

SERVICE CAMPAIGN BULLETIN

TITLE: McLaren P1™ Vehicle Software Update to Platform 8.0

CAMPAIGN REFERENCE 03F

DOCUMENT NUMBER: 12 M 002

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
- Fuel gauge sensitivity improvements
- Instrument Cluster improvements

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.14
Transmission Control Unit (TCU)	12M0847CP.09
Battery Management System (BMS)	12M0845CP.11
Motor Control Unit (MCU)	12J5000CP.06
Engine Control Module (ECM)	12M0881CP.06 ROW 12M0879CP.04 Federal

Removal:

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

Instructions:

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.

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

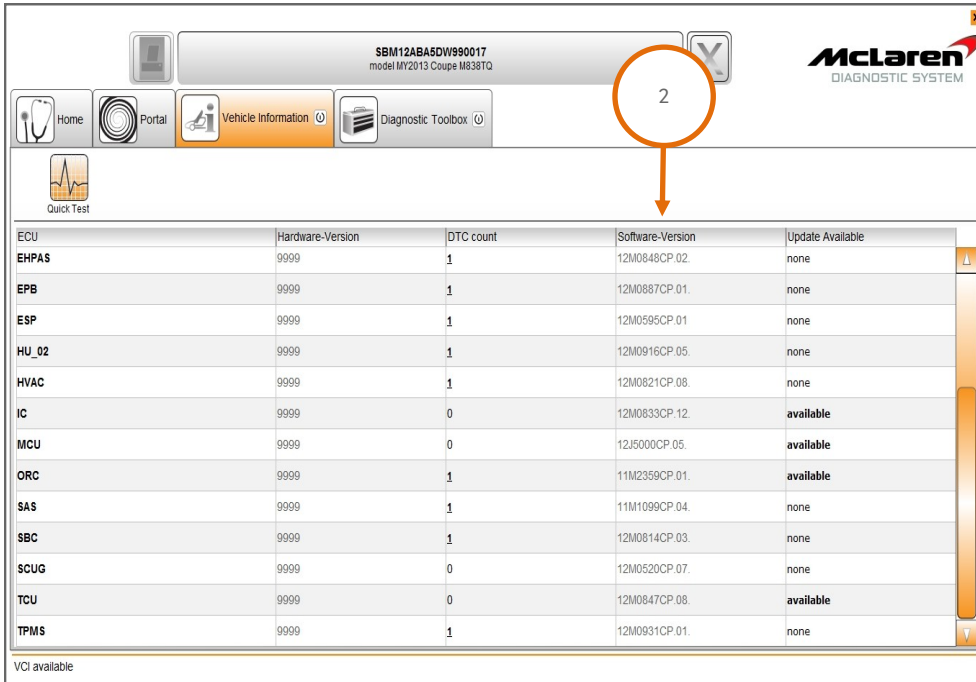
Care Point: Both the driver and passenger windows must be in the fully open position during software downloading.

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, BMS, MCU and ORC 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 at page 1 to confirm the modules are at the latest level.



