



**Campaign code.**

L73X-R.02.18

**Campaign description.**

Engine SW Update

**Model.**

Aventador

**Model year.**

From 2012 to 2018

**Special or Limited Versions.**

All.

**Markets.**

All

**VIN identification**

From VIN CLA00091 to JLA06939

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

- Before proceeding with this update make sure the vehicle has performed the **L73X-R.01.17** recall campaign.
- 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**

VIN	Model	Warranty Start Date	Warranty End Date					
17 DIGIT VIN	MODEL NAME	DD/MM/YYYY	DD/MM/YYYY					
Total days of workshop repairs: 0								
Prior activated CPO list								
CPO ?	Validity months	Classification	Mileage	Insertion date	Approval date	Start date	Expire date	Claim status
<div style="text-align: center;">Page 0 of 0 Rows</div>								
Available Campaigns								
Campaign Code	Campaign Type	Procedures	Campaign Description	Campaign Starting Date	PDF	AV		
LXXA-XXXX	A- Service Action	B	CAMPAIGN NAME	DD/MM/YYYY				



**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 the continuous product monitoring, Automobili Lamborghini S.p.A. has determined that a defect, under certain driving conditions with the accelerator pedal

released and below 2000 rpm in conjunction with automatic shifts from high to low gears, it is possible that the estimation of the fuel flow through the purge valves made by the engine software may lead to a irregularity of the idle with consequent possible **engine stall event without warning.**

**Field solution**

Two operations are contemplated:

- Operation A – Is only for cars that have performed the EVAP campaign (L73X-R.01.18 or L73X-R.02.18) after 6<sup>th</sup> August 2018, therefore having completed the above mentioned campaign the SW installed is at the latest version.
- Operation B – Engine SW update.

**Spare parts.**

Order the following part number which are connected to the operation required:

Operation B – Engine SW Update

P/N	Description	Q
n/n	n/n	0

**Replaced parts management.**

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

**Labour time**

Operation A:

- Time for inspection: 0,1 **hour**

Operation B:

- SW update : **1 hour.**

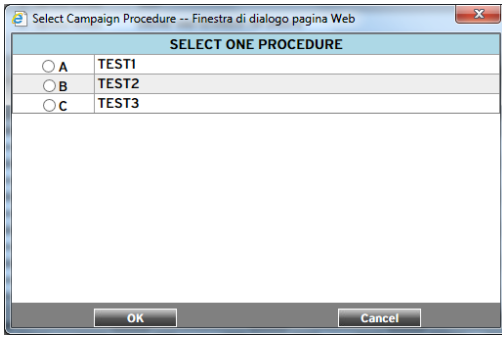
**Substituted former Bulletins.**

None.

**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 A: Time for inspection  
*Manpower: 0,1 hour*  
 spare parts: *none*,
- OPTION B, Engine SW Update  
 manpower: *1 hours*  
 spare parts: *none*,



**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
-		



**IMPORTANT:**

*Before performing the instructions provided in this recall campaign, it is important to install the SD-Creator program. The instructions to install the SD-Creator software are provided in the “BI.09.17\_[ENG]\_SD-Creator installation package procedure”.*



**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 inserting 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 9<sup>th</sup> of July 2018.

**MS/2 Diagnosis**

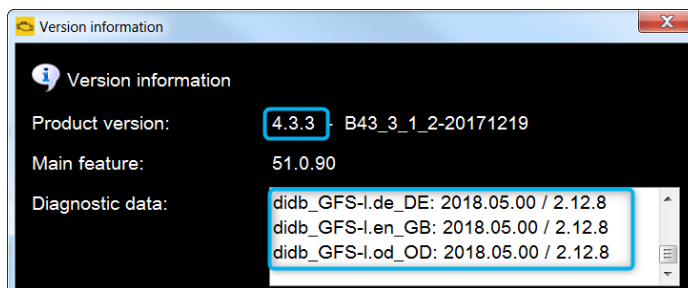
Configuration	
Base path	/var/www/desert
Provider URL	https://altair.mirrorserver2.net/deployment
Repository URL	https://altair.mirrorserver2.net/storage
Feedback URL	https://altair.mirrorserver2.net/health
Proxy	not used
Key file	/var/www/desert/certs/userkey.pem
Certificate	/var/www/desert/certs/usercert.pem
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	9
Failed package downloads	0
Last Sync	18/07/09 21:01:14
<input type="button" value="Start tests"/>	

