

## Field campaign

<b>Topic</b>	Mulsanne engine and transmission control module software update (SC15/01)
<b>Market area</b>	Bentley: worldwide (2WBE)
<b>Brand</b>	Bentley
<b>Transaction No.</b>	2038952/2
<b>Campaign number</b>	EA22
<b>Note</b>	
<b>Type</b>	
<b>US code</b>	

## Vehicle data

### Mulsanne

#### Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
3Y2*	2011	E		*	*	*
3Y2*	2012	E		*	*	*
3Y2*	2013	E		*	*	*
3Y2*	2014	E		*	*	*
3Y2*	2015	E		*	*	*

#### Chassis numbers

Manufacturer	Filler	Type	Filler	MY	Factory	From	To	Prod from	Prod to
SCB	BA6	3Y	3	C	C	000204	000204		
SCB	BA6	3Y	5	C	C	000205	000205		
SCB	BA6	3Y	7	C	C	000206	000206		
SCB	BA6	3Y	9	C	C	000207	000207		
SCB	BA6	3Y	0	C	C	000208	000208		
SCB	BA6	3Y	2	C	C	000209	000209		
SCB	BA6	3Y	9	C	C	000210	000210		
SCB	BA6	3Y	0	C	C	000211	000211		
SCB	BA6	3Y	2	C	C	000212	000212		
SCB	BA6	3Y	X	D	C	000301	000301		
SCB	BA6	3Y	1	D	C	000302	000302		
SCB	BA6	3Y	3	D	C	000303	000303		
SCB	BA6	3Y	5	D	C	000304	000304		
SCB	BA6	3Y	7	D	C	000305	000305		
SCB	BA6	3Y	9	D	C	000306	000306		

SCB	BA6	3Y	9	B	C	000688	000688		
SCB	BA6	3Y	6	B	C	000888	000888		
SCB	BA6	ZH	0	F	C	000401	000401		
SCB	BA6	ZH	2	F	C	000402	000402		
SCB	BA6	ZH	4	F	C	000403	000403		
SCB	BA6	ZH	6	F	C	000404	000404		
SCB	BA6	ZH	8	F	C	000405	000405		
SCB	BA6	ZH	4	F	C	000501	000501		
SCB	BA6	ZH	6	F	C	000502	000502		
SCB	BA6	ZH	8	F	C	000503	000503		
SCB	BA6	ZH	X	F	C	000504	000504		
SCB	BA6	ZH	1	F	C	000505	000505		
SCB	BA6	ZH	8	F	C	000601	000601		
SCB	BA6	ZH	X	F	C	000602	000602		
SCB	BA6	ZH	1	F	C	000603	000603		
SCB	*	3Y	*	*	C	015113	019941		
SCB	*	ZH	*	*	C	015113	019941		
SCB	*	ZH	*	E	C	001000	001059		
SCB	*	3Y	*	E	C	001000	001059		
SCB	*	3Y	*	F	C	001059	001434		
SCB	*	ZH	*	F	C	001059	001434		
SCB	BA6	ZH	3	F	C	000604	000604		
SCB	BA6	ZH	5	F	C	000605	000605		
SCB	BA6	3Y	2	B	C	000001	000001		
SCB	BA6	3Y	8	C	C	000201	000201		
SCB	BA6	3Y	X	C	C	000202	000202		
SCB	BA6	3Y	1	C	C	000203	000203		

## Documents

Document name
<a href="#">master.xml</a>
<a href="#">master.doc</a>

## Notes



### Technical background

Customer may experience powertrain clunk feeling when driving at low load. Investigations found that improvements in the modelled auxiliary torque drag would remove the clunk sensation



As part of the software update both the engine and transmission control modules require updating by using Software Versions Management (SVM), both modules must be updated without interruption as detailed within the Measure section of this TPI, failure to update the engine and transmission control modules as detailed will incur driveability issues

### Remedy

The improved modelled auxiliary torque drag calibration for Mulsanne must be applied by performing this campaign process.

### Customer notification

Customers do not need to be informed directly of this campaign. Please ensure that all affected vehicles are repaired during a service visit. You should also inform your new and used car sales departments so that the vehicles affected can have this campaign applied immediately (and not just before sale).

