

SERVICE CAMPAIGN BULLETIN

CAMPAIGN REF # 02K
TITLE : McLaren P1™ Vehicle Software Update to Platform 7.1
DOCUMENT # : 12 M 001
AFFECTED VEHICLES : McLaren P1™

SITUATION : Quality Engineering at McLaren Automotive have released a new software platform for the McLaren P1™.

The most noticeable customer benefits of this software are:

- Hybrid System Enhancements.
- Distinction between eMode-EV (Electric Driving) and eMode-RE (Range Extending). The emode message in the bottom right of the instrument cluster has an additional line of text that states 'Range Extending' when engine is running in emode.

PROCEDURE : It is necessary to update the software on all vehicles within your Aftersales car parc at the next service centre visit.

MODULE	NEW SOFTWARE PART NUMBERS
Instrument Cluster (IC)	12M0833CP.12
Transmission Control Unit (TCU)	12M0847CP.08
Chassis Control Unit (CCU)	12M0860CP.07
Engine Control Module (ECM)	12M0881CP.06 ROW 12M0879CP.04 Federal
Battery Management System (BMS)	12M0845CP.09

REMOVAL:

1. Please refer to BA-RM-03A071-07-001 - Remove/Install luggage bin closure panel.

Care Point: In order to avoid personal injury and damage to the vehicle, do not connect the positive terminal (+) to the negative terminal (-). Ensure that the connections are secure. Do not place any metal objects near the battery when charging.

2. Keep the 12V Li-Ion battery on charge, using a Deutronic battery charger during the software downloading procedure.

Care Point: Both the driver and passenger windows must be in the fully open position during software downloads.

Care Point: All software downloads require the vehicle to be in ignition state 5.

Care Point: During the update the key must be positioned at the rear cup holder/stowage area (1).



Care Point: The IC, TCU, CCU, ECM and BMS will display software update is still available after they have been reprogrammed, this should be ignored. Check that the Software-Version (2) matches the table below to confirm the modules are at the latest level.

ECU	Hardware-Version	DTC count	Software-Version	Update Available
DML	1308	0	11M2984CP.02.	none
DMR	1308	0	11M2986CP.02.	none
ECM_02	11M1319CP.01.	0	11M3048CP.02.	none
EHPAS	1017	0	11M1034CP.03.	none
EPB	9999	0	11M0935CP.04.	none
ESP	1114	0	11M2974CP.01	none
HU_02	9999	0	11M2909CP.18.	none
HVAC	1711	0	11A4742CP.16.	none
IC_04	1224	0	11M2977CP.05.	available
ORC_02	923	2	11M2359CP.01.	available
PCCU_02	1113	0	11M3070CP.04.	available
SAS	1037	0	11M1099CP.04.	none
SBC_02	1301	0	11M2923CP.02.	none
ICM, Base				none

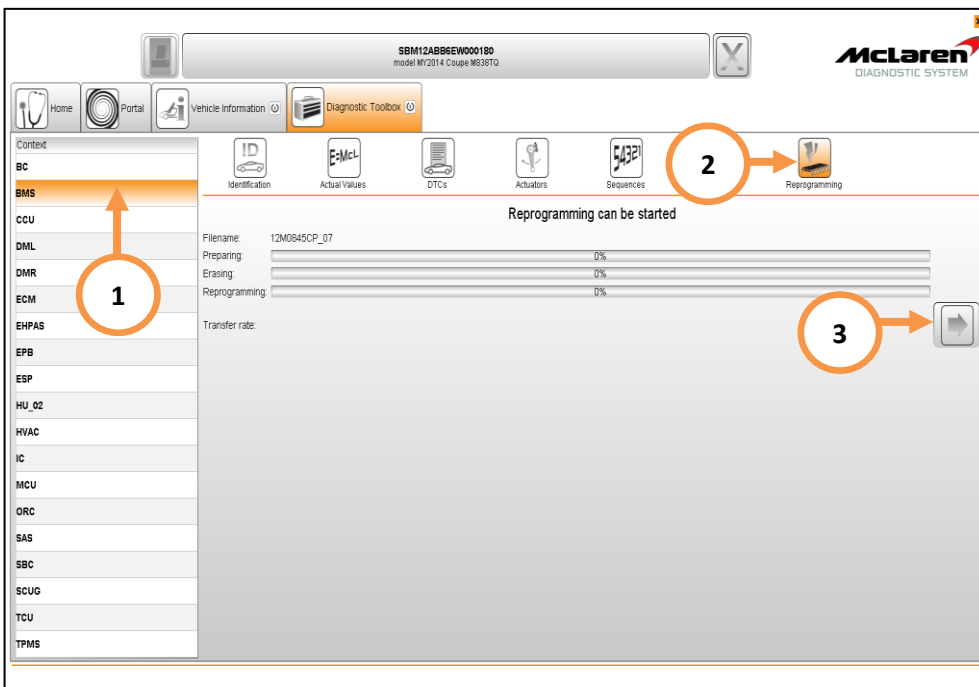
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BMS SOFTWARE UPDATE:

1. Connect the McLaren Diagnostic System (MDS) to the vehicle.

Care Point: If the BMS fails to reprogram the first time, do not attempt to restart the reprogramming. Please raise a Technical Request and the Technical Helpdesk will contact you to advice for the next steps.

