

**Campaign code.**L73X-A.09.19.**Subject.**Pydos ECU replacement and ECU 17 update.**Model.**Aventador S.**Model year.**MY 18.**Special or Limited Versions.**All.**Markets.**Korea.**VIN Identification.**

ZHWEG4ZD2JLA07704	ZHWEG4ZD6JLA07754
ZHWEG4ZD8JLA07738	ZHWEG4ZDXJLA07756
ZHWEG4ZD8JLA07741	ZHWEG4ZD1JLA07757
ZHWEG4ZDXJLA07742	ZHWEG4ZD5JLA07759
ZHWEG4ZD3JLA07744	ZHWEG4ZD5JLA07762
ZHWEG4ZD5JLA07745	ZHWEG4ZD7JLA07763
ZHWEG4ZD2JLA07749	ZHWEG4ZD0JLA07765
ZHWEG4ZD0JLA07751	ZHWEG4ZD2JLA07766

Warning: before starting with the repair, log to the Warranty portal and check through VIN Info:

- The vehicle is effectively involved by these bulletin instructions; some cars may not be included even when they are in the VIN range.
- The procedure identified by a letter (e.g. A, B or C....etc. whose differences are explained below in this bulletin), taking care to order and use the parts corresponding to the assigned procedure.

Example
**NOTE:**

Procedure A will be available only when the instructions require to carry out a preliminary control to determine whether or not a vehicle needs to be updated.

Information to the field.

As a result of continuous product monitoring, Automobili Lamborghini S.p.A. has discovered that the Pydos system may not be accurate in detecting the car tilt level. The root cause of this problem is the wrong parameter setting and the scope of this service is to replace the Pydos ECU. If not repaired the system could be activated also when tilt level does not require the activation. The campaign will be open until all vehicle will be updated.

Field solution

Replace the Pydos ECU and update the instrument cluster software.

Spare parts.

Order the following part number which is connected to the operation:

- **Operation B:** Pydos ECU replacement;

P/N	Description	Q
470907721E	Pydos ECU	1

Replaced parts management.

Store properly and tagged the parts replaced with bar code form for their identification during Area Manager visits.



Labour time.

- Operation B : 2,25 hours

Warranty Claim instructions

To claim the reimbursement log into the warranty system management on the Lamborghini Portal and consults the manual “W.Claim “ available on the portal for the download .

Select the desired campaign and go on with the claim insertion, read carefully the windows message content and choose the option button corresponding to the operation performed .

On the base of the chosen option the reimbursement will be:

- **OPTION B:** Pydos ECU replacement and ECU 17 update;
 manpower: 2,25 hours;
 spare parts: 47090772E;



ATTENTION!

Attach all documents produced during the vehicle visit that show evidence of the work performed such as repair order, software protocols or acquisitions...etc.; the lack of one or more of those, may deny the reimbursement.

Remember to fill all data in the section “Service and Recall Campaign” in the Warranty booklet of the vehicle as shown below.

Necessary tools/material.

P/N	Description	Q
n/a	n/a	n/a



Work instructions

The update procedure here described includes the following steps:

- I. Preliminary operations;
- II. Save a diagnostic log;
- III. Pydos ECU replacement;
- IV. Software update of the control unit 17;
- V. Configuration of the expiration date of the Pydos control unit;
- VI. Erase fault memory

I. Preliminary operations

1. Make sure to be recently synchronized with Mirrorserver by checking the Last Sync date under:
<http://mirrorserver/maintenance/diagnosis.py>
 or directly insterting your Btac-box IP address:
[http://\[IP_address\]/maintenance/diagnosis.py](http://[IP_address]/maintenance/diagnosis.py)
 if you have not previously set up the mirror-server IP alias.
 (e.g. <http://12.34.567.890/maintenance/diagnosis.py>)



NOTE:

Make sure the last synchronization has been done after the 19th of June 2019.

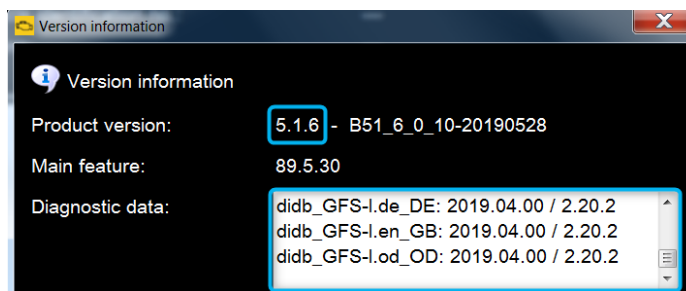
MS/2 Diagnosis

Configuration	
Base path	/var/www/desert
Provider URL	https://altair.mirrorserver2.net/deployment
Repository URL	https://altair.mirrorserver2.net/storage
Feedback URL	https://altair.mirrorserver2.net/health
Proxy	not used
Key file	/var/www/desert/certs/userkey.pem
Certificate	/var/www/desert/certs/usercert.pem
Tests	
Local file/directory permissions	OK
Disk space	OK
Provider reachable	OK (altair.mirrorserver2.net)
Repository reachable	OK (altair.mirrorserver2.net)
Feedback reachable	OK (altair.mirrorserver2.net)
Provider WebDAV access	OK (https://altair.mirrorserver2.net/deployment)
Repository WebDAV access	OK (https://altair.mirrorserver2.net/storage)
Feedback WebDAV access	OK (https://altair.mirrorserver2.net/health)
Successful package downloads	8
Failed package downloads	0
Last Sync	19/06/19 21:01:40
Start tests	

