

Field campaign

Topic	OBC Charging Efficiency MIL HW/SW Update (NAR Only) Bentayga (Hybrid) 24MY
Market area	United States E05 Bentley USA and rest America (6E05)
Brand	Bentley
Transaction No.	2077790/1
Campaign number	ED44
Note	
Type	
US code	

Vehicle data

Hybrid (PHEV) Bentayga 24 Model Year

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4V14F9	2024	E	SUV PHEV BY636PH340/V6 8AG	DCBE	UDT	RZQ
4V14F9	2024	E	SUV PHEV BY636PH340/V6 8AG	DCBE	VFM	RZQ
4V14F9	2024	E	SUV PHEV BY636PH340/V6 8AG	EALD	VPK	RZQ
4V14F9	2024	E	SUV PHEV BY636PH340/V6 8AG	EALD	VFM	RZQ
4V14F9	2024	E	SUV PHEV BY636PH340/V6 8AG	EALD	UDT	RZQ
4V14F9	2024	E	SUV PHEV BY636PH340/V6 8AG	EALA	VFN	RZQ
4V14F9	2024	E	SUV PHEV BY636PH340/V6 8AG	EALA	UDT	RZQ
4V14F9	2024	E	SUV PHEV BY636PH340/V6 8AG	DCBE	VPK	RZQ
4V14F9	2024	E	SUV PHEV BY636PH340/V6 8AG	DCBE	VFN	RZQ
4V15F9	2024	E	SUV PHEV S BY636PH340/V6 8AG	DCBE	UDT	RZQ
4V15F9	2024	E	SUV PHEV S BY636PH340/V6 8AG	EALD	VFM	RZQ
4V15F9	2024	E	SUV PHEV S BY636PH340/V6 8AG	EALD	UDT	RZQ
4V15F9	2024	E	SUV PHEV S BY636PH340/V6 8AG	EALA	VFN	RZQ
4V15F9	2024	E	SUV PHEV S BY636PH340/V6 8AG	EALD	VPK	RZQ
4V15F9	2024	E	SUV PHEV S BY636PH340/V6 8AG	DCBE	VPK	RZQ
4V15F9	2024	E	SUV PHEV S BY636PH340/V6 8AG	DCBE	VFN	RZQ
4V15F9	2024	E	SUV PHEV S BY636PH340/V6 8AG	DCBE	VFM	RZQ
4V15F9	2024	E	SUV PHEV S BY636PH340/V6 8AG	EALA	UDT	RZQ

Documents

Document name
master.xml
ed44vinlist.pdf

Notes



Technical background

A Software update and gateway hardware change are required for Plug-in Hybrid vehicles built prior to BIL 5.5

This update must be applied to update the vehicles on board charger (OBC). Diagnostic address (00C6). The update resolves the potential triggering of the following fault:

- "Control unit defective" error 0x100200 low_power_efficiency (T=B200000) is registered in the OBC. Repeated occurrences of the identified error will result in MiL illumination.

Remedy

The instructions within the 'Work' section **must** be conducted to completion.

Customer notification

Customers of affected vehicles will be notified in writing by their Bentley retailer to arrange an appointment

Please ensure that all affected vehicles are checked and repaired at the nearest opportunity, make a note of the required action on the workshop order before it is signed by the customer

If it is omitted to perform the work required during a workshop visit, the customer should be notified immediately

You should also pass on this information to your new and used car sales department so that affected vehicles are checked and repaired immediately

Warranty

Warranty

Claim type: 790 or 710

Service number: ED44

Damage code: 0066

Criteria: 01

SVM Update:

Labour Operation Code: 01 51 00 00

Time: As per ODIS log (Must not exceed 150 TU)

Gateway (J533) Replacement:

Labour Operation Code: 90 35 19 00

Time: 110 TU

Parts

Not Applicable

Parts supply

Not Applicable

Parts despatch control

Not Applicable

Repair instructions



Technical background

A Software update and gateway hardware change are required for Plug-in Hybrid vehicles built prior to BIL 5.5

This update must be applied to update the vehicles on board charger (OBC). Diagnostic address (00C6). The update resolves the potential

triggering of the following fault:

- "Control unit defective" error 0x100200 low_power_efficiency (TI=B20000) is registered in the OBC. Repeated occurrences of the identified error will result in MiL illumination.