2. Select BMS (1), then Reprogramming (2) followed by the arrow button (3). Select “YES” to initiate programming.

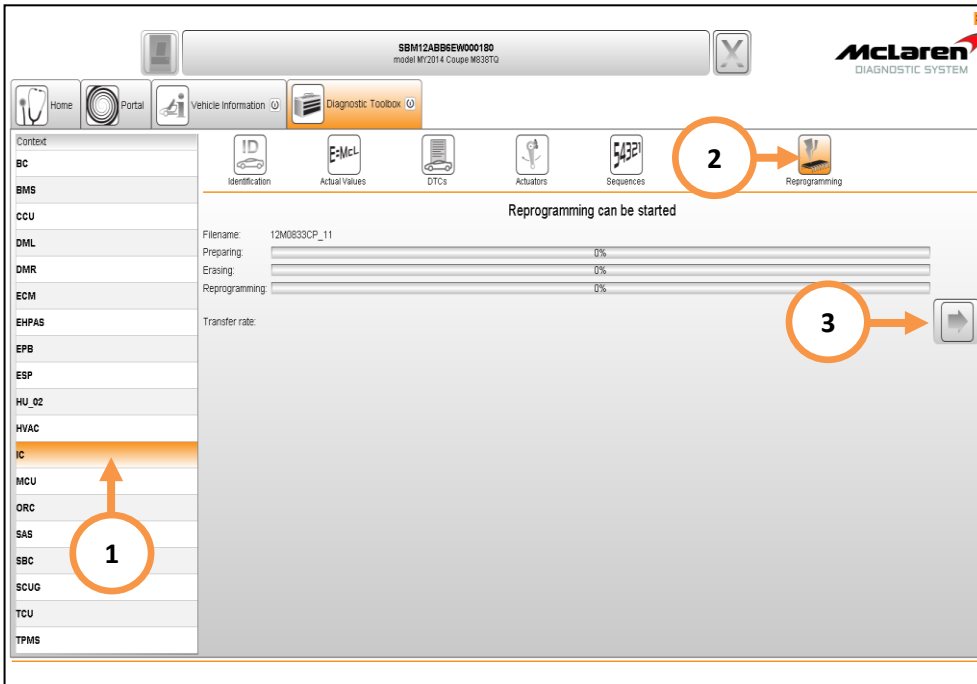


IC SOFTWARE UPDATE:

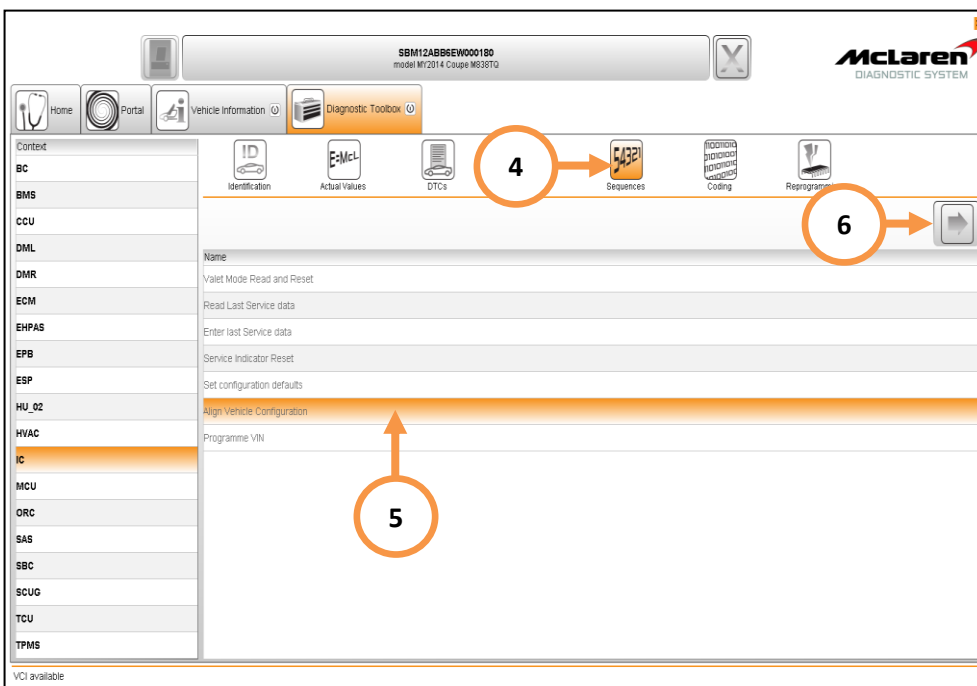
Care Point: The total time to reprogram the IC is 4.1 hours.