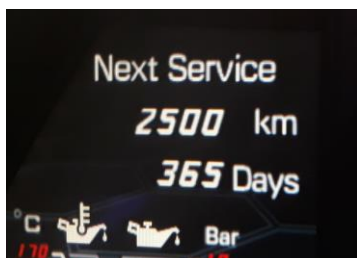


NOTE:

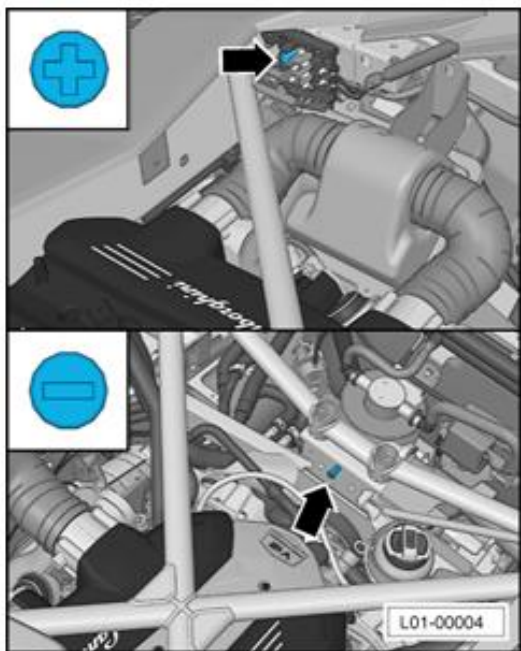
The instructions contained in this bulletin are based on ODIS Service diagnosis software updated to the release 5.1.6 (or following) and database Lamborghini 2.20.2 (please refer to BI.07.15 and be sure that ODIS Service on your laptop is updated).



2. Take note of the distance and the days remaining until the next service by reading the values from the menu on the instrument panel. For additional information on how to check the maintenance intervals, please refer to the Lamborghini LUM supplied with your car.



3. Please connect a suitable battery charger to the re-charge points available in the engine bonnet, as shown in the following picture.



II. Save a diagnostic log

4. Before to start any other activity save the diagnostic protocol as described in chapter: **10.00.ODIS Saving the diagnostic protocol**.

III. Pydos ECU replacement

5. Carefully follow the instructions below to replace the Pydos control unit index p/n: 470907721D.

To perform this operation, follow the instructions given in the repair manual at the following path:

09 Electrical system→81 Control Unit→PYDOS Control Unit→Disassembly/Assembly

IV. Software update of the control unit 17

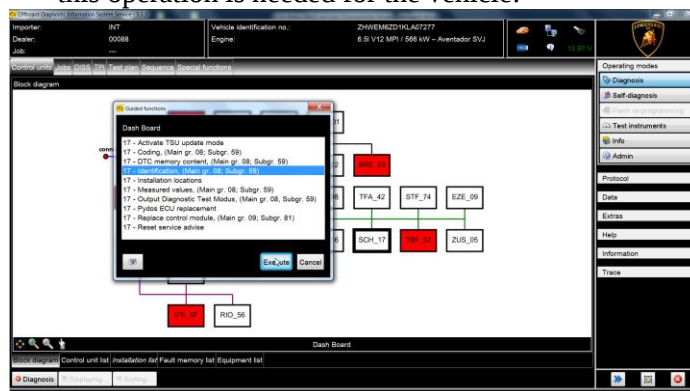
To correctly update the control unit refer to the procedure in the workshop manual regarding "Implementation of an SVM code".



IMPORTANT:

Improper use of this function can cause damage to the ECUs.

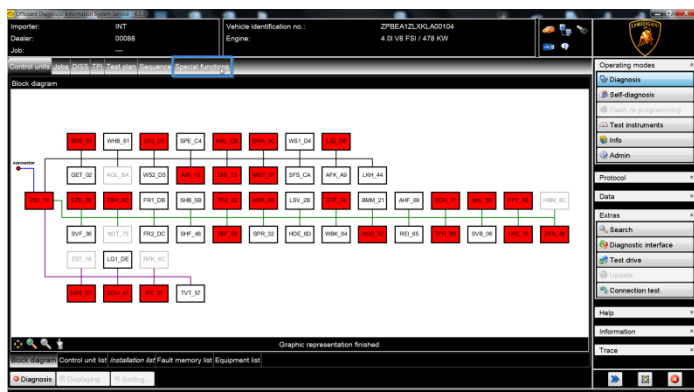
6. Select the function "17 - Identification" from the "Guided functions" of the control unit 17 to check if this operation is needed for the vehicle.



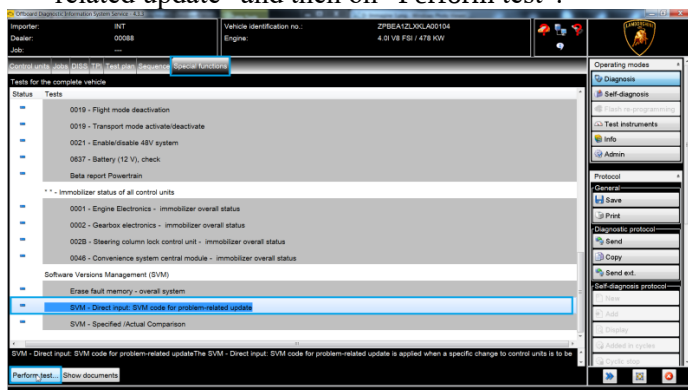
IMPORTANT:

The software update procedure is needed only if the software version installed on the control unit 17 of the vehicle is less than "0022" for Aventador S.