NOTE: Ask the customer if the engine control modules have been modified in anyway (chip tuning) Explain to the customer that updates to the engine control modules can render the chip tuning ineffective or damage to the control modules can occur.

Ask the customer to contact the tuning contractor to establish if a software update is possible Inform the customer that if modifications have been carried out to the engine control module Bentley Motors or your own company will not accept liability from damage by updating the software.

Should a customer decline to have the update performed because the vehicle has been chip tuned please make your TSC aware by raising a DISS ticket of the chip tune, the VIN and (Chip tuning) information can then be saved for future reference.

Normal Warranty policies are applicable

### Warranty

Warranty Type	710 or 790
Labour operation code	01 29 00 05
Damage Service Number	EA22
Damage Code	00 66
Criteria ID	01
Time	50 Time Units

### Parts

Not applicable

### Parts supply

Not applicable

## Parts despatch control

Not applicable

---

## Repair instructions



### Technical background

Customer may experience powertrain clunk feeling when driving at low load. Investigations found that improvements in the modelled auxiliary torque drag would remove the clunk sensation



As part of the software update both the engine and transmission control modules require updating by using Software Versions Management (SVM), both modules must be updated without interruption as detailed within the Measure section of this TPI, failure to update the engine and transmission control modules as detailed will incur driveability issues

### Check

If the vehicle is not already listed as repaired in the "Repair history" (in Elsa Pro) check the bonnet hinge for the white completion mark (see Figure 8), if it is evident that the campaign has not been applied carry out the required work in accordance within these instructions.

### Parts

Not applicable

### Tools

- Bentley diagnostic tool VAS 6150A-VAS 6150B/C or 6160/A with Windows 7 software or later approved equipment is required for this procedure
- VAS 5903 or a charger with the same specification



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

### Work

1. 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



**WARNING:** During the software update the radiator fan can spin at high speed DO NOT go near to the fan during the software update

2. Check before proceeding that you can connect to the Internet. Do Not use a wireless Internet connection always use a suitable Internet cable, Bluetooth connections are not advised

**WARNING:** Do not attempt to install the software using wireless Bluetooth as interference in the workshop may cancel the signal resulting in the ECM being permanently damaged, which will result in replacement

3. Connect a suitable battery charger Refer to Workshop Manual Rep.Gr 27 - Charging battery. **IMPORTANT:** Do not switch off or disconnect the charger at any point until the software update is fully completed.

4. Switch on the vehicle ignition by following the instructions below

- 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 are removed from the ignition key ring and the single ignition key is used only (see Figure 1) as extra weight may cause the key to withdraw from the reader



Figure 1

- Press the Start/Stop switch on the centre console to activate the ignition

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

Do not switch off the ignition until the software update is complete, clear instructions will be shown on the diagnostic machine when the ignition should be switched On/Off

5. Connect a suitable VAS diagnostic machine (as detailed in Tools section) to the vehicle diagnostic socket using a USB cable

6. From the Desktop launch the Off board Diagnostic Information System Service using the Diagstarter icon and follow all on screen prompts



- Ensure the Using guided fault finding box is ticked (Figure 2) - follow all on screen prompts to allow the guided fault finding control module sweep to complete