Care Point: Please check the progress of the update 20 minutes after the start to ensure is still running.

3. Select IC (1), then Reprogramming (2), followed by the arrow button (3). Select “YES” to initiate programming.



4. Select Sequences (4), then select Align Vehicle Configuration (5), followed by the arrow key (6).

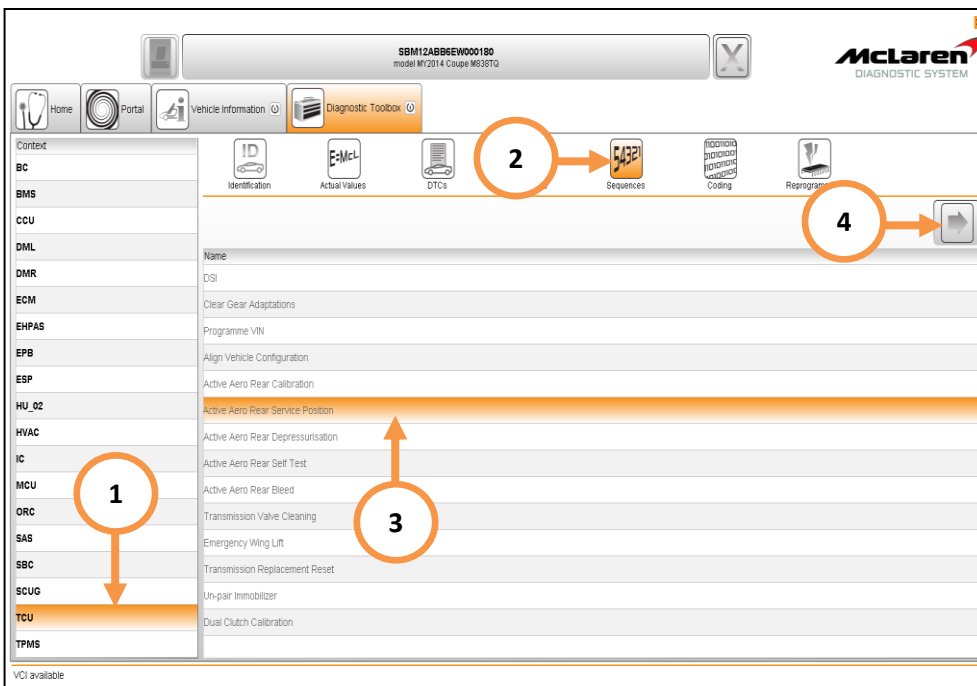


TCU SOFTWARE UPDATE:

Care Point: If the rear wing panel is already at a raised position it is not required to run the following sequence. Proceed to step 8.

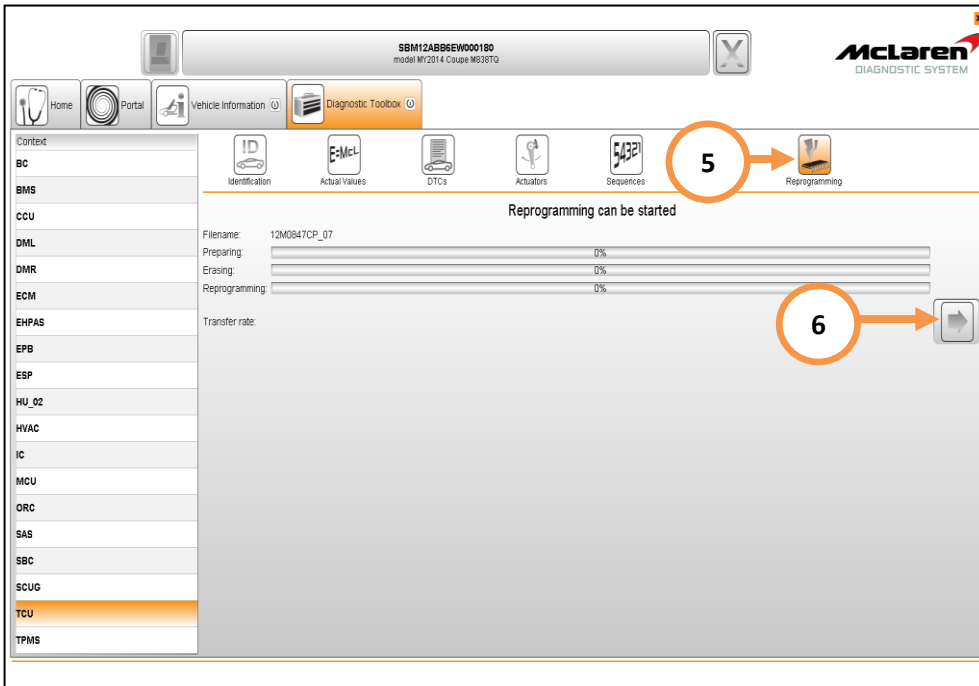
Care Point: If the rear wing assembly has lost the adaption values a notification message will appear in your screen before you start the operation asking you if the rear wing panel is removed. In this situation please cancel the operation, return to Sequences and run the Emergency Wing Lift sequence instead which will raise the rear wing panel.