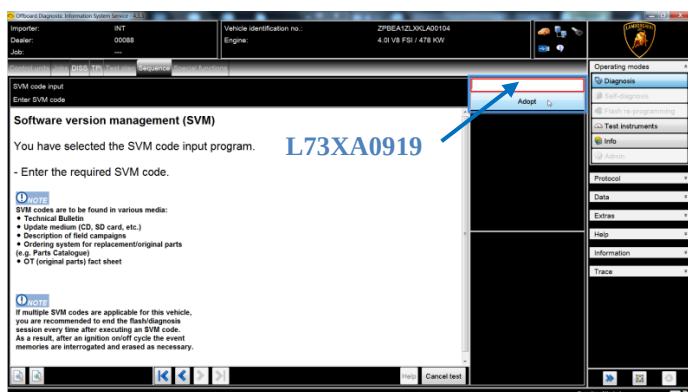
7. To start the procedure to execute an SVM code, select the "Special functions" tab in ODIS Service.



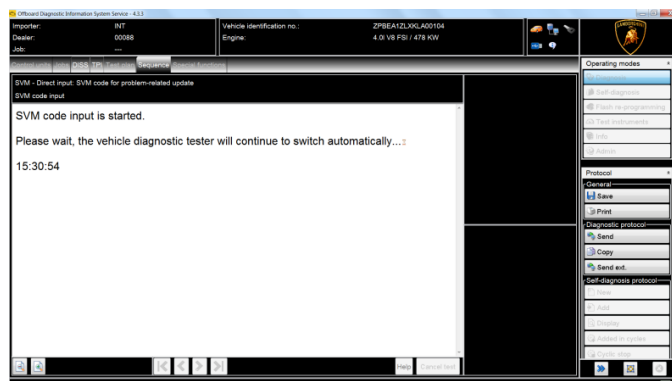
8. Click on “SVM - Direct input: SVM for problem-related update” and then on “Perform test”.



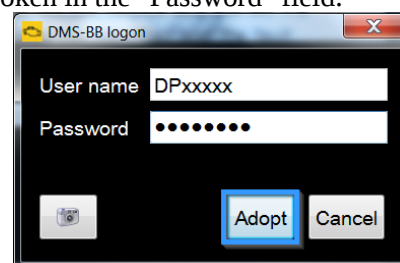
9. Enter the campaign code “L73XA0919” in the appropriate space at the top right and click “Adopt”.



10. The SVM code entered is again displayed in the dialog box. If the entered code is correct, click on “Yes”, otherwise click on “No” to cancel the SVM procedure.
11. Wait for data to be acquired from all the control units. This operation requires few minutes.



12. To run the SVM function and access the Lamborghini servers, you must have a valid GeKo account. Ensure that the laptop is correctly connected to internet. Enter your GeKo username in the "User name" field and the PIN 1324 + the 6-digit code currently displayed on the GeKo token in the "Password" field.



Click “Adopt” to confirm.

13. The SVM function will automatically continue with identification of the control units of the vehicle.
14. It might be necessary to perform one or more of the following operations in the SVM procedure:
- Coding;
 - Parameterization;
 - Calibration.

To perform these actions, it is necessary to click on “Done/Continue” where requested following the instructions directly provided on the ODIS dialog screens.

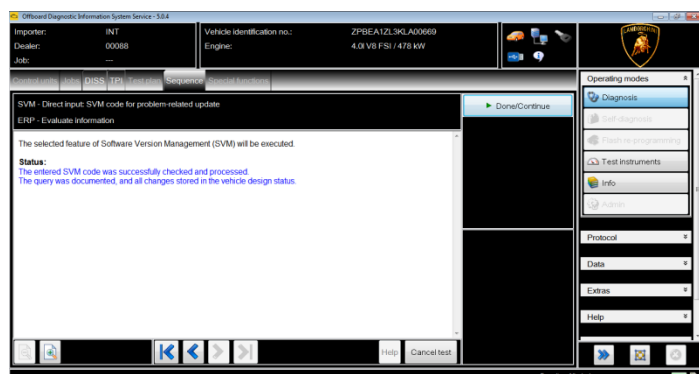


IMPORTANT:

If an error occurs during the SVM calibration phase on the channel “55”, please consult the trouble shooting section of this bulletin for additional information.



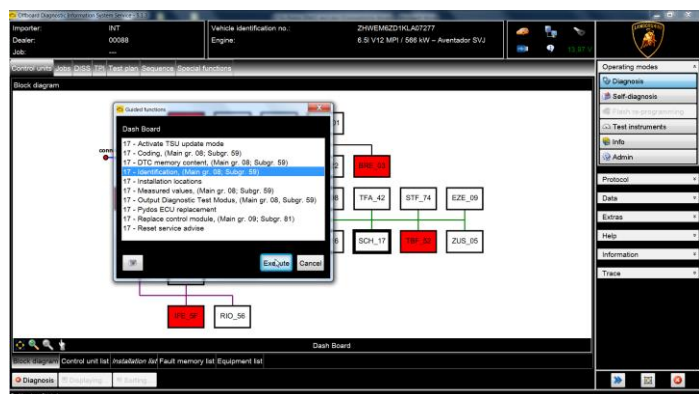
15. Click “Done/Continue” until the control unit 17 updating procedure is completed.



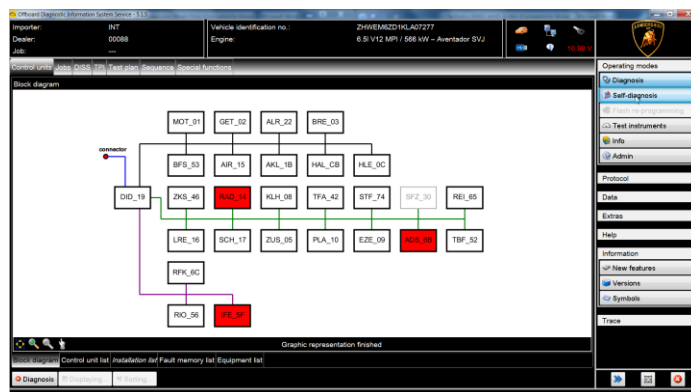
16. At the end of the function, switch the ignition OFF for few seconds, to allow the reset of the vehicle's on-board network.

