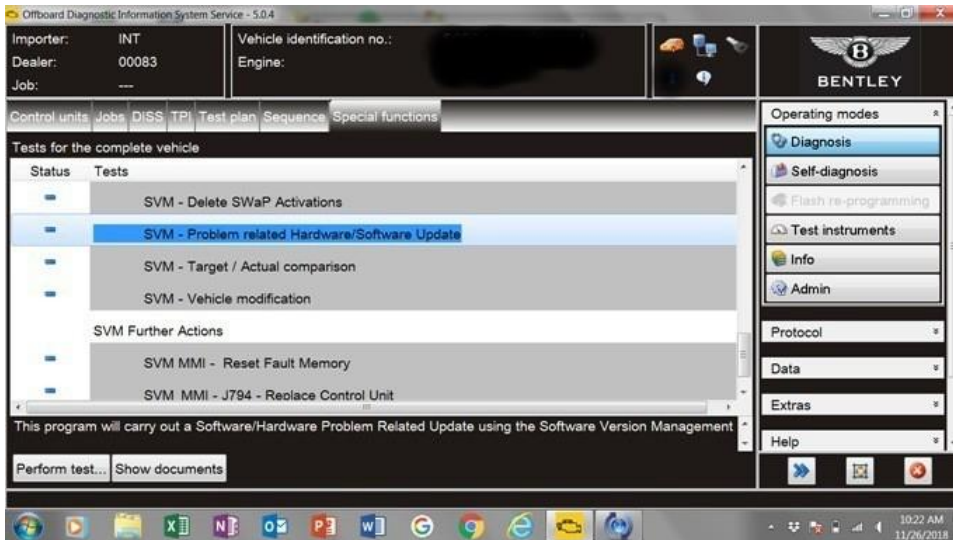

Figure 3

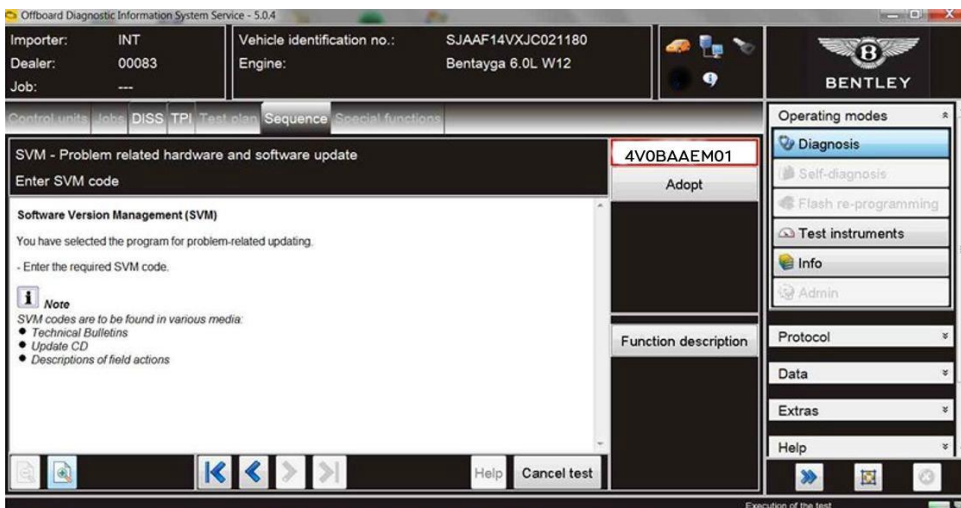2. On the next screen enter the SVM code 4V0BAAEM01 and select Adopt (Figure 4).