5. Select TCU (1), then Sequences (2), select Active Aero Rear Service Position (3), followed by the arrow key (4).

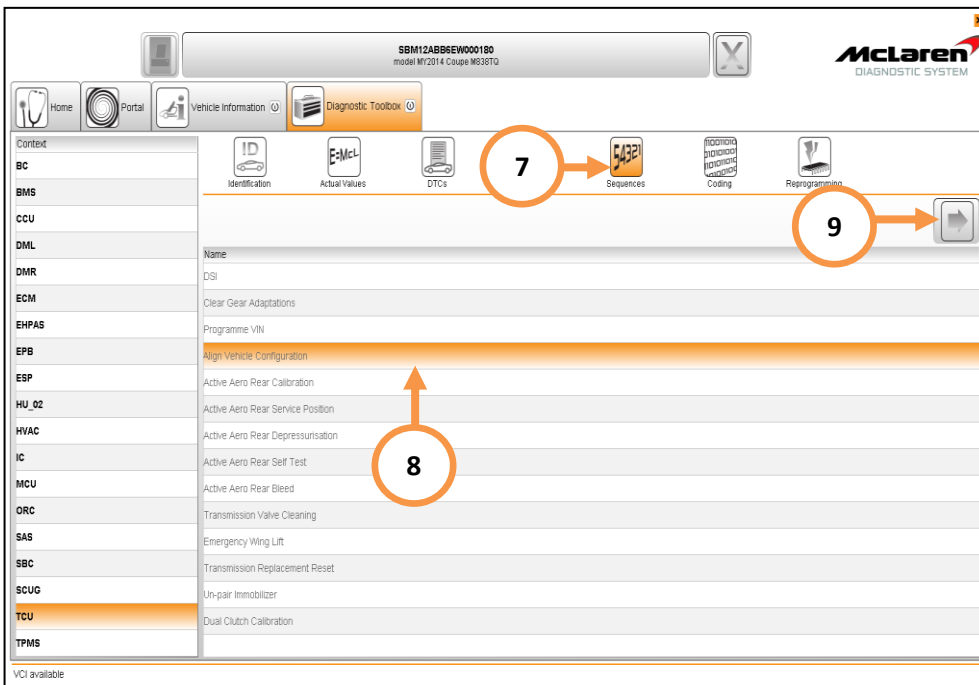


Care Point: Please ensure the rear wing is at the service position before you proceed to the next step.