**Work instructions:**



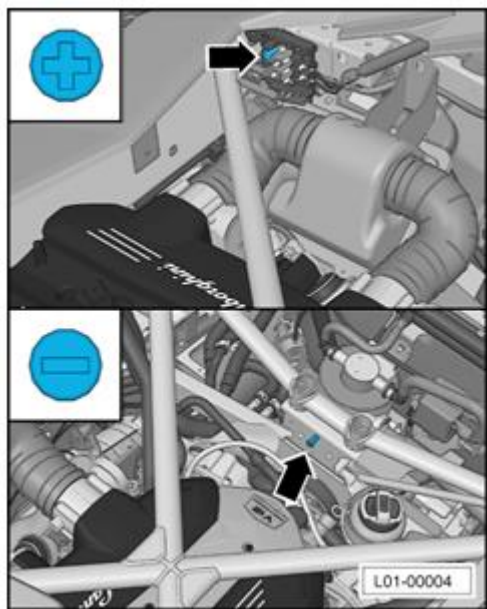
**NOTE:**

The instructions contained in this bulletin are based on ODIS Service diagnosis software updated to release 4.3.3 (or following) and database Lamborghini 2.12.8 (please refer to BI.07.15 and be sure that ODIS service on your laptop is up-to-date).



**Updating Procedure:**

2. Before starting this update, make sure that the vehicle, if involved, has carried out the "L73X-R.01.17" or "L73X-R.02.17" campaigns.
3. Check if it is necessary to install the hotfix for the execution of an SVM code, as specified in the "TPI\_LB73X.04.18\_SVM Function". This TPI is available in Lamborghini HUB, in SERVICE / Technical communications / Aventador / 2018 / 10\_Diagnosis / 00\_ODIS.
4. Please connect a battery charger to the recharge points available in the engine bonnet, as shown in picture.



5. Start ODIS service and complete the preliminary operations as described in chapter **10.00.A: ODIS preliminary operations**.



**IMPORTANT:**

Please correctly identify the vehicle selecting the right Variant and Engine Type of the vehicle.

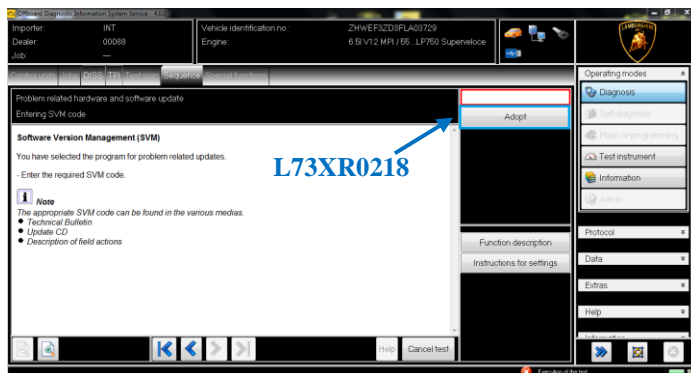
Leave the checkbox “Using guided fault finding” marked.

6. At the end of the start-up procedure move on the ODIS tab “Special Functions”. Select “SVM – Direct input: SVM code for problem-related update” clicking the related row.

Click “Perform test...” to execute the SVM function.

7. Insert in the upper box with the cursor the code: **L73XR0218**

Click “Adopt”.



8. To perform the complete and correct system update, carefully follow what is specified and prescribed in ODIS. The complete guide in order to perform an SVM code is available in the workshop manual, chapter **10.00.D: Running an SVM code**.

9. Once the SVM has been completed, go back to the tab “Special Functions” and select “Erase fault memory – overall system” to clear all the faults stored because of the recent software update.

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**.