Check

Check if the vehicle is already listed as repaired in "Repair history" (in ElsaPro).

Please also refer to the "Identification" section and check if a paint identification mark is evident in the vehicle.

If the vehicle is not shown in ElsaPro as repaired, and the identification mark is not present, please conduct the instructions within the 'Work' section to completion

Parts

Not Applicable

Work

CAUTION

The Bentley ODIS-S Brand Version **MUST** be at least 2.35.2 (or higher)

CAUTION

Before conducting the onward instructions, the operative **MUST** recheck the communication method in ODIS and ensure that DoIP is selected before proceeding. Within ODIS-S, perform the following:

- On the right hand side, select the "Admin" tile (Within 'Operating modes')
- Select "GFF sequence" (Within 'General information' section)
- Under the "Selection of Communication path" drop-down menu, select "Only permit DoIP communication".

CAUTION

DO NOT, UNDER ANY CIRCUMSTANCES, ATTEMPT TO CONDUCT THE SOFTWARE UPDATE VIA THE CAN NETWORK. ONLY DoIP SHOULD BE USED WHEN PERFORMING THE SVM UPDATE.

CAUTION

You **MUST ONLY** use the Diagnosis Interface VAS 6154 (WiFi Diagnostic Tool) in USB OPERATION or the CABLE-CONNECTED VAS 5055 for the reprogramming (updating) of the control units.

- If neither of these units are available, the VAS 5054 (A) may be used in USB MODE.
- **DO NOT** under any circumstances use a Bluetooth connection to conduct the reprogramming (updating) of any control units.

Battery Charger

CAUTION

ONLY Chargers that meet the approved specification on the Mandatory Equipment List (available on the Bentley Hub) **MUST** be used.

- The charger must be set to a mode where a **MINIMUM** of 90a is supplied to the battery during the process. Typically, this is known as 'Power Supply Mode' or 'DIAG+ Mode'.
- A voltage of exactly 13.8v must be set and maintained throughout the process.
- Please refer to the manual to ensure that these requirements are met before beginning any SVM update

Preparation Before Update

WARNING

Hybrid Vehicles use a High Voltage System and therefore **MUST ONLY** be worked on by suitable personnel

CAUTION

During the update, switch off all unnecessary consumers. For example, ventilation, seat heaters, interior illumination, exterior lights ect.

Conduct a full guided fault find of the vehicle.

Address any unknown faults **BEFORE** conducting any of the below updates, referencing the applicable TPI.

Ensure that the correct battery charger is connected to the vehicle. – Refer to the "Battery Charger" Section above.

Obtaining Hotfix for ODIS-S

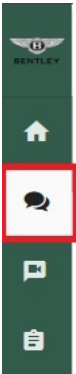
Visit <https://bentley.atheer.io/> and log in with the following case-sensitive account details.

- Username: bilupdate
- Password: Bentley123!

NOTICE

If you are already logged into your retailer account, you will need to logout first. To do this, click on your account initials (bottom left corner) and click "Sign Out".

After logging in, using the navigation bar on the left hand side, click on the 'conversations' tab



Next, click the conversation name "ED44/45/46"

NOTICE

You **MUST NOT** leave the conversation, remove users from the conversation, delete the conversation or alter the conversation in any way. The **ONLY** action you are permitted to perform is download the applicable file required for this campaign.

In this conversation, you will find a file named "E_2.35.2_HF_SE24V0BIL5501_V1_20250507-161723.zip"

Left click the file names and download the folder.