17. Switch the ignition ON.

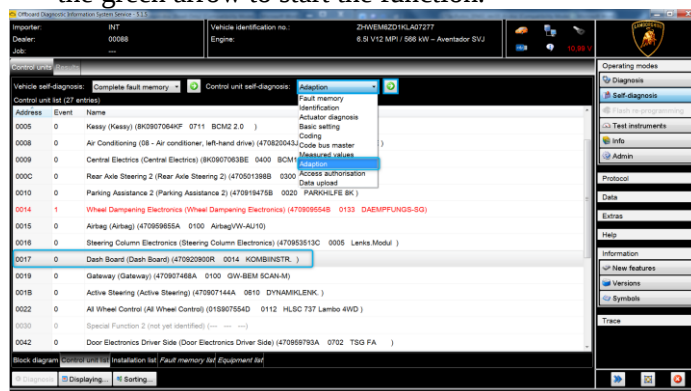
18. Select the function “17 - Identification” from the “Guided functions” of control unit 17 and click “Execute”.



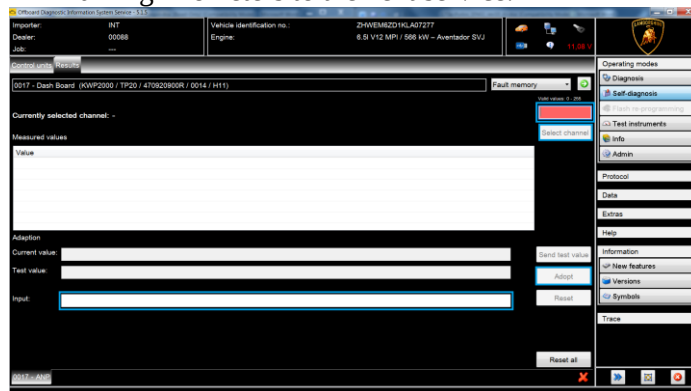
19. At the end of the update procedure it is necessary to set the maintenance intervals previously annotated. Select “Self-diagnosis” from the “Operating modes”.



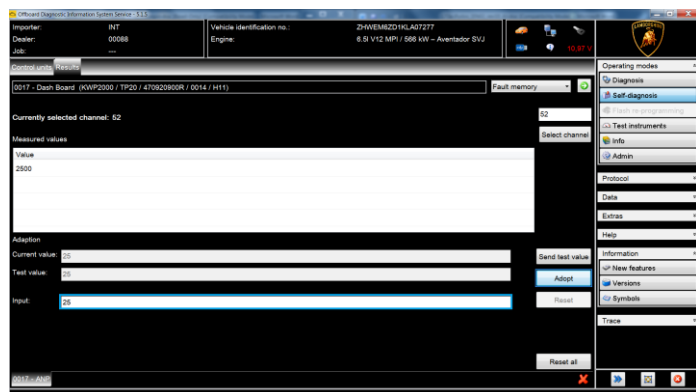
20. Select the dashboard control unit, ECU 17 and from the drop-down menu select “Adaption”, then click on the green arrow to start the function.



21. Enter "52" in the text box at the top right and click on "Select Channel" to select the channel to set the remaining kilometers to the next service.

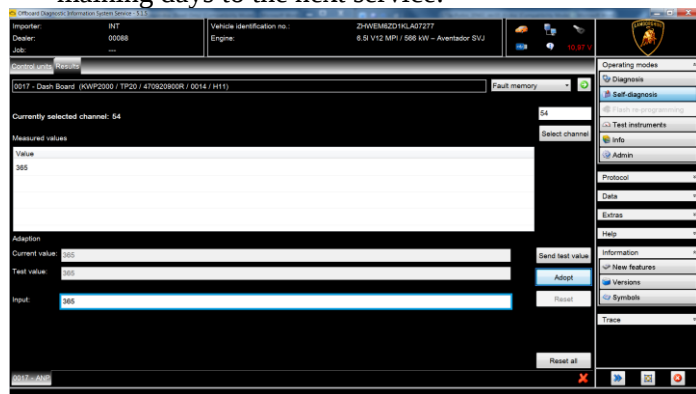


22. Enter in the "Input" box the km read from the instrument cluster and previously annotated. The next service must be entered in "km" and divided by 100 (E.g. if the initial value was 2500km, enter the value 25, i.e. 2500/100). Click on the “Apply” button to set the entered value.

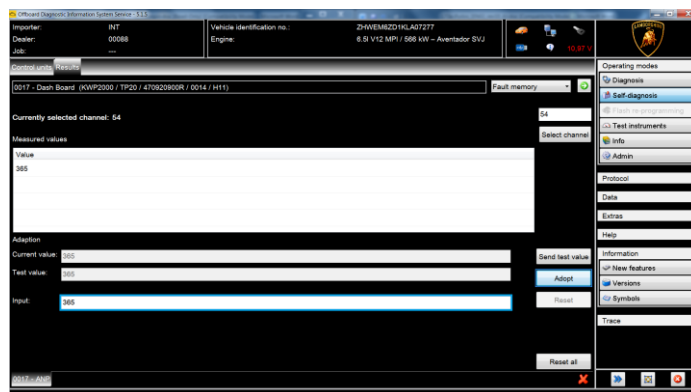
**NOTE:**

If previously the value read was expressed in miles before proceed please convert the value into kilometers. The next service must be entered in km. Clicking the "Adopt" button it is possible to check if the value updates correctly, both from the instrument cluster and from the "Value" field of the Odis Service dialogue screen.