SBM12ABA5DW990017
model MY2013 Coupe M338TQ

McLaren DIAGNOSTIC SYSTEM

Home Portal Vehicle Information Diagnostic Toolbox

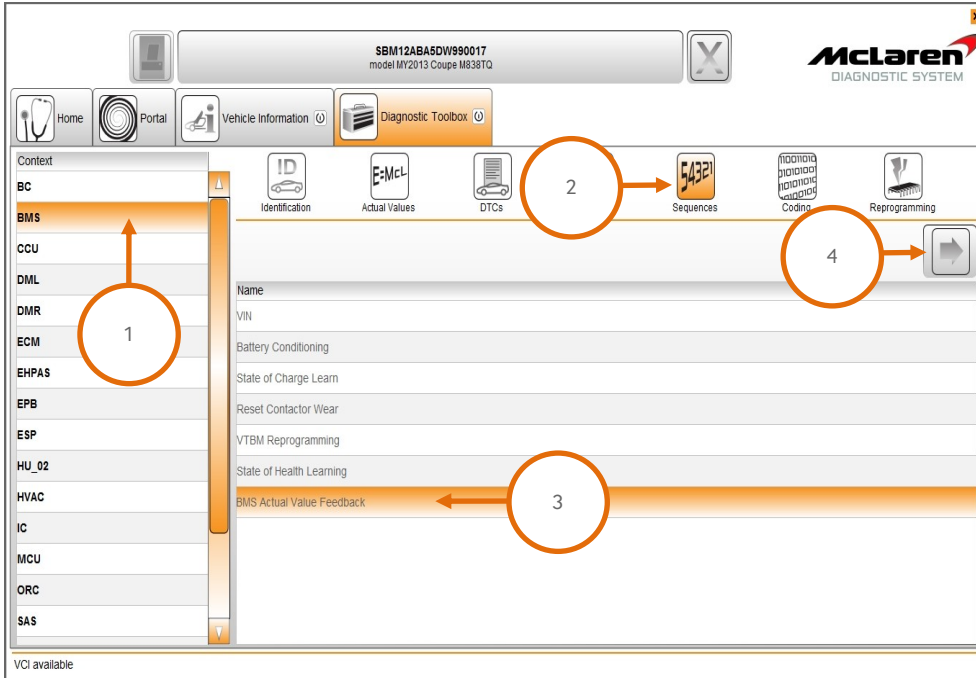
Quick Test

ECU	Hardware-Version	DTC count	Software-Version	Update Available
EHPAS	9999	1	12M0848CP.02	none
EPB	9999	1	12M0887CP.01	none
ESP	9999	1	12M0595CP.01	none
HU_02	9999	1	12M0916CP.05	none
HVAC	9999	1	12M0821CP.08	none
IC	9999	0	12M0833CP.12	available
MCU	9999	0	12J5000CP.05	available
ORC	9999	1	11M2359CP.01	available
SAS	9999	1	11M1099CP.04	none
SBC	9999	1	12M0814CP.03	none
SCUG	9999	0	12M0520CP.07	none
TCU	9999	0	12M0847CP.08	available
TPMS	9999	1	12M0931CP.01	none

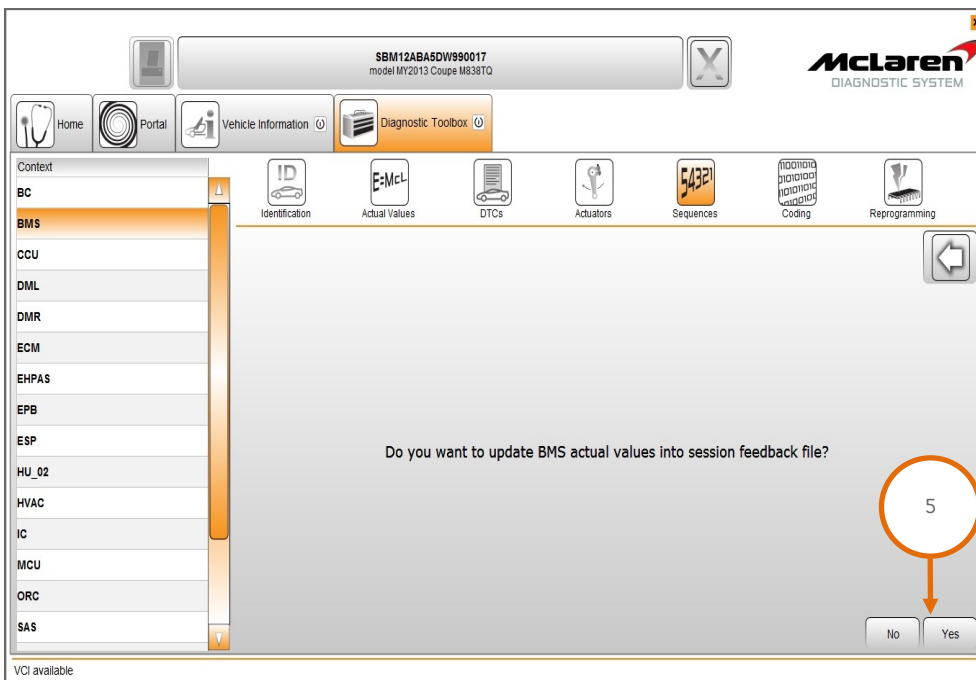
VCI available

BMS Software update:

1. Connect the McLaren Diagnostic System (MDS) to the vehicle.
2. Select BMS (1), then select Sequences (2) and then select BMS Actual Value Feedback (3) followed by the arrow button (4).