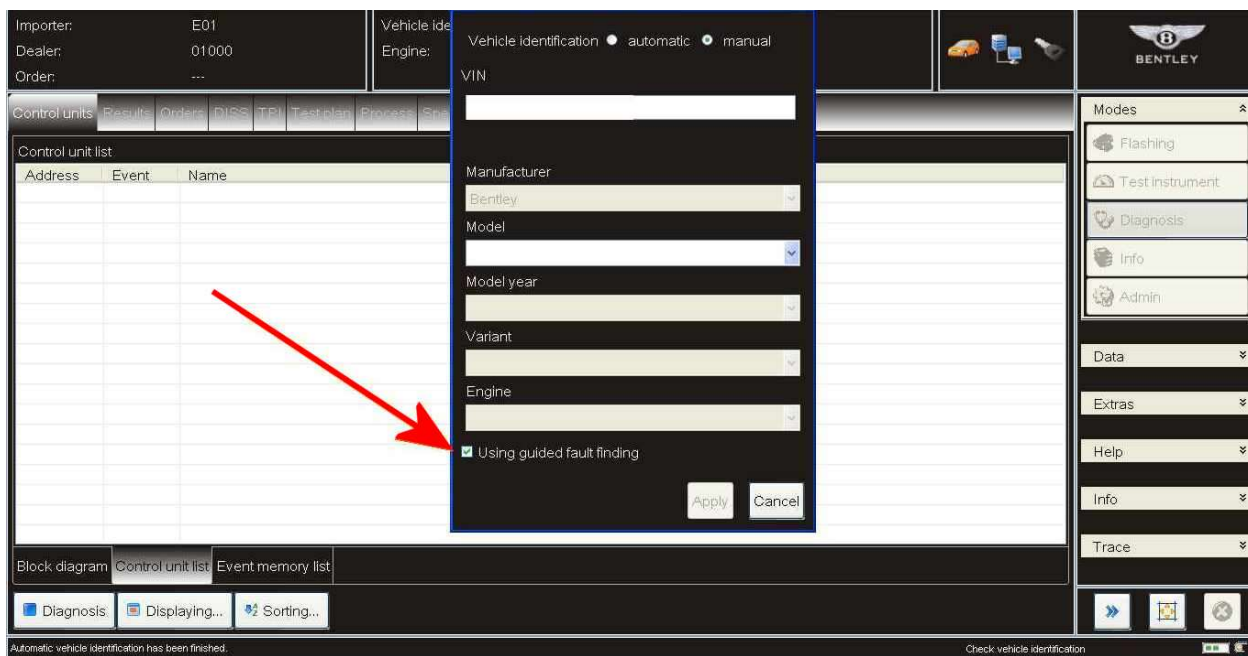


Figure 2

**IMPORTANT:** When requested to Make an SVM Target/ Actual comparison please select No (Figure 3)

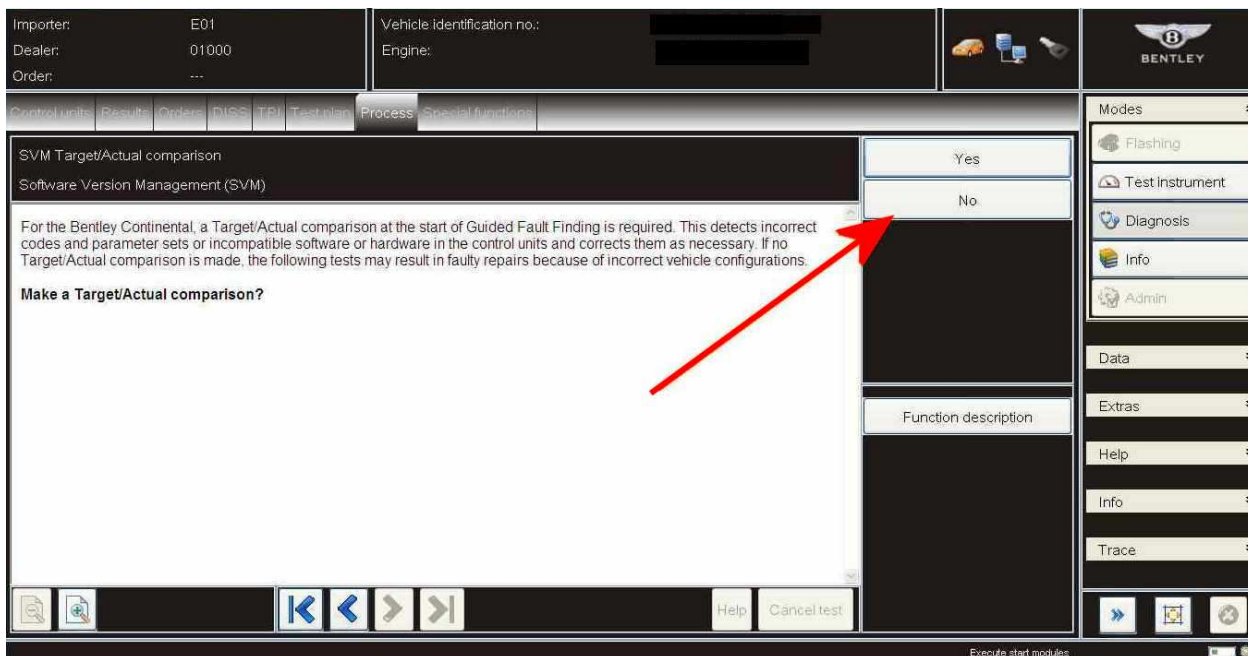


Figure 3

7. - Once the control module sweep within Guided Fault Finding is complete, Select – Special functions as shown in Figure 4 (point A)