**/\*Adaptation after software update \*/**



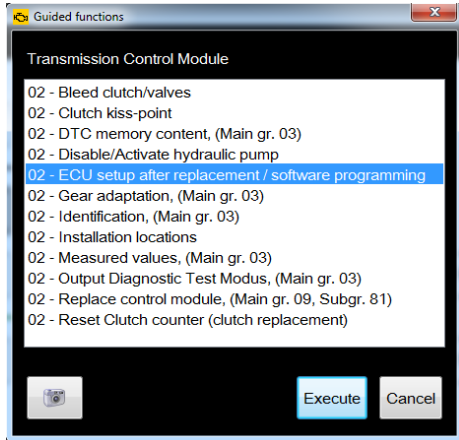
**IMPORTANT:**

**If the gearbox software has been updated, follow all the steps described, otherwise proceed from the point 22.**

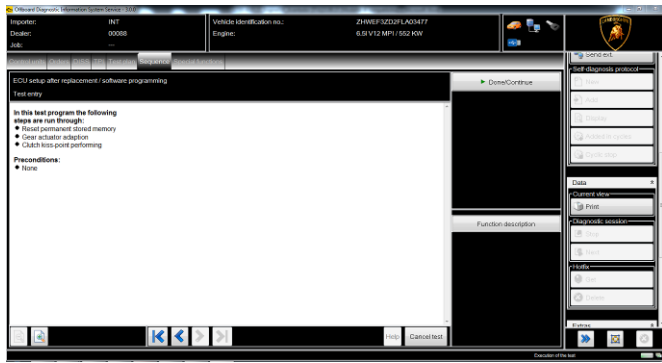
10. Go to Control Unit tab to select the gearbox ECU GET\_02 guided function:

“02 – ECU setup after replacement / software programming”

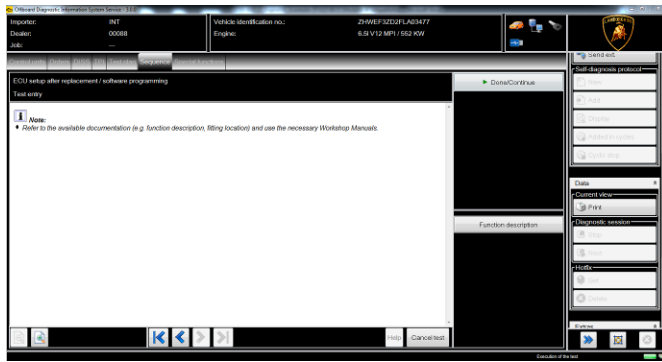
Click “Execute”.



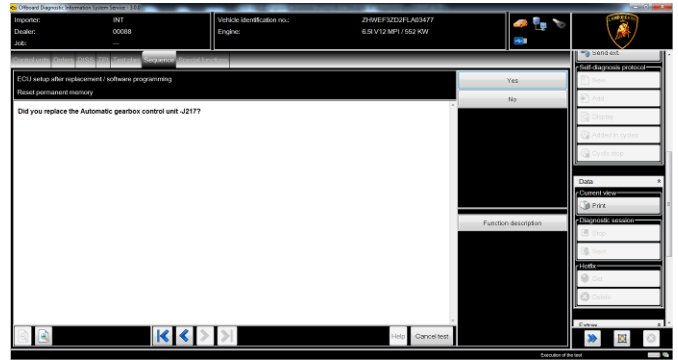
11. Click “Done/Continue”.



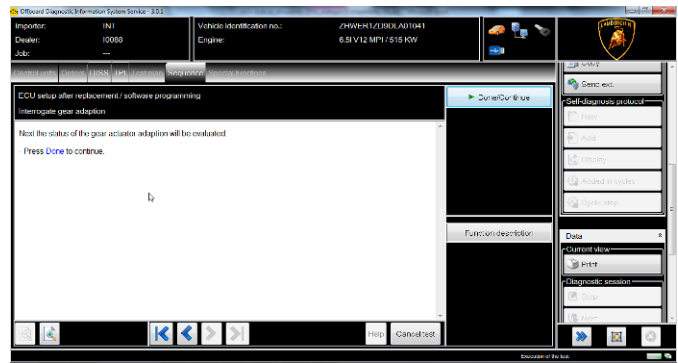
12. Click “Done/Continue”.