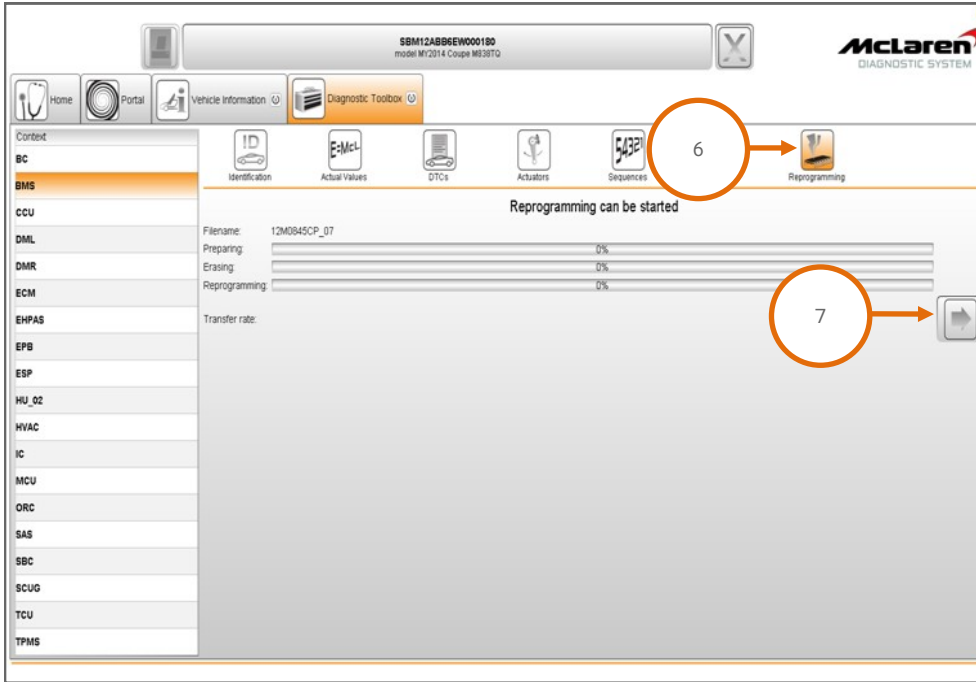
3. Press YES (5) for the MDS to store the BMS Actual values.



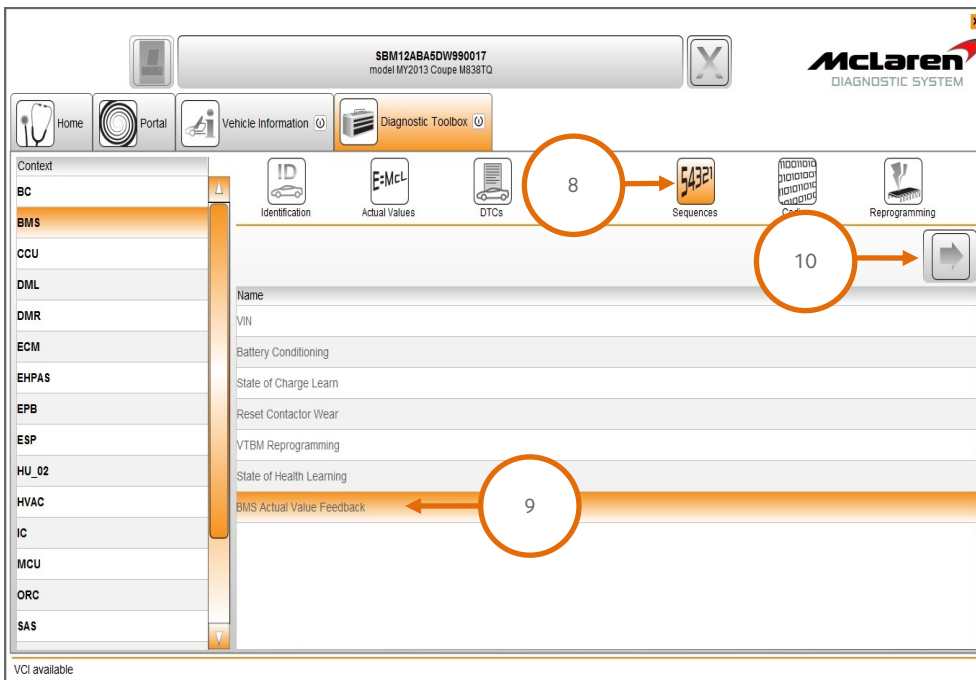
Care Point: During BMS programming phase the front cooling fans will operate at full speed all the time and should stop once the programming is finished.