After left-clicking the file to download, the download will take circa 5-10 minutes, do not interrupt this process. You may need to wait a short period (internet speed dependent) for the file to download.

During/before the download commences, there may be a warning about a "pop-up" being blocked which will prevent the file from downloading, ensure to select option "Allow Pop-Ups from this website" to download the file. Wording may differ depending on web browser.

Locate the download file and extract it. To do this, right click the file, click "7 zip" and then "Extract here"

After successfully downloading the file, please logout of the account

Replace the gateway (J533)

1) Check the software level of the gateway (J533), by reading the ECU's identification data.

- a. If the software version is SW0025 please continue with steps 2 and 3.
- b. If the software version is already at SW0027 please proceed to the "SVM Code Input" section.

2) Refer to ElsaPro Repair Group 90 'Data bus diagnostic interface (J533) – To remove and fit'.

3) Run the replace routine without any SVM code input.

First SVM Code Input (Vehicle Baseline)

CAUTION

At this point, a suitable battery charger must be connected to the vehicle.

1. After a suitable battery charger is connected, select the Special Functions tab
2. Navigate to 'SVM – Code input' and enter the SVM code: **SE24V0BIL5501** and select "Adopt".

NOTICE

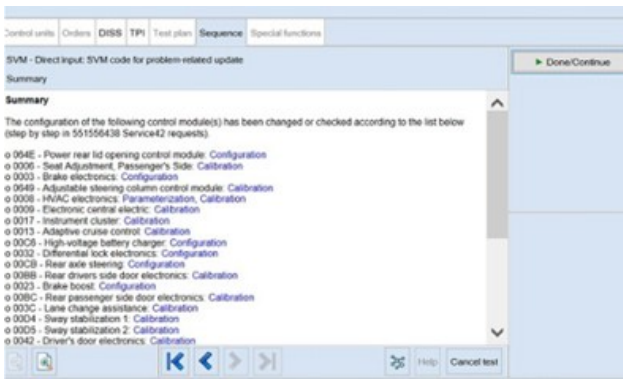
Ensure that the Mirror server is connected when running the SVM code.

3. On the next screen, ensure that the SVM code is correct.
4. You will be shown the communication type. This **MUST** be set to "DoIP".
 - a. If "DoIP" is not selected, select option 3 until the communication type is set to "DoIP".
5. Ensure that the diagnostic device remains connected for the duration of the update.
6. Follow all on-screen prompts until the program ends.
 - a. You may be required to perform various ignition cycles during the test so ensure that you are situated around the vehicle/ODIS-S device for the full update.
7. If you receive the error message '8118':
 - a. Switch off the battery charger
 - b. Switch off the ignition
 - c. Remove the VCI
 - d. Close all doors
 - e. Wait 15 minutes
 - f. Retry the SVM code
 - g. If the error is received again, allow the vehicle to reach a full CAN-BUS sleep
 - h. Remove the 12V battery negative for 15 minutes and return to step f (Refer to ElsaPro Repair Group 27 'Battery – To disconnect and connect')

NOTICE

If you encounter any errors during the update, or if you receive the '8118' error as per step 8 more than two times, please raise a full technical DISS query.

- **Customer statement:** "ED44 Support"
- **Workshop Findings:** Give a summary of the error encountered and ensure that the latest Guided Fault Finding log is submitted online