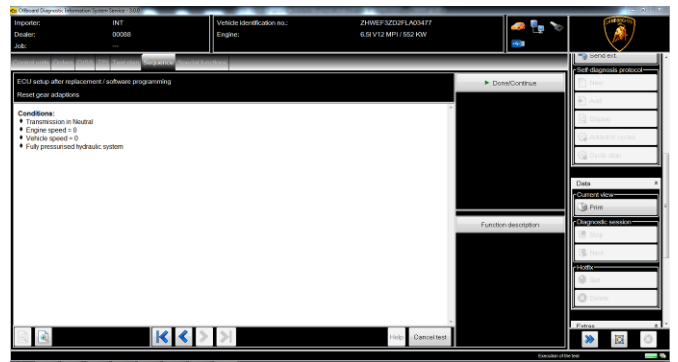
13. Click “NO”



14. Click “Done/Continue”.



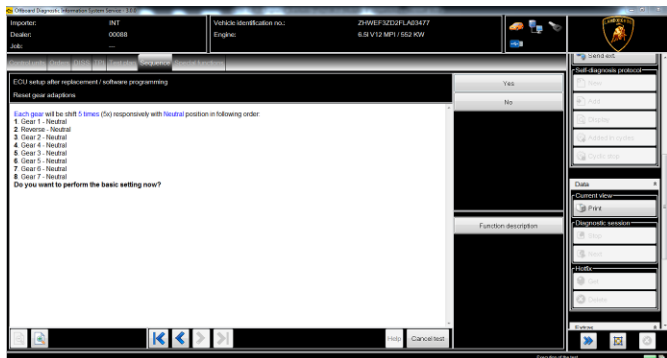
15. Read the conditions to perform the test and click “Done/Continue” .



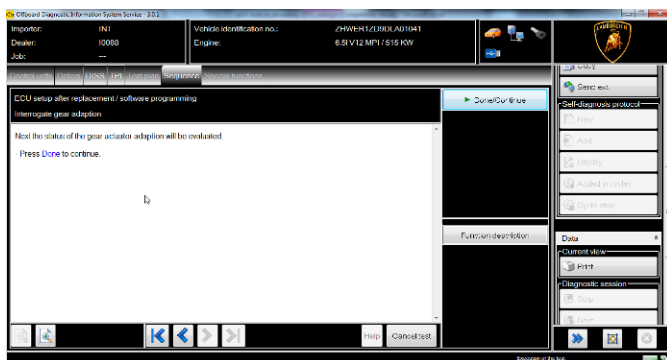


16. Click “YES” to start the basic setting.

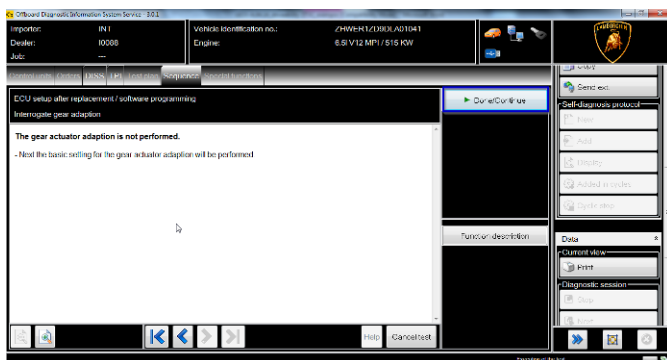
You can check on the instrument cluster the gear shifting.



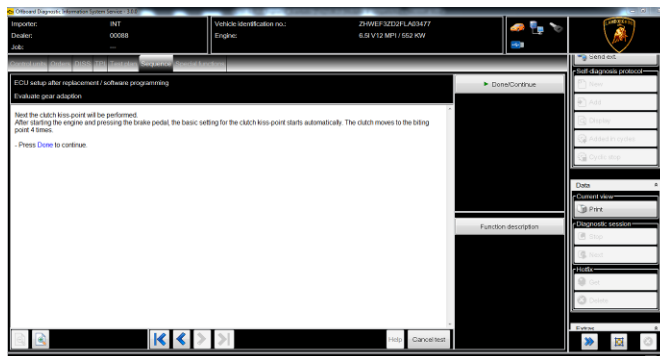
17. Click “Done/Continue” to evaluate the gear actuator adaption.