23. Enter "54" in the text box at the top right and click on "Select Channel" to select the channel to set the remaining days to the next service.



24. In the "Input" box, enter the days read from the instrument cluster and previously annotated. To the next service (E.g. 365 = 365 days) and click on "Apply".

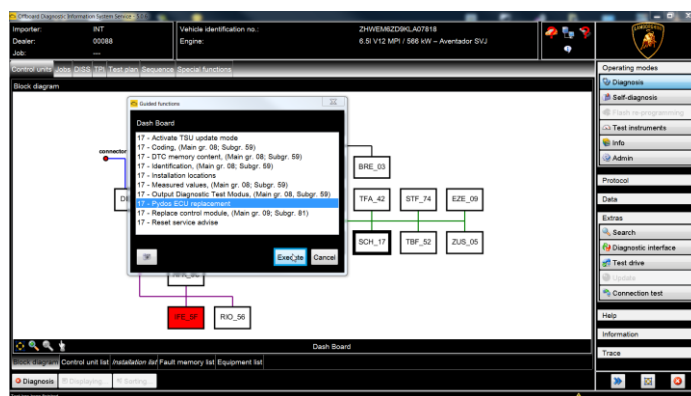
**NOTE:**

After clicking the "Adopt" button it is possible to check if the value updates correctly, both from the instrument cluster and from the "Value" field of the Odis Service dialogue screen.

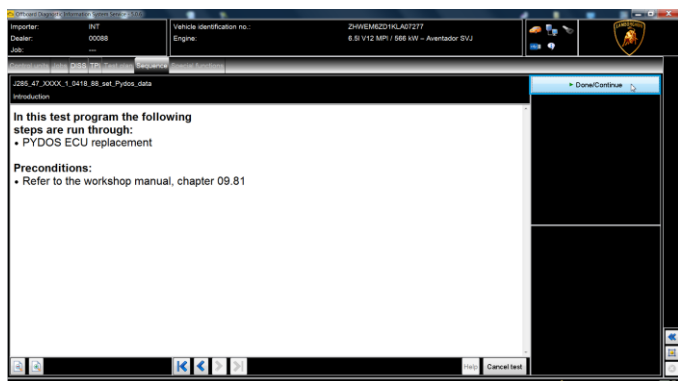
V. Configuration of the expiration date of the Pydos control unit

The configuration of the expiration date of the Pydos control unit is necessary for all the vehicles involved in this campaign.

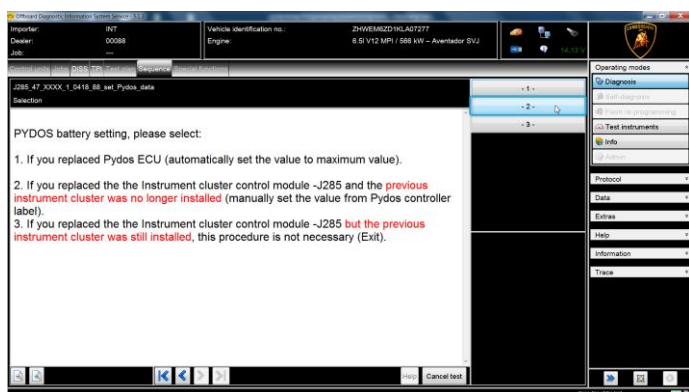
25. From the guided function of the control unit 17 select the function "17 - Pydos ECU replacement" and click "Execute".



26. Click the "Done/Continue" button to continue.

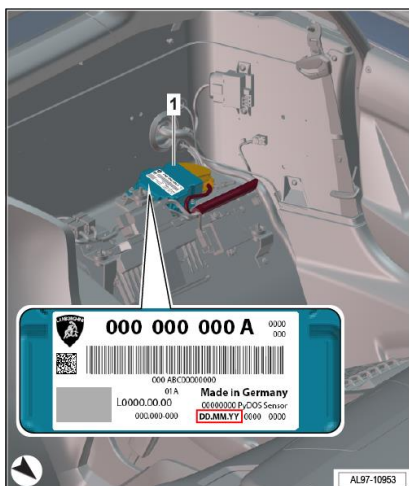


27. Click the button -2- and perform the manual operation.

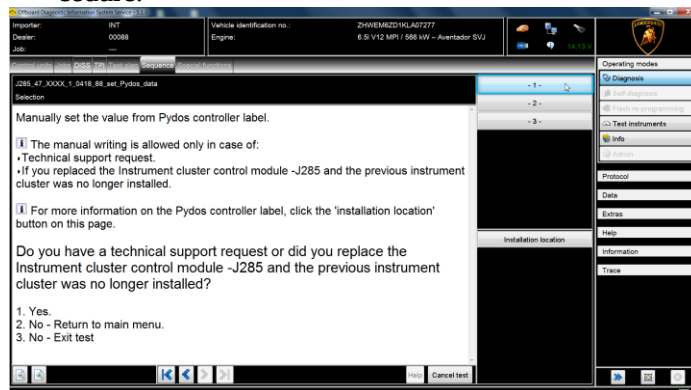


NOTE:

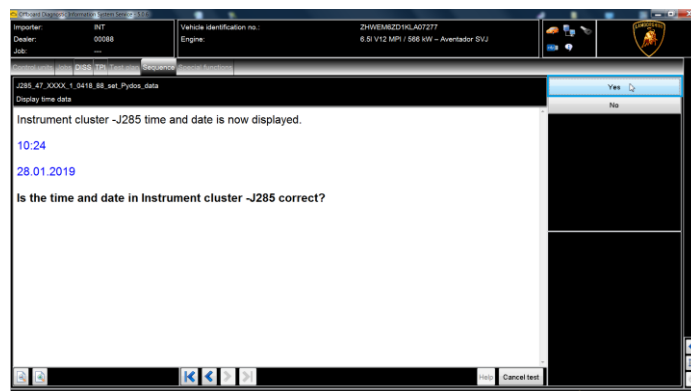
The expiry of the Pydos battery must be set according to the production year of the Pydos control unit fitted in the car and previously annotated. Refer to the following image to identify the position of the production data label.