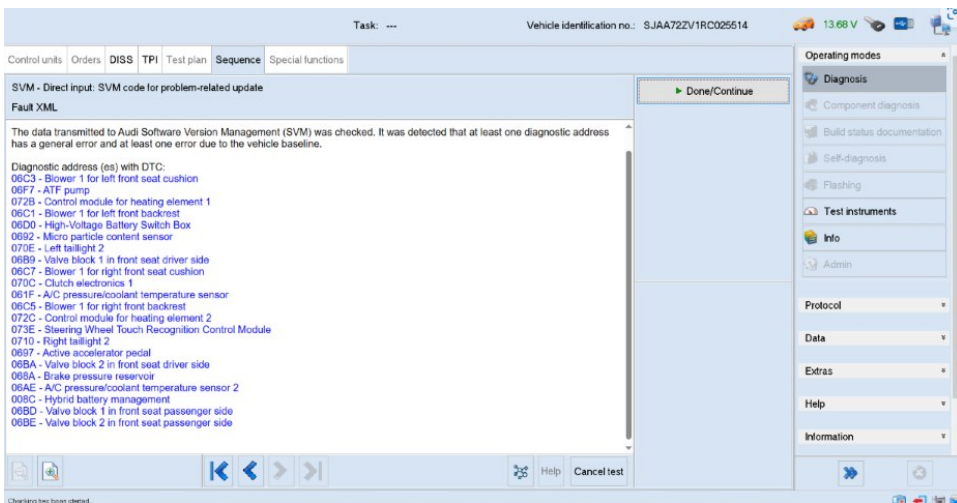


8. If the SVM code completes successfully, ODIS should display as per the image above.

Second SVM Code Input (Onboard Charger OBC - 00C6)

1. Please run the SVM code: SE24V0C6SW3322

a. Upon successful completion the program will flash the onboard charger, it will then query all ECUs on the car



b. If you receive the error '8058' or the screen shown in the image above, please do the following:

c. Locate 00C6 in control unit list

d. Select -> Guided Functions -> Read Identification Data

e. If the software version of 00C6 is now at SW3322 then proceed to step 2.

2. After successful completion of the update, perform the following.

a. Turn off the ignition.

b. Remove all equipment from the car (Diagnostic tester/dongle, battery charger, keys).

c. Remove the VCI.

d. Close all doors, windows, bonnet and boot lid.

e. Lock the vehicle to perform a CAN-BUS sleep (wait 15 minutes).

3. After 15 minutes, unlock and open the driver's door. Turn on the ignition, re-connect the battery charger and diagnostic dongle.

4. Re-run guided fault finding and clear DTCs, check for any abnormal DTCs. If any are present raise a full technical DISS query

Customer statement / workshop findings

The diagnostic address for the on board charger, 00C6, is storing DTC P31CD00 – Charge cover A activation locking (Figure 1).

Address: 00C6 System name: 00C6 - High-voltage battery charger Protocol variant: UDS/ISOTP (Events: 1)

Identification:	
Event memory entries	
Entry in fault memory	
Number:	P31CD00: Charge cover A activation locking
Fault type 2:	Electrical malfunction
Symptom:	no BMS/Hiak
Status:	14749440
State:	00101111
Standard ambient conditions	
Extended ambient conditions	

Figure 1

The symptom code shown is 14749440.

Technical background

This DTC is a static fault that can be ignored if the charge flap is functioning normally and there are no warning lights displayed on the driver's instrument panel.

5. If the DTC shown above is present in 00C6, this can be ignored as per TPI 2076739/-

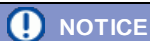
Third SVM Code Input (Vehicle Baseline)



CAUTION

At this point, a suitable battery charger must be connected to the vehicle.

1. After a suitable battery charger is connected, select the Special Functions tab
2. Navigate to 'SVM – Code input' and enter the SVM code: **SE24V0BIL5501** and select "Adopt".



NOTICE

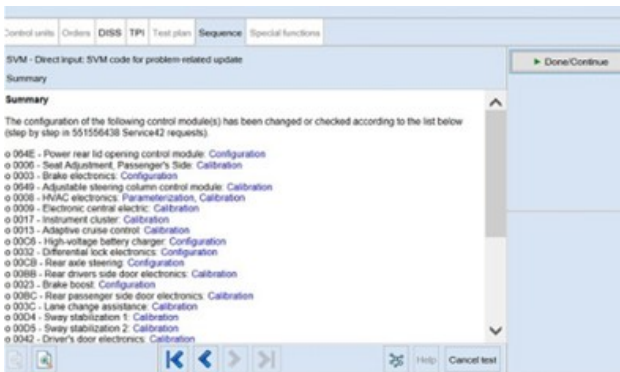
Ensure that the Mirror server is connected when running the SVM code.