18. Click “Done/Continue”.



19. Click “Done/Continue” to perform the clutch kiss point test.

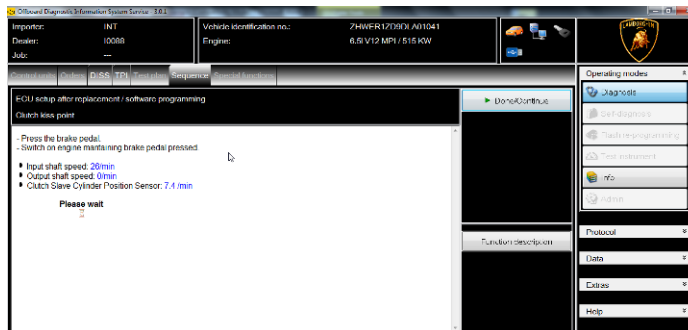


20. Press the brake pedal and start the engine.

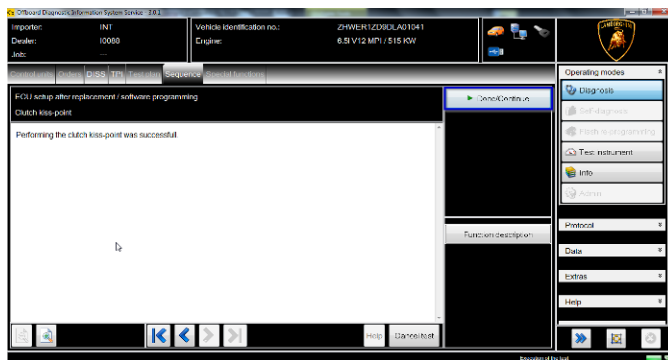
Keep the brake pedal pressed until the end of the basic setting. (approx. one minute).

If you cannot turn the engine ON:

- Turn the key off;
- Disconnect the diagnosis interface;
- Wait at least one minute before turning the key on again;



21. Click “Done/Continue” to end the test.





22. Go back to the Control Unit tab and select the Engine ECU MOT\_01 guided function:

**“01 – Reset adaptation values”.**

Click “Execute” to start the procedure to reset the adaptation values.

23. Follow the instructions shown on the ODIS dialog screens and make sure the activation conditions are respected:

- Key ON;
- Engine OFF;
- No faults stored in the Engine ECU memory.

24. If the procedure has not been performed successfully:

- Turn ignition OFF;
- Wait at least one minute before turning ignition ON again;
- Repeat the procedure from step 0.

25. Go back to the Control Unit tab (block diagram or list view) to select the Engine ECU MOT\_01 guided functions. Select:

**“01 – Throttle body, self-learning”**

Click “Execute” to start the self-learning procedure.



**IMPORTANT:**

**Make sure that air conditioning is OFF.**

26. Start the engine at idle speed, the self-learning is an automatic procedure which is activated when engine water and oil temperature reach 90 °C.

Check the parameters from ODIS and wait until water and oil temperatures reach the target.

Don't perform any action on the car (e.g. pushing the accelerator pedal) if not necessary.

Once the conditions are met (water and oil temperature above 90°C) the “Throttle body – Self learning

enabling conditions flag” switches from 0 to 1 indicating the beginning of the self-learning procedure.

27. Evaluate the ignition advance values, must be inside the range [-2°, 3°].

Switch the engine OFF and press “Done/Continue” to exit the program.

If these values were out of the range restart the procedure from step 24, leaving ignition Key OFF for at least one minute .