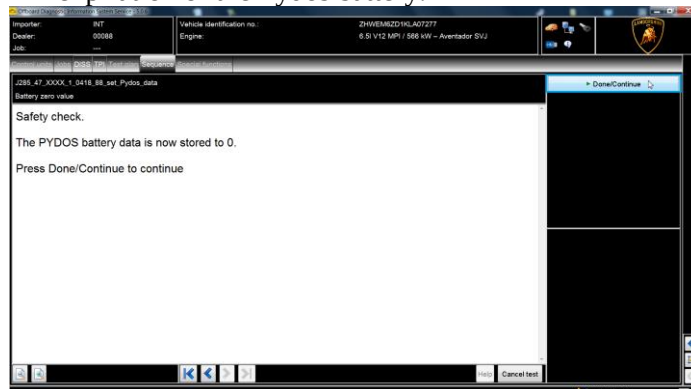
28. Click on "-1-" (Yes) and proceed with the manual procedure.



29. Check the date and time of the instrument cluster. Click on "Yes" if the date and time of the instrument cluster are correct, otherwise click "No" and set the correct values as described in the car's use and maintenance manual.

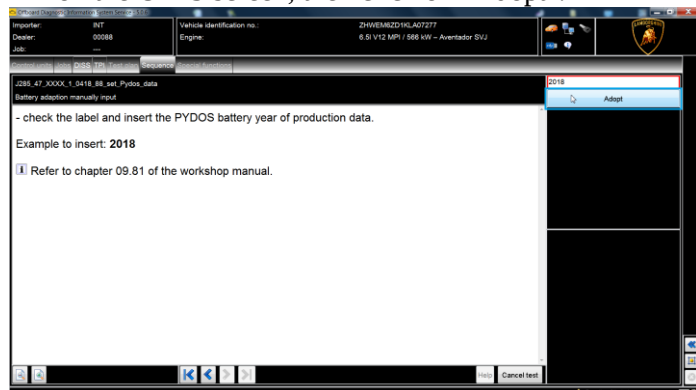


30. Click the "Done/Continue" button to initialize the expiration of the Pydos battery.





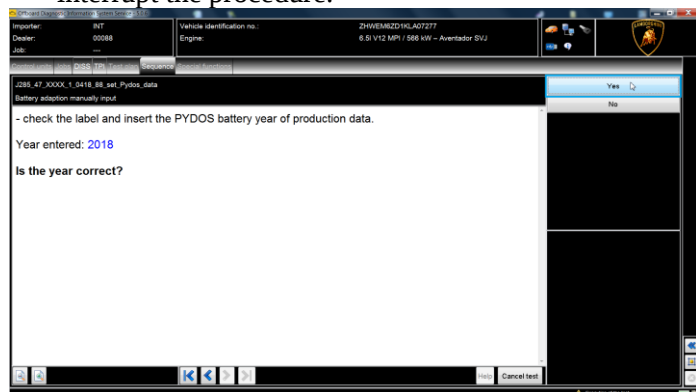
31. Check the production date indicated on the label of the Pydos control unit and insert it in the appropriate field on the ODIS screen, then click on "Adopt".



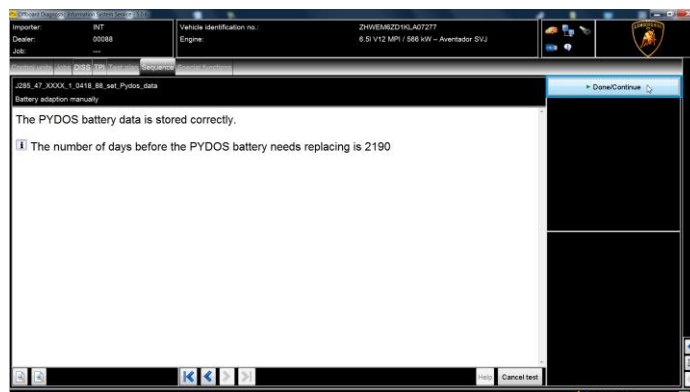
NOTE:

The format of the date to be inserted is the one shown in the example, and require to input only the year, e.g. "2018".

32. Click on "Yes" if the inserted date is correct, "No" to interrupt the procedure.



33. The number of days for the Pydos battery validity is displayed. Click "Done/Continue" to complete the Pydos battery life setting procedure.



VI. Erase fault memories:

34. Once the previous steps has been completed, go back to the tab "Special Functions" and select "Erase fault memory – overall system" to clear all the faults stored. The complete guide in order to erase all fault memories is available in the workshop manual, chapter **10.00.B: Deleting the data in the fault memory of control units.**

/* Diagnosis protocol saving */

At the end of the procedure, save the diagnostic protocol as described in chapter **10.00.ODIS Saving the diagnostic protocol.**



IMPORTANT:

The diagnosis protocol has to be attached to the related Warranty Claim (in order to insert the claim on the Web Portal, please refer to Warranty Claim Manual you can find under the Portal, Warranty section).