Figure 4

3. On the following screen, confirm the code then select *Yes.*

4. Follow all on screen prompts.

5. The software of *00BA Assembly Mounting* will now be reprogrammed (Figure 5). *NOTE: Depending on the software part number of the control module your vehicle may skip straight to step 6, if so proceed as instructed.*
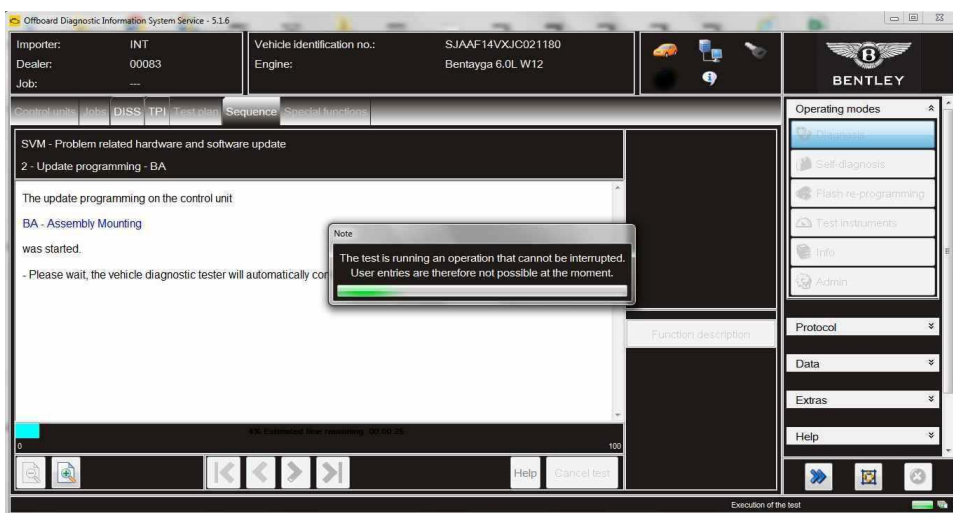

Figure 5

6. Once the software is updated, a parameter setting is required, select *Yes* (Figure 6).
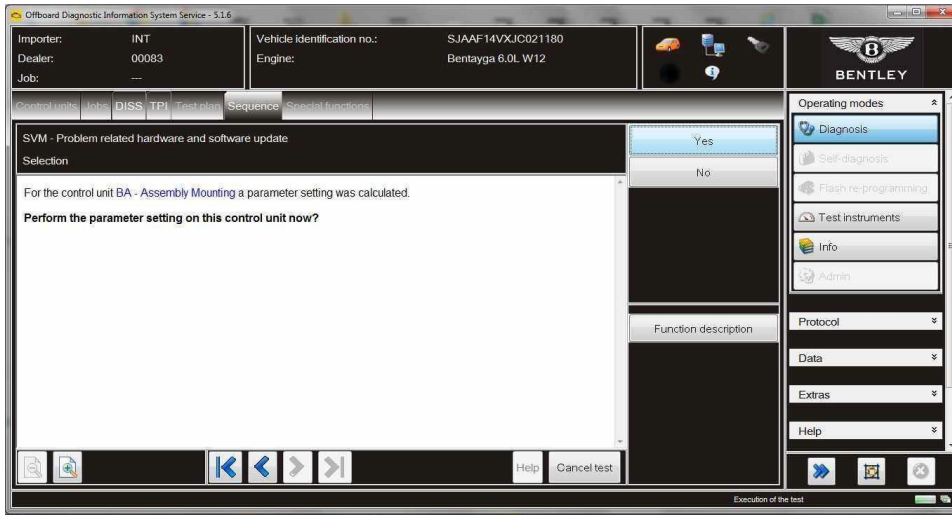