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 advise for the next steps.

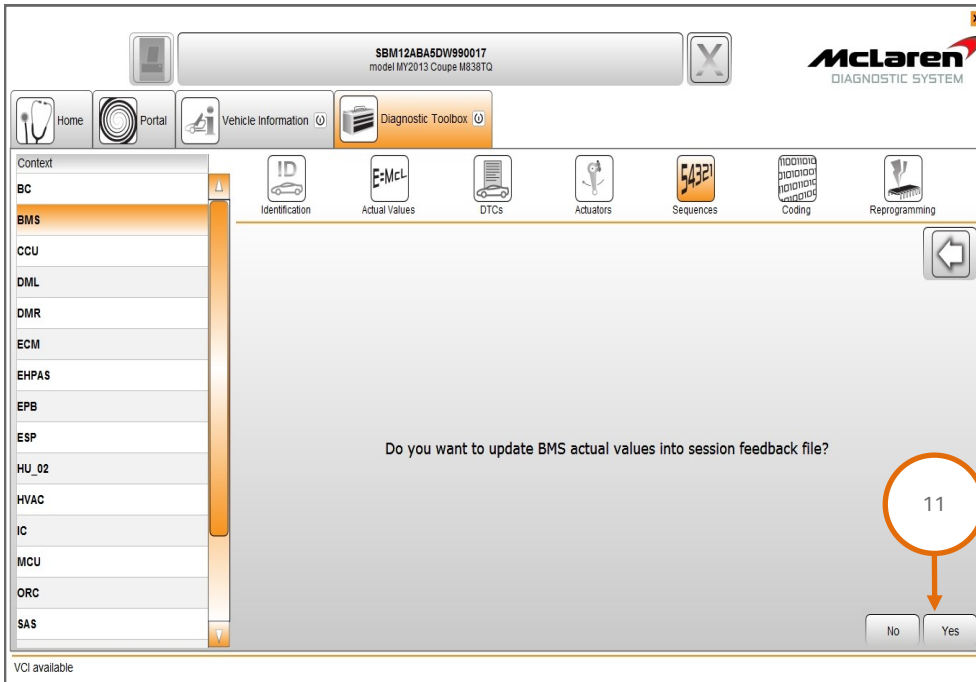
4. Select Reprogramming (6) followed by the arrow button (7). Select YES to initiate programming.



5. Once programming is completed select Sequences (8) and then select BMS Actual Value Feedback (9) followed by the arrow button (10).