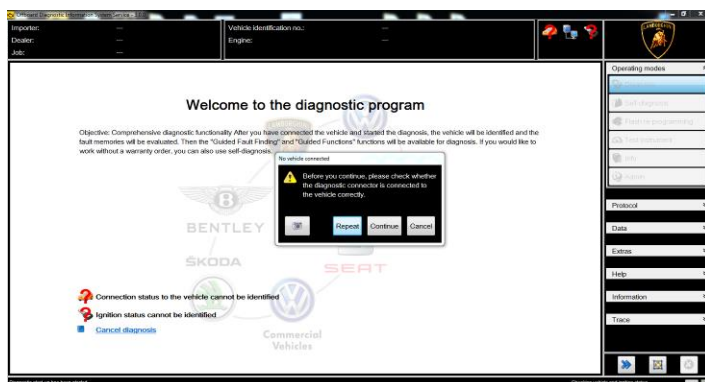
/* Trouble shooting */

- i. If the following error page is shown, you shall abort the procedure clicking on “Cancel Test” and contact the Technical Support.



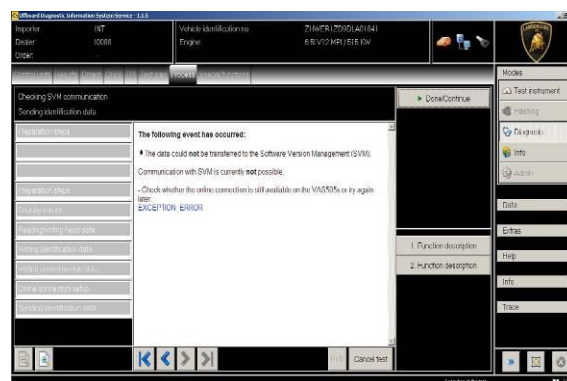
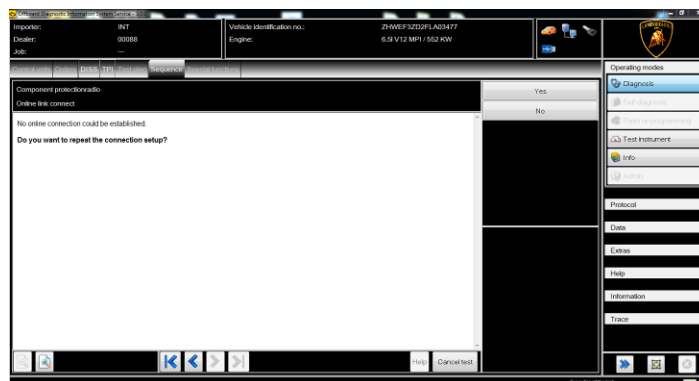
- ii. If the error message regarding the VAS5054 interface and the two icons for status of on board connection and key ON are shown as in the picture below:

- Click “Cancel”;
- Repeat the VAS5054 HW interface installation following the procedure (*) “VCI Manager v2.0”, by entering in the menu “Extras” on the right side and clicking on “Diagnostic interface”.



- iii. If one of the connection error screens is shown as in the pictures below:

- it is not possible to establish a connection with the central server. Please check carefully that the diagnosis laptop is properly connected to the internet network and retry clicking “Yes” or “Done/Continue”.



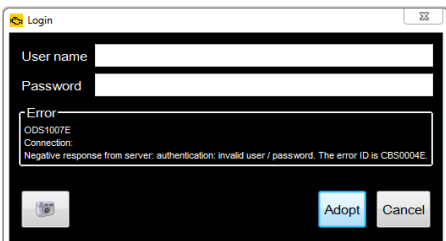
- iv. If the loss of connection happens during the target/actual comparison during SVM procedure:
- It is not possible to connect to central server, check the working connection of internet and retry by clicking “1”.



- v. If the incorrect identification message is shown as in the picture below (error code: ODS1007E):
- be sure that your Geko account is valid;

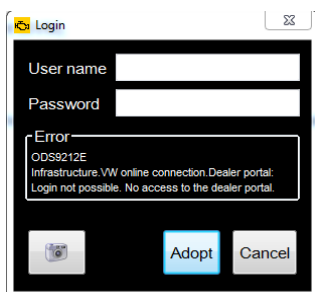


- be sure that the label “Geko” is written on the token that you are using for the authentication;
- be sure the Password inserted is correct;
- click on Cancel and perform the application test (see document “ODIS_Checking_ConnectionServer_SVM_2.0” (*)).



vi. If the infrastructure error message is shown as in the picture below (error code: ODS9212E):

- be sure that your Geko account is valid
- be sure that the label “Geko” is written on the token that you are using for the authentication
- verify in ODIS settings you have “Internet” instead of “CPN” (see document “ODIS_Initial_Setup_2.0” (*))
- click on Cancel and perform the application test (see document “ODIS_Checking_ConnectionServer_SVM_2.0” (*))



If the same error is present during the application test, try the following procedure:

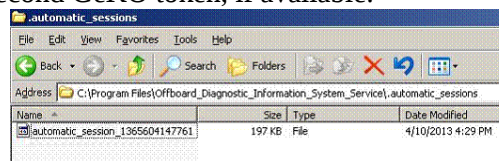
- quit ODIS;
- Enter the folder C:\Program Files (x86)\Offboard_Diagnostic_Information_System_Service\automatic_sessions on your diagnosis laptop;
- delete the only file present in that folder.

- re-Start ODIS Service under following conditions:
 1. Network connection available;
 2. ODIS connection set on “Internet”;
- Retry the application test and the SVM with your GeKO Token.



IMPORTANT REMARK:

In the case an error is still present, retry the procedure with a second GeKO token, if available.



vii. In the case the flash container is not detected (see figure):

- Make sure to be recently synchronized with Mirrorserver by checking the last date of Sync under:
<http://mirrorserver/maintenance/diagnosis.py>
 or under
[http://\[IP_address\]/maintenance/diagnosis.py](http://[IP_address]/maintenance/diagnosis.py)
- if you don't have previously defined the “mirrorserver” IP address alias.
- Make sure to be correctly connected with Mirrorserver.