6. Select Reprogramming (5), followed by the arrow button (6). Select “YES” to initiate programming.

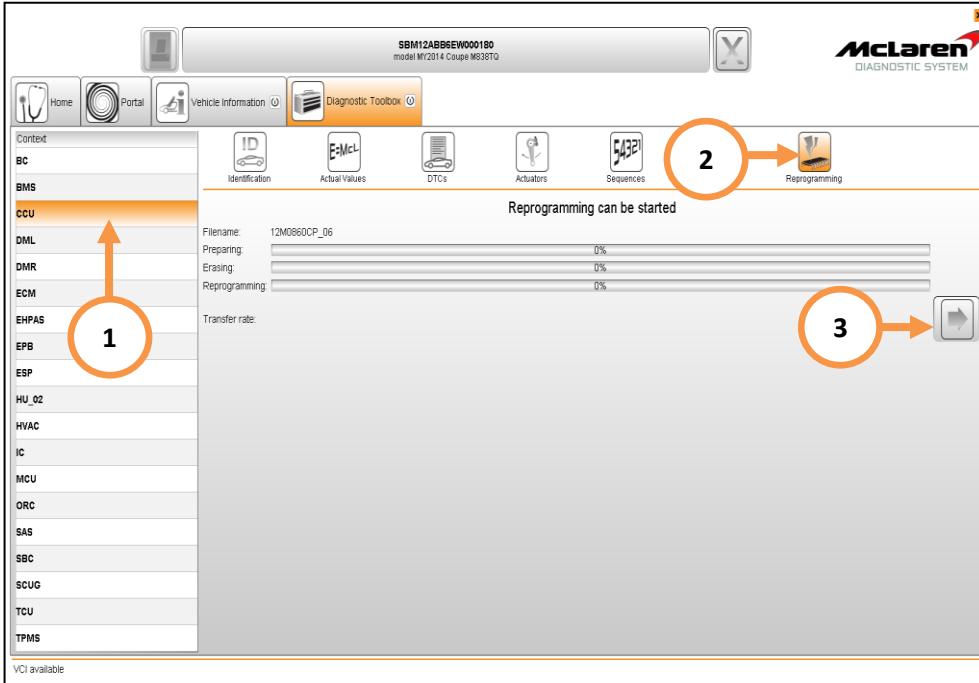


7. Select Sequences (7), then select Align Vehicle Configuration (8), followed by the arrow key (9).

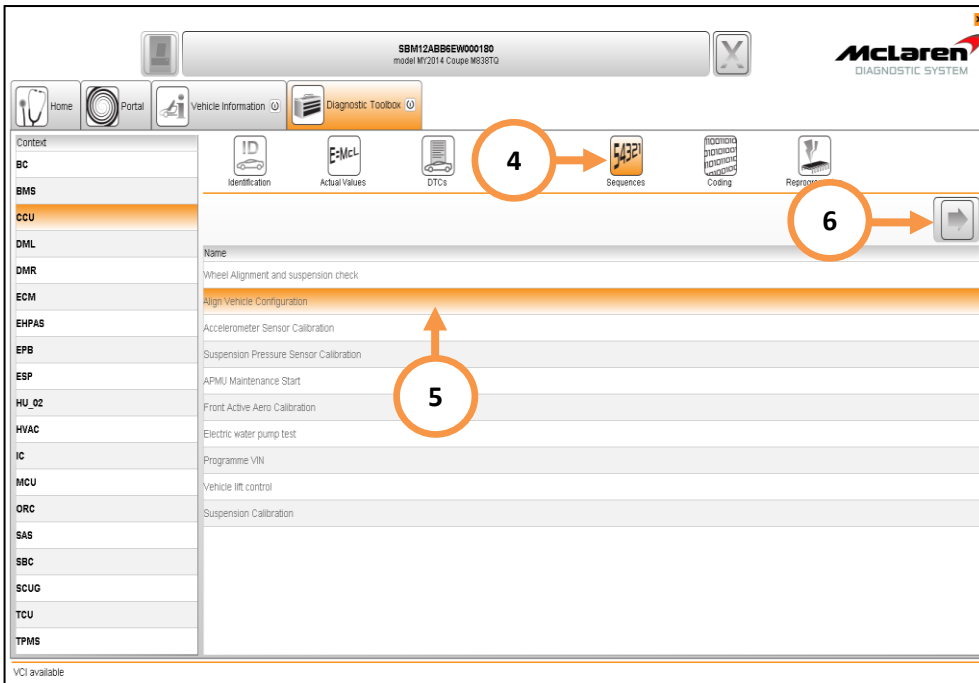


CCU SOFTWARE UPDATE:

8. Select CCU (1), then Reprogramming (2), followed by the arrow button (3). Select “YES” to initiate programming.

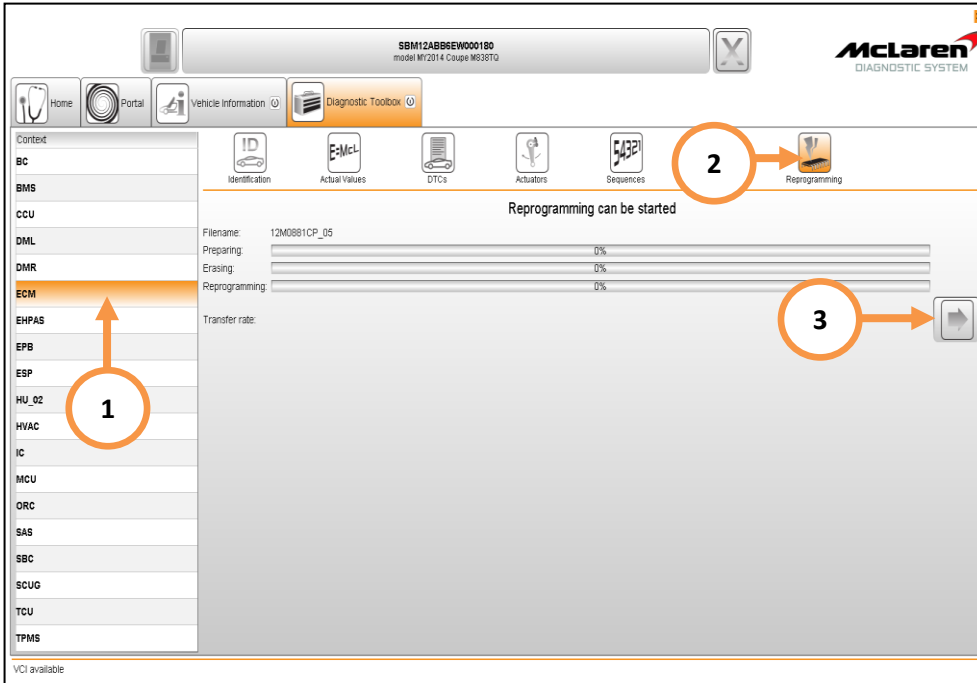


9. Select Sequences (4), then select Align Vehicle Configuration (5), followed by the arrow key (6).



ECM SOFTWARE UPDATE:

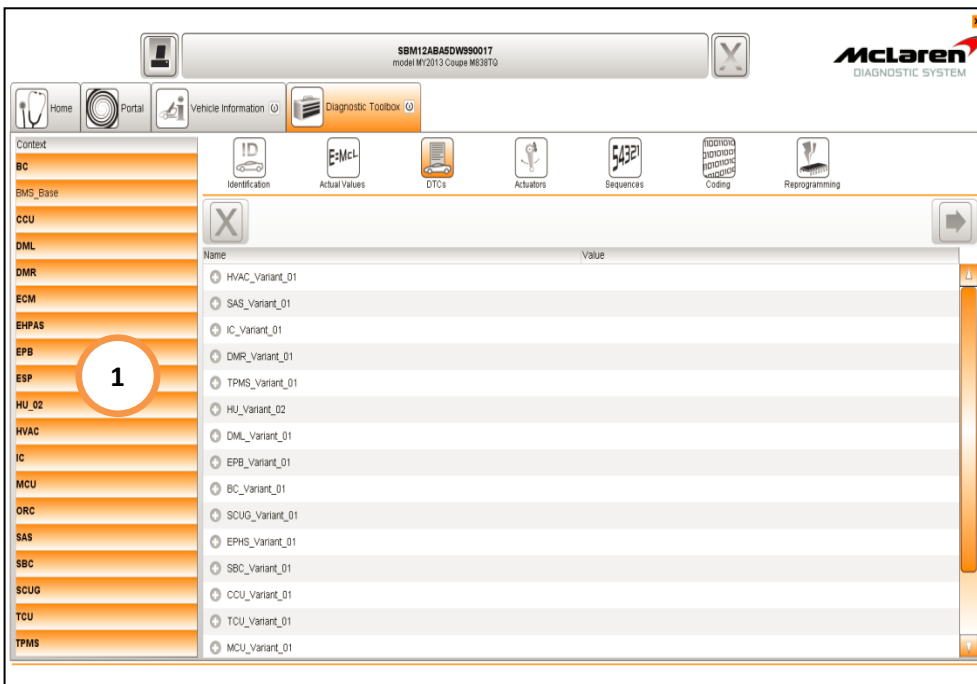
10. Select ECM (1), then Reprogramming (2) followed by the arrow button (3). Select “YES” to initiate programming.



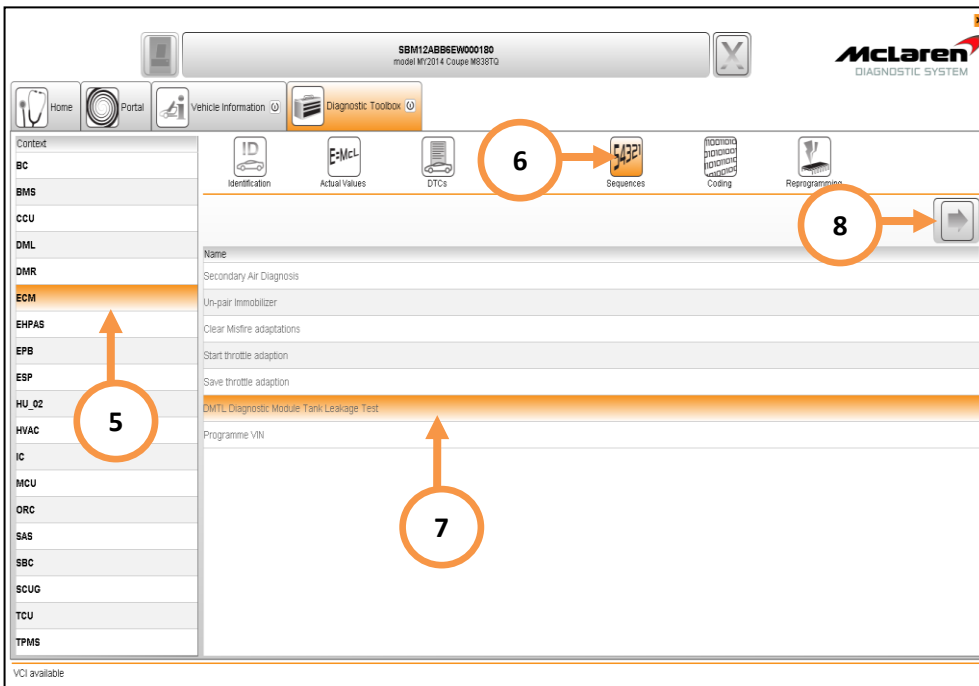
11. Cycle the ignition (off on off on) and wait for 30 seconds. Place the vehicle into a sleep mode, and then establish the vehicle back into ignition state 5.