6. Press YES (11) for the MDS to store the BMS Actual values.



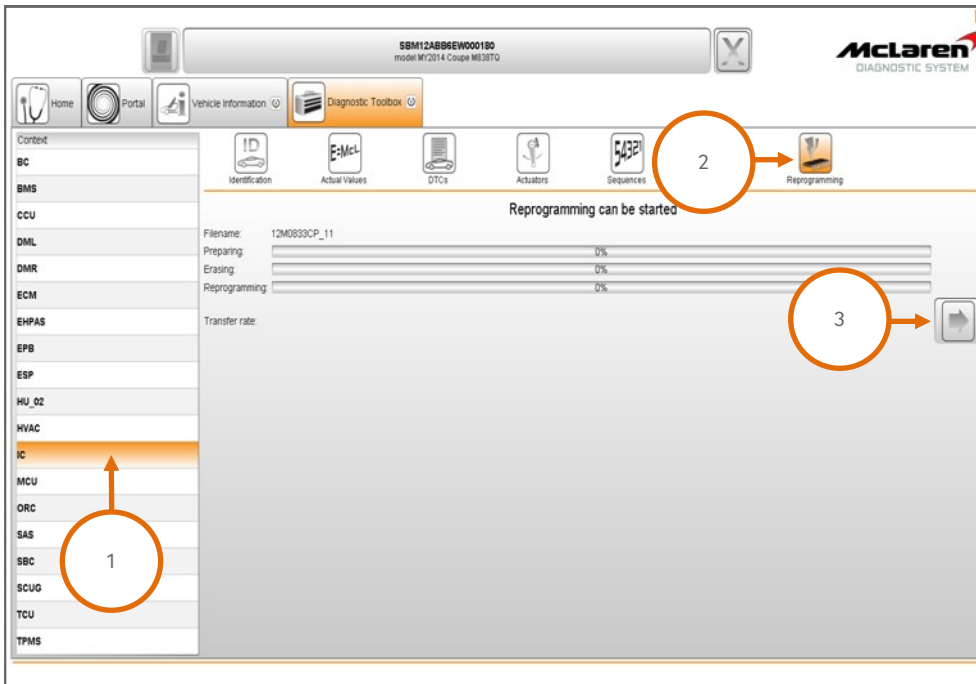
IC Software update:

Care Point: Total time to reprogram the IC is 3.00 hours.

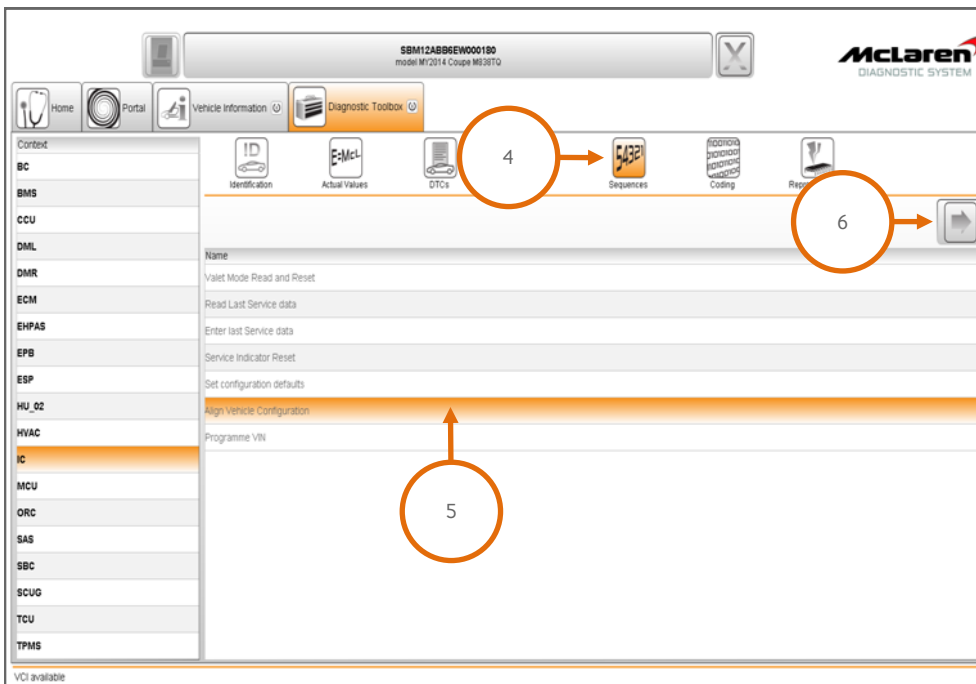
Care Point: Please check the progress of the update 6 minutes after the start to ensure it is still running.