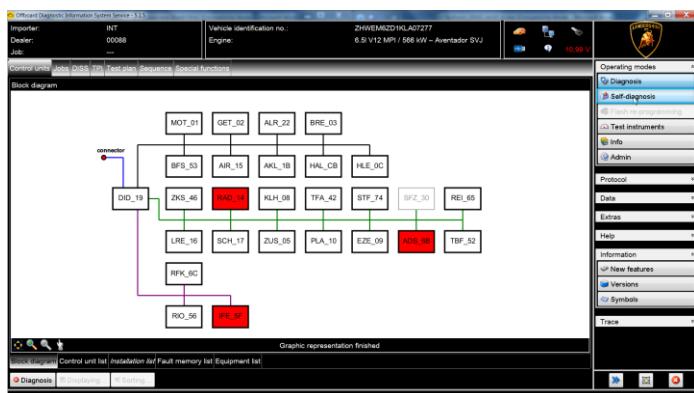
MS/2 Diagnosis

Configuration	
Base path	/var/www/desert
Provider URL	https://altair.mirrorserver2.net/deployment
Repository URL	https://altair.mirrorserver2.net/storage
Feedback URL	https://altair.mirrorserver2.net/health
Proxy	not used
Key file	/var/www/desert/certs/userkey.pem
Certificate	/var/www/desert/certs/usercert.pem
Tests	
Local file/directory permissions	OK
Disk space	OK
Provider reachable	OK (altair.mirrorserver2.net)
Repository reachable	OK (altair.mirrorserver2.net)
Feedback reachable	OK (altair.mirrorserver2.net)
Provider WebDAV access	OK (https://altair.mirrorserver2.net/deployment)
Repository WebDAV access	OK (https://altair.mirrorserver2.net/storage)
Feedback WebDAV access	OK (https://altair.mirrorserver2.net/health)
Successful package downloads	8
Failed package downloads	0
Last Sync	19/06/19 21:01:40
Start tests	

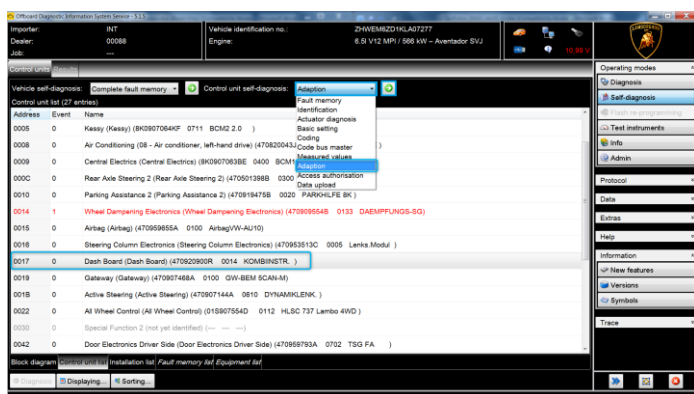


viii. If an error occurs during the SVM calibration phase on the channel “55”, please perform the following actions.

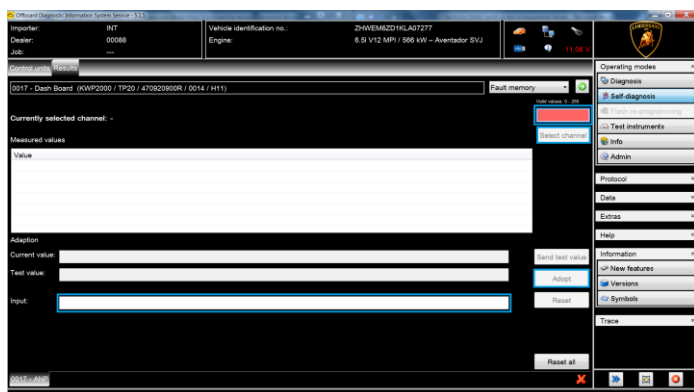
Select “Self-diagnosis” from the “Operating modes”.



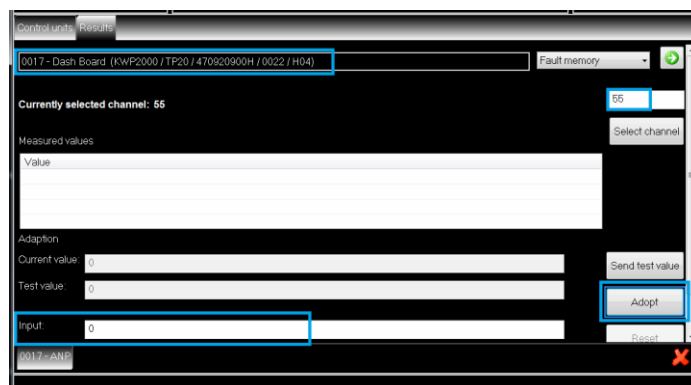
Select the dashboard control unit, ECU 17 and from the drop-down menu select “Adaption”, then click on the green arrow to start the function.



Enter "55" in the text box at the top right and click on "Select Channel" to access to the channel.



Enter in the "Input" box the value “0” and click on the “Apply” button to set the entered value.



After this operation switch back to “Diagnosis” from the “Operating modes” and execute again the SVM declared at the step 10.



NOTE:

ODIS technical documentation can be retrieved on the Lamborghini web portal, under ODIS section.



IMPORTANT REMARK:

The documents to be mandatory attached to the claim are:

- Job order done;
- Diagnosis Protocol saved.

Failure to follow the procedures may lead to the rejection of the request.

Your Area Manager is at full disposal for further information