Care point: ECM DTC's must only be cleared at ignition state 5.

12. Select and highlight all items within the context fields (1) and perform a global clear of all DTC's.

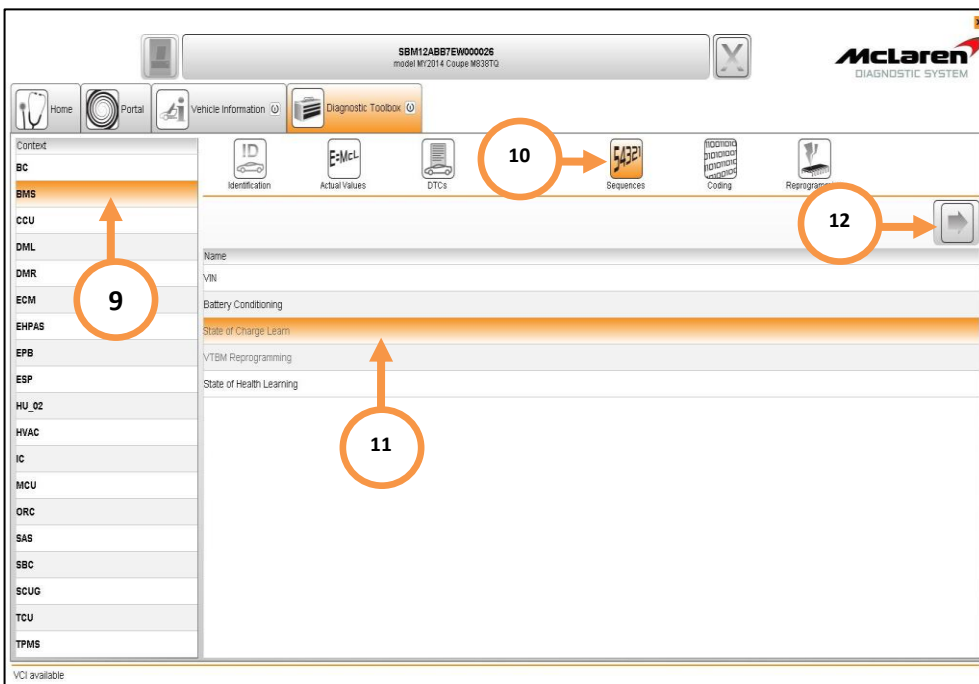


13. Select ECM (5), then select Sequences (6), then DMTL Diagnostic Module Tank Leakage Test (7), followed by the arrow button to proceed (8). The DMTL test will now run and can take up to six minutes to complete the 20 thou and 40 thou leak test.