Care Point: During the IC programming phase a “Post Condition Failed” message will illuminate, please ignore the message as it does not affect the programming of the module.

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



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

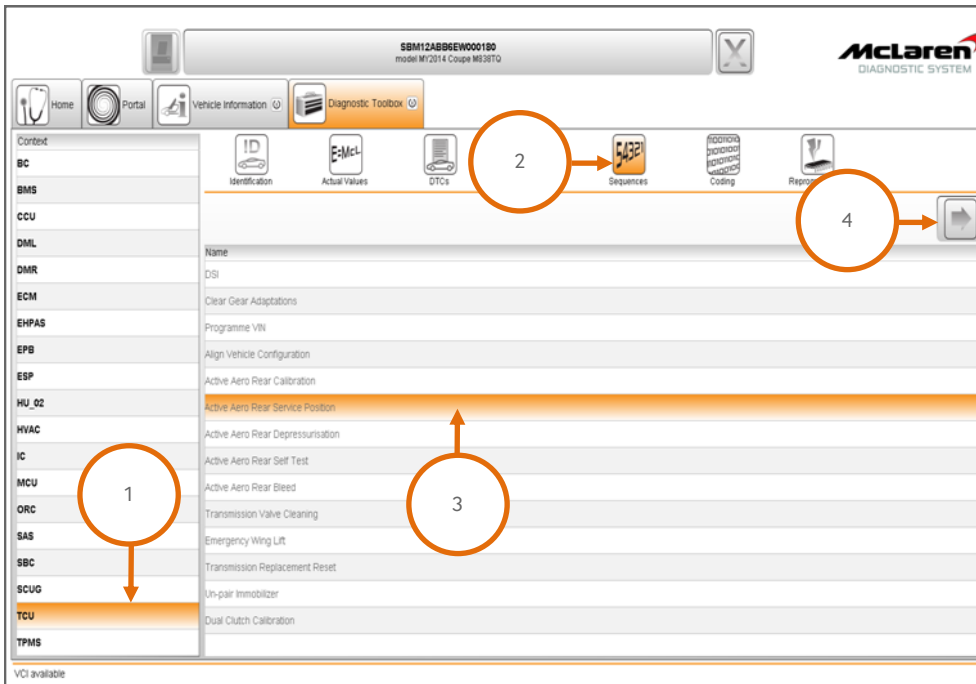


TCU Software update:

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

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 allow you to manually raise the rear wing panel.

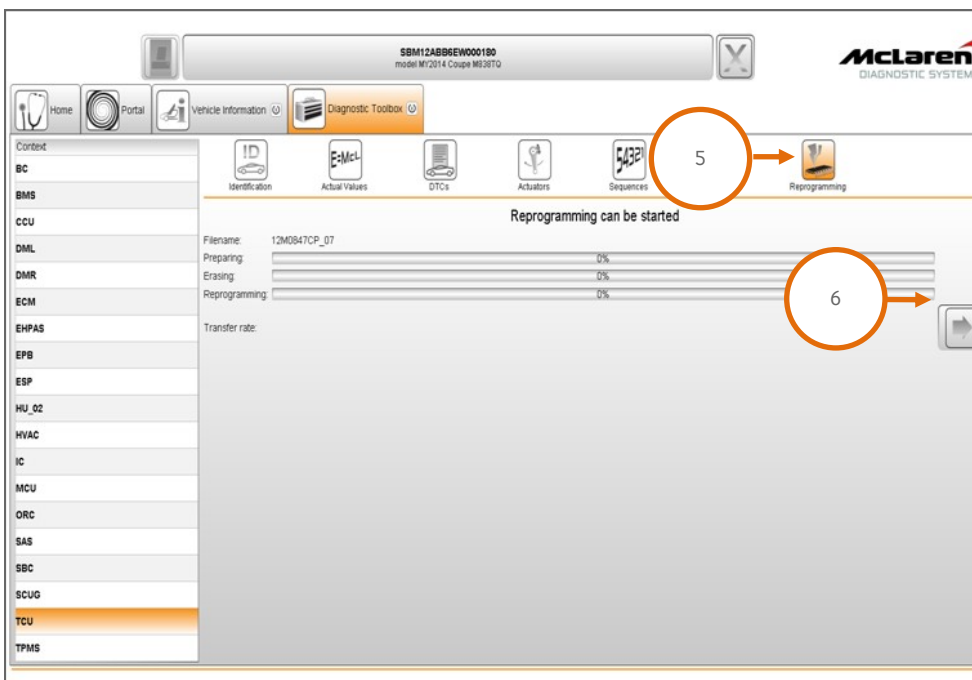
9. Select TCU (1), then Sequences (2), select Active Aero Rear Service Position (3) followed by the arrow button (4).