**/\*Basic Settings\*/**

28. In order to verify the correct execution of the updating procedures, please run the following basic settings for the Engine ECU MOT\_01:

- 2- Canister purge (EAVP)
- 7- Secondary air injection leak detection pump (Air-LDP)

J623 - Basic setting

Selection 1

**Which basic setting do you want to perform?**

- 1- Throttle valves (DBW)
- 2- Canister purge (EAVP)
- 3- Camshaft adjustment intake (VVT intake)
- 4- Camshaft adjustment exhaust (VVT exhaust)
- 5- Lambda oxygen sensors before and after catalyst
- 6- Exhaust temperature control system (ETCS)
- 7- Further basic settings
- 8- End test

J623 - Basic setting

Selection 2

**Which basic setting do you want to perform?**

- 7- Secondary air injection leak detection pump (Air-LDP)
- 8- Lambda oxygen sensors before catalyst efficiency
- 9- Catalyst efficiency
- 10- Fan actuator test
- 11- Variable Intake System (VIS) actuator test
- 12- Throttle valves (Self learning DBW)
- 13- Back to previous selection
- 14- End test



29. The complete guide in order to perform the basic settings for the engine ECU is available in the workshop manual, chapter **10.01.Q: Guided diagnostic functions with ODIS Service - Basic Settings.**

**/\* Diagnosis protocol saving \*/**

30. At the end of software updates, save the diagnostic protocol as described in chapter **10.00.G: ODIS Saving the diagnostic protocol.**



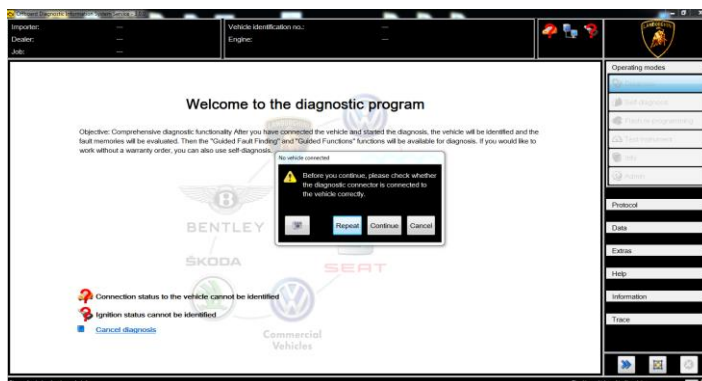
**IMPORTANT:**

**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, that you can find under the Warranty section of the portal).

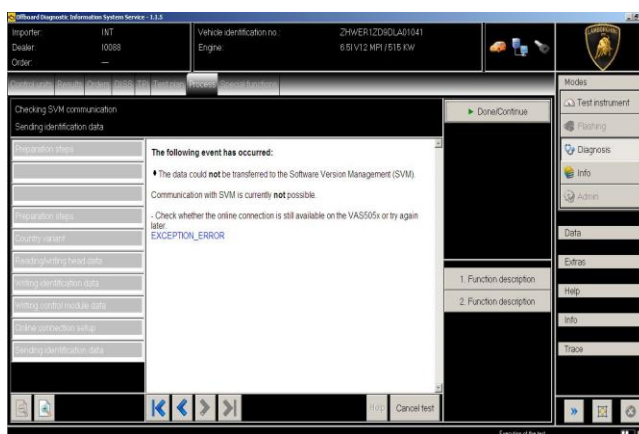
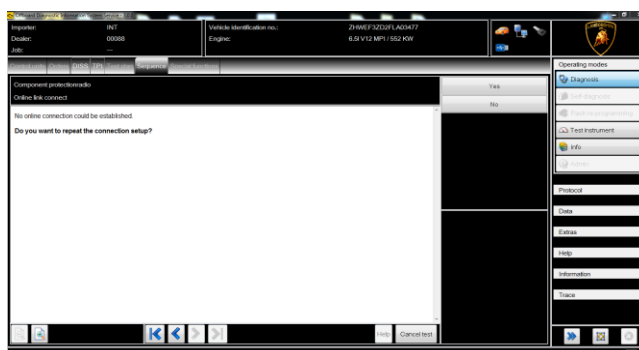
**Trouble shooting:**

- A. If there are any connection problems with the VAS 6154 diagnostic interface and MY 12 vehicles, check the technical documentation in the Lamborghini HUB / Service / Service&Recall Campaigns-Technical Communication / Technical Communication / Aventador.
- B. If the error message regarding the diagnostic 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 diagnostic interface installation following the procedure in the Lamborghini HUB / Service / Diagnosis / ODIS.