3. On the next screen, ensure that the SVM code is correct.
4. You will be shown the communication type. This **MUST** be set to "DoIP".
 - a. If "DoIP" is not selected, select option 3 until the communication type is set to "DoIP".
5. Ensure that the diagnostic device remains connected for the duration of the update.
6. Follow all on-screen prompts until the program ends.
 - a. You may be required to perform various ignition cycles during the test so ensure that you are situated around the vehicle/ODIS-S device for the full update.
7. If you receive the error message '8118':
 - a. Switch off the battery charger
 - b. Switch off the ignition
 - c. Remove the VCI
 - d. Close all doors
 - e. Wait 15 minutes
 - f. Retry the SVM code
 - g. If the error is received again, allow the vehicle to reach a full CAN-BUS sleep
 - h. Remove the 12V battery negative for 15 minutes and return to step f (Refer to ElsaPro Repair Group 27 'Battery – To disconnect and connect')

NOTICE

If you encounter any errors during the update, or if you receive the '8118' error as per step 8 more than two times, please raise a full technical DISS query.

- **Customer statement: "ED44 Support"**
- **Workshop Findings: Give a summary of the error encountered and ensure that the latest Guided Fault Finding log is submitted online**



8. If the SVM code completes successfully, ODIS should display as per the image above.

9. After successful completion of the update, perform the following.

- Turn off the ignition.
- Remove all equipment from the car (Diagnostic tester/dongle, battery charger, keys).
- Remove the VCI.
- Close all doors, windows, bonnet and boot lid.
- Lock the vehicle to perform a CAN-BUS sleep (wait 15 minutes).

10. After 15 minutes, unlock and open the driver's door. Turn on the ignition, re-connect the battery charger and diagnostic dongle.

11. Re-run guided fault finding and clear DTCs, check for any abnormal DTCs. If any are present raise a full technical DISS query.

NOTICE

Check that the MMI displays a navigation data base. If it does not, the gateway may not have its activations. To correct this, re-run the replace routine of 0019 to restore activations.

Identification

Once the applicable action has been conducted, the operative must submit a warranty claim as this will show the service campaign action as complete within Elsa Pro "Repair history".

You must also add a paint mark as per the picture below.



[▲ Repair instructions](#) [▲ Notes](#)

SJAA72ZV2RC024999	SJAA72ZV3RC026048
SJAA72ZV1RC025013	SJAA72ZVXRC026421
SJAA72ZV6RC025024	SJAA72ZV2RC026106
SJAA72ZV5RC025032	SJAA72ZV7RC026134
SJAA72ZV3RC025045	SJAA72ZV1RC026145
SJAA72ZV9RC025082	SJAA72ZV6RC026299
SJAA72ZV1RC025092	
SJAA72ZV0RC025133	
SJAA72ZV2RC025148	
SJAA72ZVXRC025172	
SJAA72ZV0RC025181	
SJAA72ZV8RC025185	
SJAA72ZV4RC025197	
SJAA72ZV7RC025212	
SJAA72ZV5RC025242	
SJAA72ZV3RC025269	
SJAA72ZVXRC025317	
SJAA72ZV2RC025330	
SJAA72ZV5RC025418	
SJAA72ZV3RC025448	
SJAA72ZV1RC025514	
SJAA72ZV9RC025566	
SJAA72ZV2RC025568	
SJAA72ZV9RC025583	
SJAA72ZV1RC025626	
SJAA72ZV9RC025647	
SJAA72ZV1RC025674	
SJAA72ZV8RC025686	
SJAA72ZV7RC025727	
SJAA72ZV4RC025832	
SJAA72ZV4RC025944	