- Select SVM - Problem related Hardware/Software Update (point B)

- Select Perform test (point C) and follow all on screen prompts

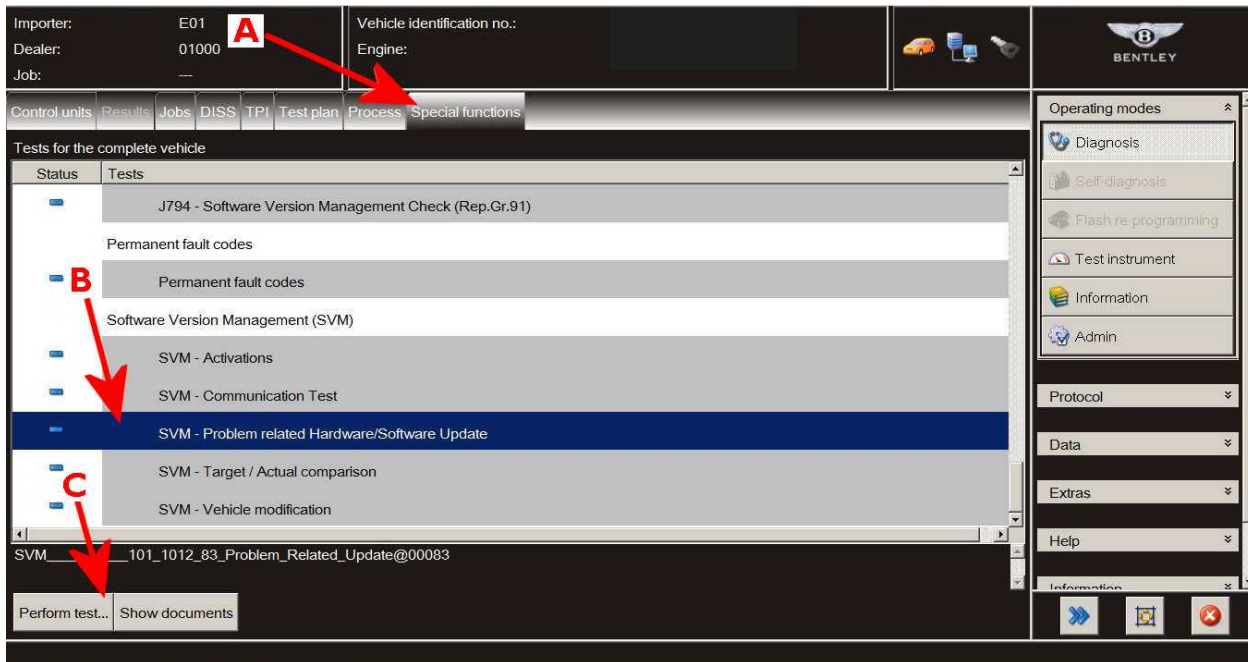


Figure 4

- Once at Figure 5, please insert the SVM code 3Y013MYEMS01 (point A) and select Adopt (point B) and follow all on screen prompts