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

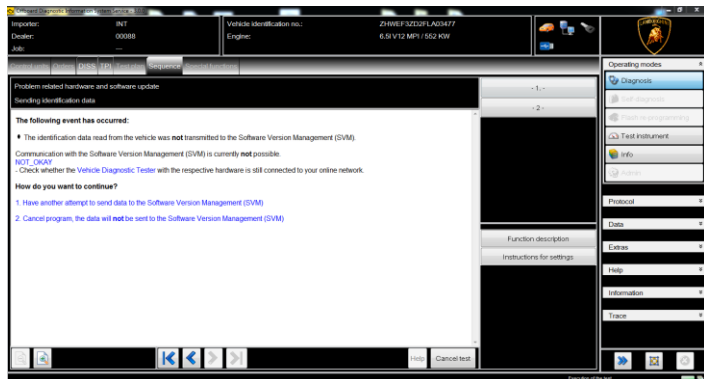
- It is not possible to establish a connection with the central server. Please check carefully that the diagnosis laptop is properly connected to the internet network and retry clicking “Yes” or “Done/Continue”.



D. If the loss of connection happens during the target/actual comparison during SVM procedure:

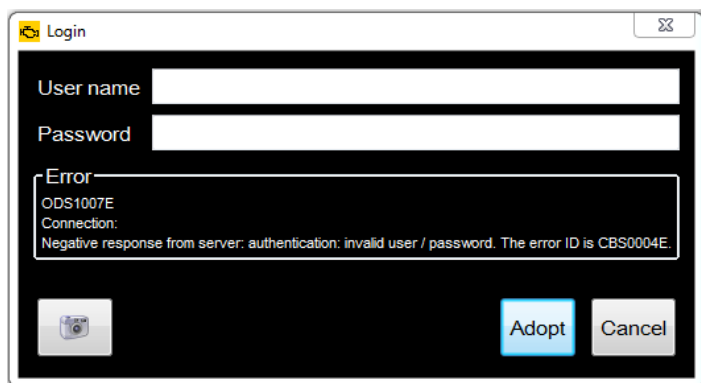


- It is not possible to connect to central server, check the working connection of internet and retry by clicking “1”.



E. If the incorrect identification message is shown as in the picture below (error code: ODS1007E):

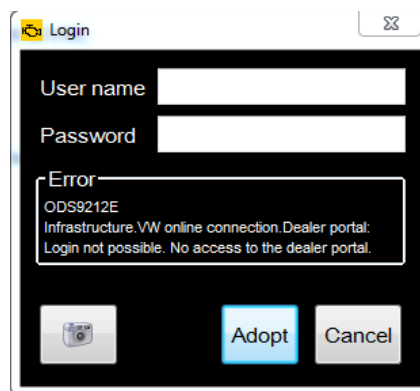
- Check that your Geko account is valid;
- Check that the label “Geko” is written on the token that you are using for the authentication;
- Check if the Password inserted is correct;
- Click on Cancel and perform the application test (see document “ODIS\_Checking\_ConnectionServer\_SVM\_2.0” (\*)).



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

- Check that your Geko account is valid;
- Check that the label “Geko” is written on the token that you are using for the authentication;

- Check if 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” (\*)).



G. 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.

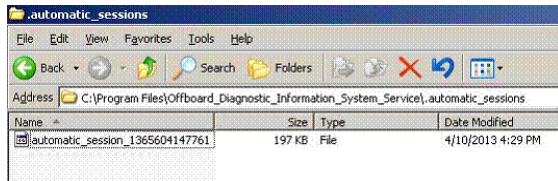


**IMPORTANT:**

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

**L73X-  
R.02.18**

**To: Official After Sales Network**  
**Subject: Engine SW Update**  
**Date: 05 October 2018**  
**Pages 10**



**NOTE:**

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



**IMPORTANT:**

*The documents to be mandatory attached to the claim are:*

- *Job order done;*
- *Diagnosis Protocol saved.*

*Failure to comply with the procedures may lead to the rejection of the request.*

Your Area Manager is at full disposal for further information.