Figure 6

7. You will then see a confirmation message that the reprogramming has been successful (Figure 7).
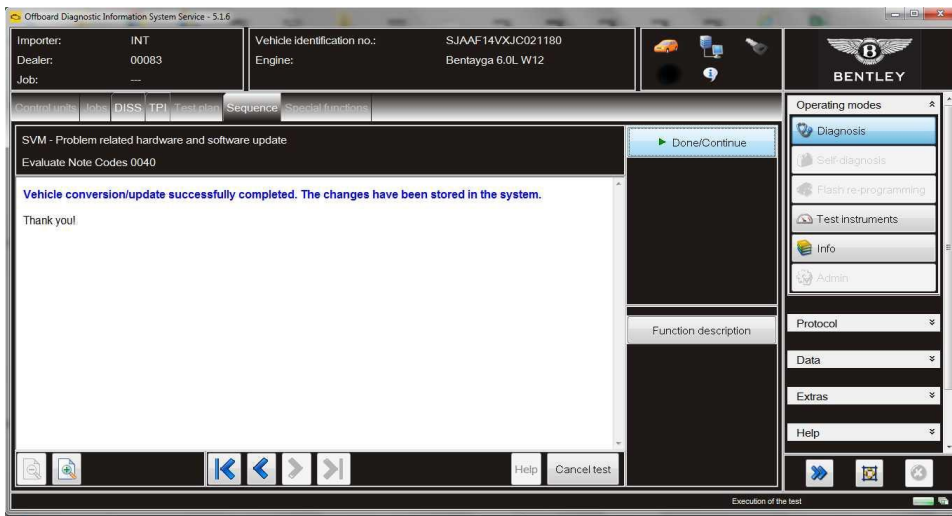

Figure 7

8. Follow on screen prompts until program end.

9. Confirm that the software reprogramming has completed successfully. Read the identification data of address 00BA (Figure 8).
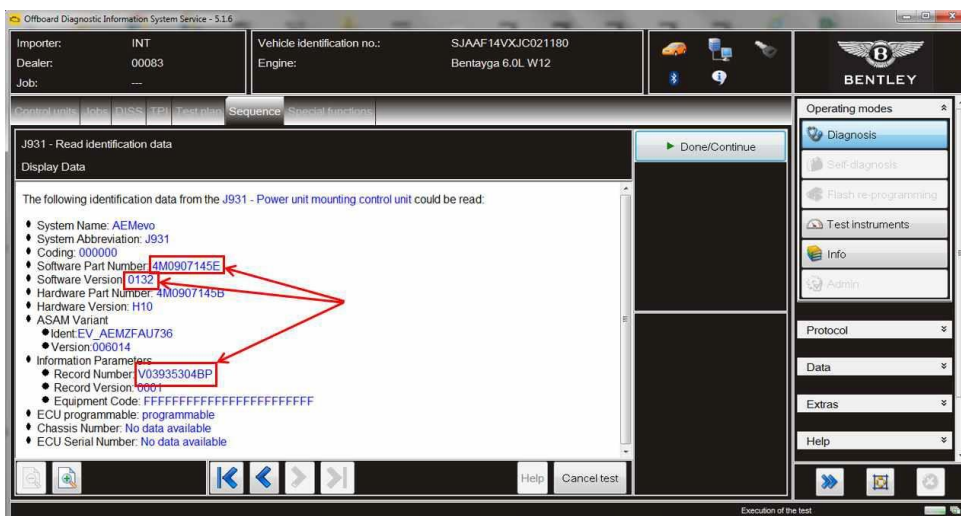

Figure 8

Your vehicle must read as per the table below;

Software Part Number	Software version	Record Number
4M0907145E	0132	V03935304BP

10. Complete the Basic settings of the active engine mounts:

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In the event that mechanical malfunction DTC's are evident after replacement, and the vehicle meets the software and hardware requirements, please refer to TPI 2063297/-

Warranty accounting instructions

<u>Replacement of the left hand AEM</u>

Warranty type 110 or 910

Damage code   00 20

Damage service number 10 35

<u>Labour</u>

Labour operation code 10 35 19 51

Time   10 Time units

<u>Replacement of the right hand AEM</u>

Labour operation code 10 35 19 52

Time   10 Time units

<u>Remove and refit the front subframe</u>

Labour operation code 40 07 19 00

Time   490 Time units

<u>Reprogramming of the AEM control module (if required)</u>

<u>Labour</u>

Labour operation code 01 51 00 00

Time   As per ODIS log (No more than 40 Time units)

<u>Replacement of the AEM control module (if required)</u>

<u>Labour</u>

Labour operation code 10 39 19 00

Time   30 Time units

Parts information

Part Number	Description	Quantity
4M0 907 145 E	Control unit for electrohydraulic engine mount	1
4M0 199 255 BH	Active Engine Mount LH	1
4M0 199 256 BH	Active Engine Mount RH	1