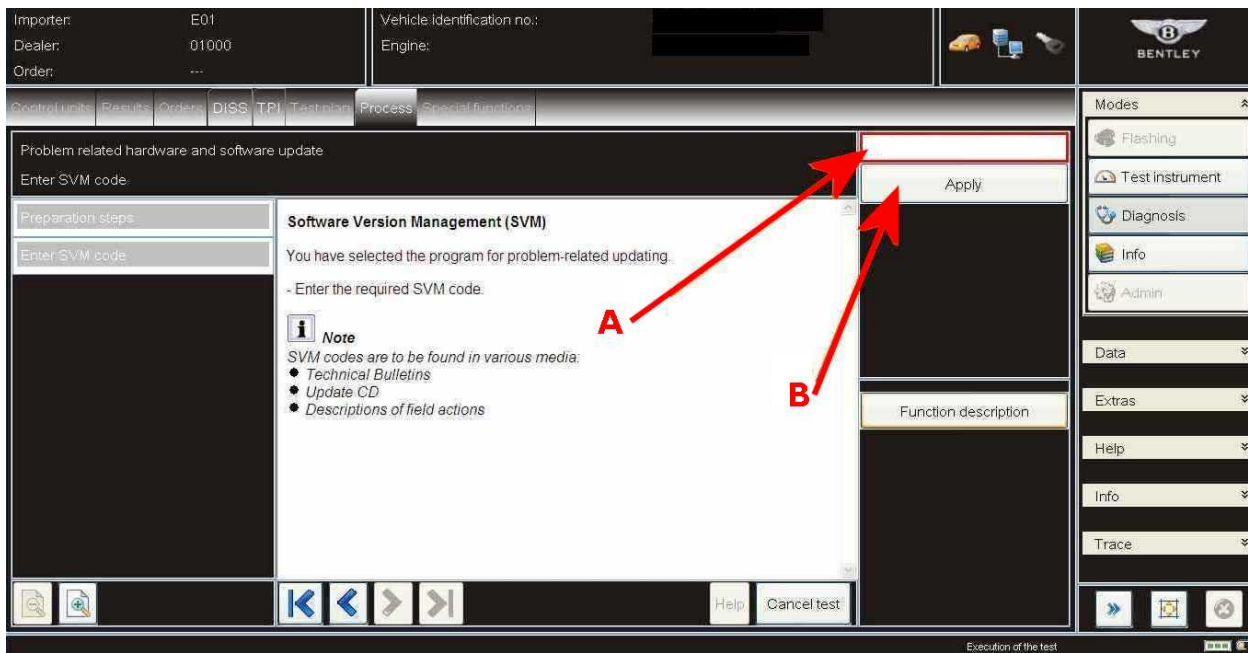


Figure 5

- When requested, enter your GEKO user ID and follow all on screen prompts



8. Please read all text within the highlighted boxes shown in Figure 6, as during the next steps you will be asked to select how the updates should be performed, It is recommended to perform all updates without interruption (2<sup>nd</sup> option)

- Select Done/Continue – (Point A) and follow all on screen prompts to update the engine and transmission control units