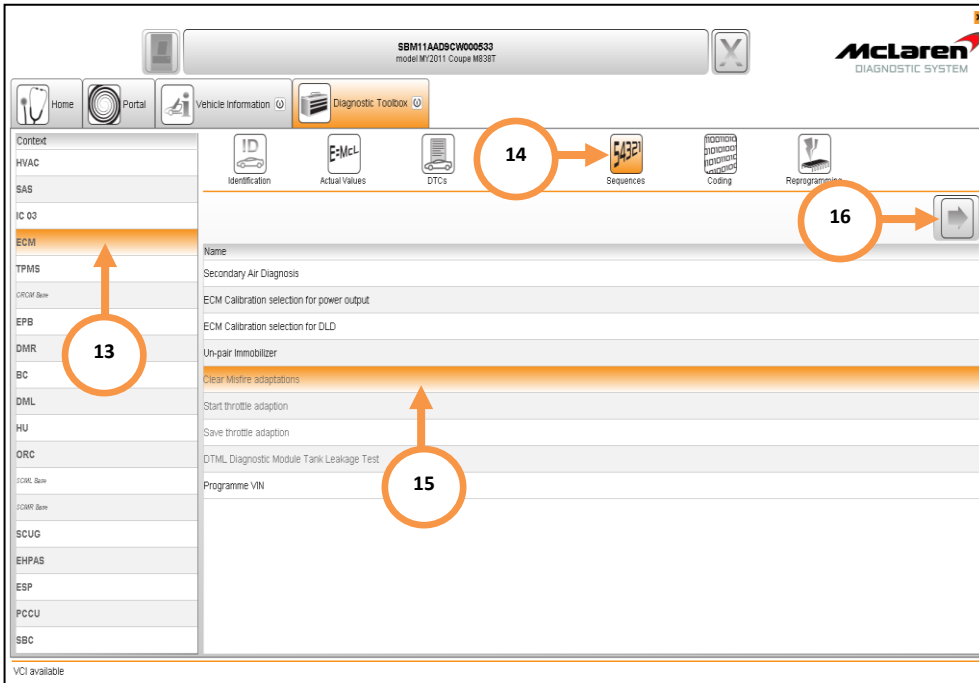


14. Select BMS (9), then select Sequences (10) then State of Charge Learn (11) followed by the arrow button to proceed (12).

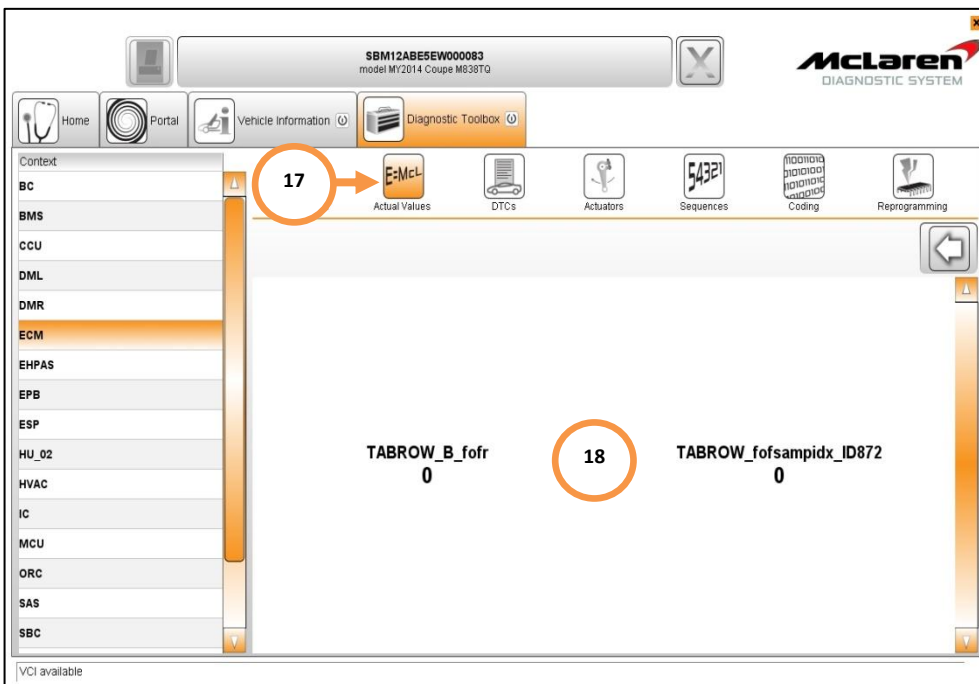
Care Point: The driving session of the State of Charge Learn can be completed at a later stage when the vehicle will be driven to learn the misfire adaptations (step 18).



15. Start a New MDS session in the MDS Offline mode, refer to Service Information Bulletin 11 S 011 McLaren Diagnostic System (MDS) Offline and proceed to complete the remaining procedures.
16. Select ECM (13), then Sequences (14), then Clear Misfire adaptations (15), followed by the arrow button to proceed (16).



17. Select Actual Values (17), select the following values as per the screenshot below (18), then select the play button to access the required data screen.



18. Misfire adaptations are performed whilst the car is driven with the gearbox set to manual mode and with the A/C off and completed in 2nd or 3rd gear.

Care Point: McLaren P1™ requires you to reach the 4000 rpm gradually.

19. Perform eleven gentle successive fuel cuts from above 4000rpm for a 5 second duration (a fuel cut off will occur when the accelerator pedal is fully released).

20. Once the TABROW_fofsampidx_ID872 reaches 11, the TABROW_B_fofr Counter will display 1; the misfire adaption"s have been learned. The TABROW_B_fofr Counter will display Zero and then start to count again when further fuel cut offs occur, this is correct operation and no further action is required.

21. End the current MDS session to allow session feedback to be sent and stored at McLaren.

Please contact your Regional Aftersales Manager should you have any questions relating to the information contained in this bulletin.

WARRANTY INFORMATION

DESCRIPTION	RESOLUTION CODE	TOTAL REPAIR TIME
Software Update to Platform 7.1	BGMB0901A33A4A02	3.5 hours