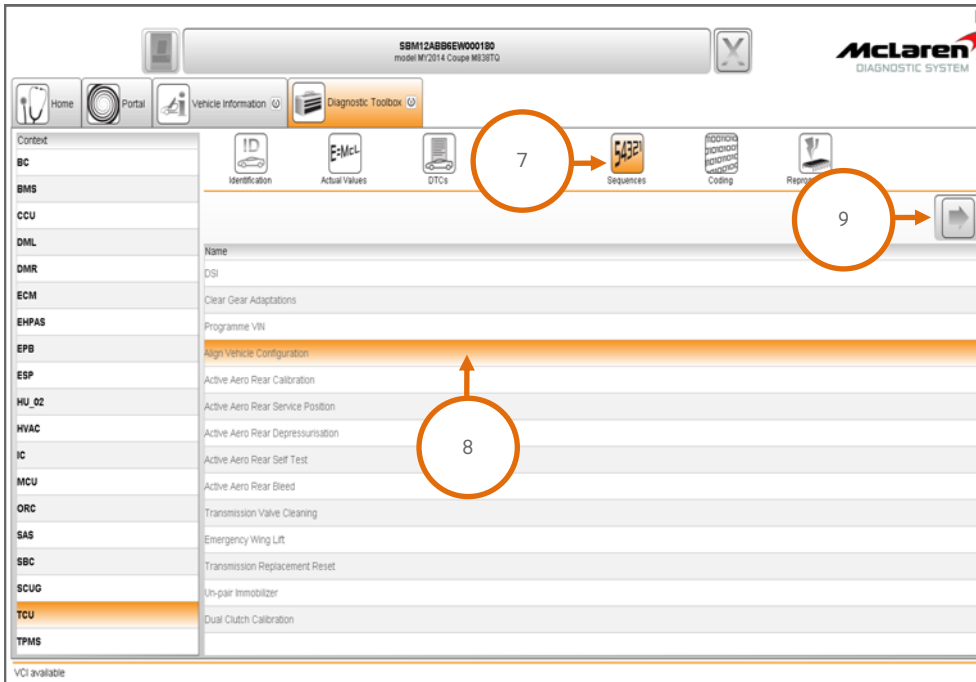
Care Point: Please ensure the rear wing is at the service position before you proceed to the next step.

Care Point: If the TCU fails to reprogram first time and is then in Base, do not attempt to restart the reprogramming. Please raise a Technical Request and the Technical Helpdesk will contact you to advise for the next steps.