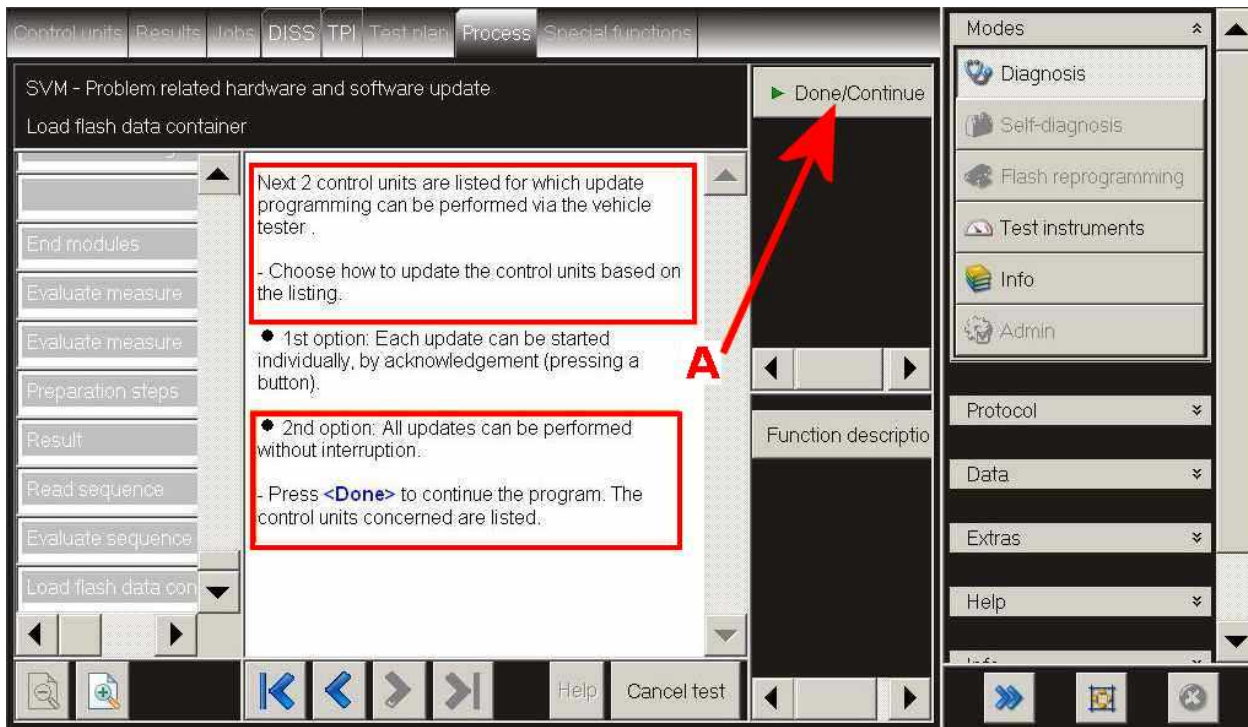


Figure 6

9. Once at Figure 7, select – 2. Perform update programming of all control units without interruption, and follow all on screen prompts until the Engine control module and Automatic transmission control module was successful

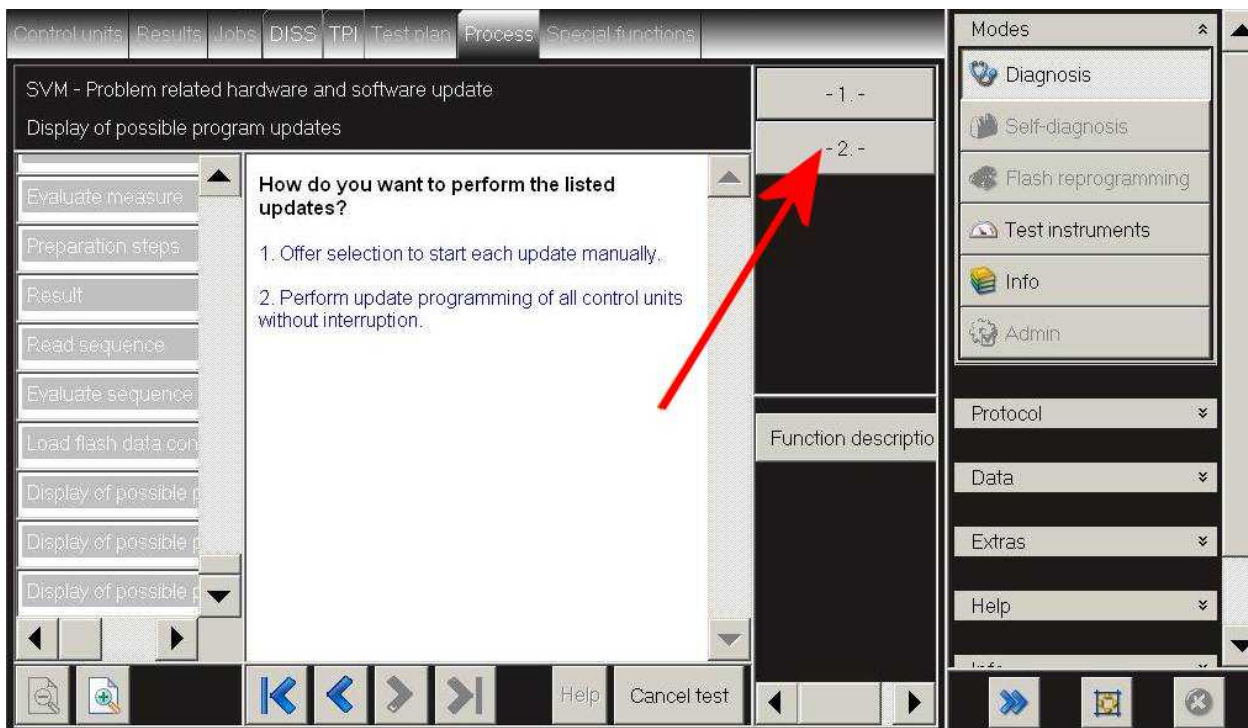


Figure 7



The update of the Engine and Transmission control modules takes approximately 5-10 minutes to complete Do Not interrupt whilst the update is taking place

10. Follow all remaining on screen prompts until program end.

- Use Guided Fault Finding to carry out a complete diagnostic sweep clearing and fault codes generated as a result of

performing this procedure

- Once complete, place a white paint completion mark on the right hand bonnet hinge (see Figure 8).



Figure 8

### Identification

White paint completion mark on the right hand bonnet hinge (see Figure 8).