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



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

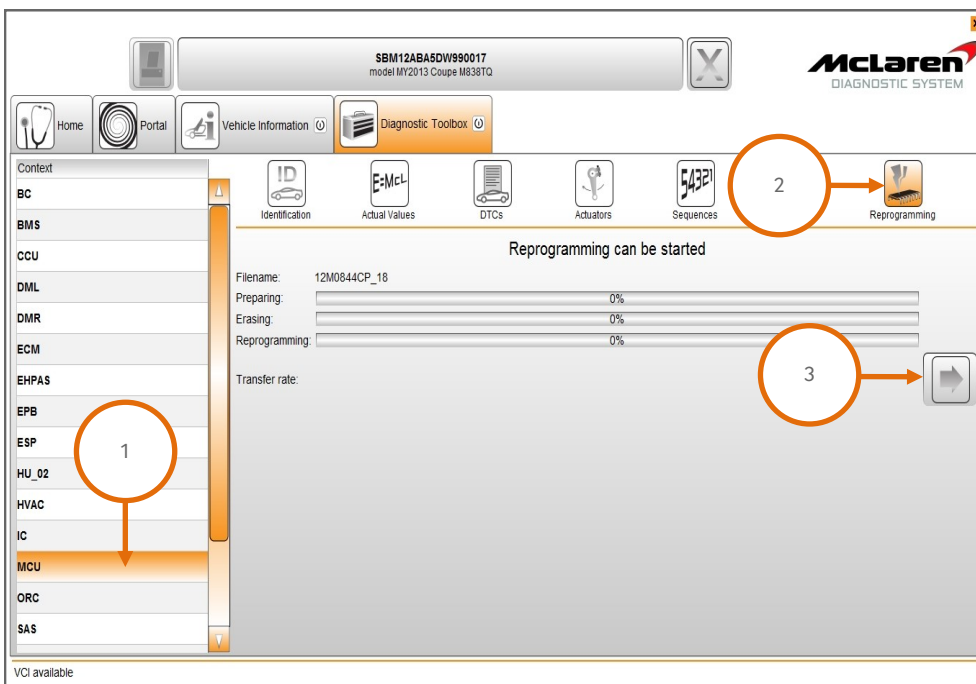


12. Cycle the ignition (off on off on) and wait for 30 seconds. Place the vehicle into a sleep mode, and then establish the vehicle back into ignition state 5.

MCU Software update:

Care Point: During the MCU programming phase the front fans will run all the time and should stop once the programming is finished.

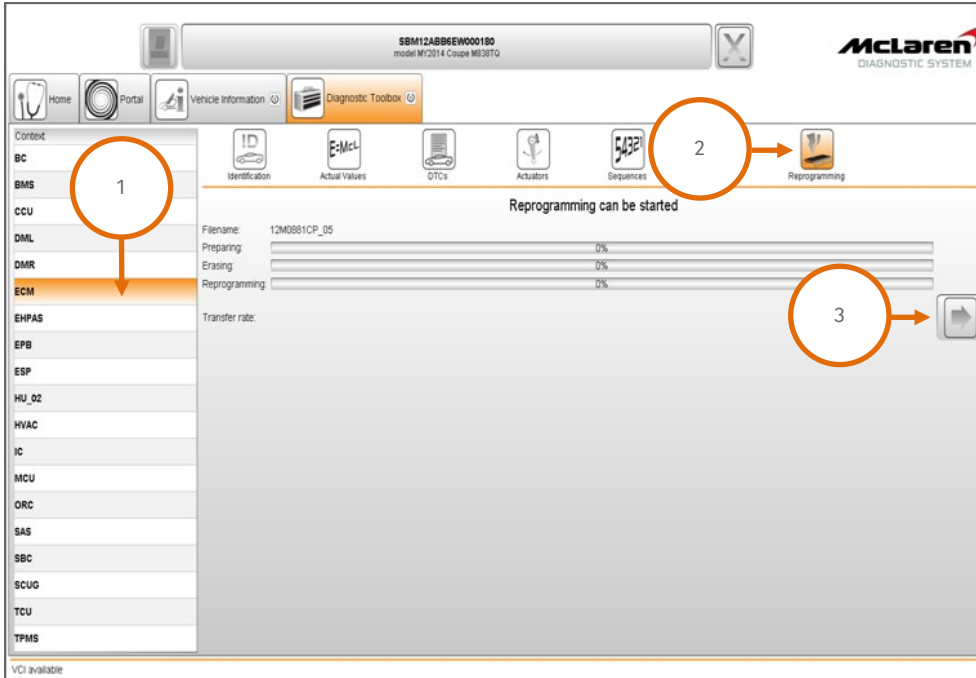
13. Select MCU (1), then Reprogramming (2) followed by the arrow button (3). Select YES to initiate programming.



ECM Software update:

Care Point: Only vehicles that haven't been updated to Platform 7.1 will require ECM software update.

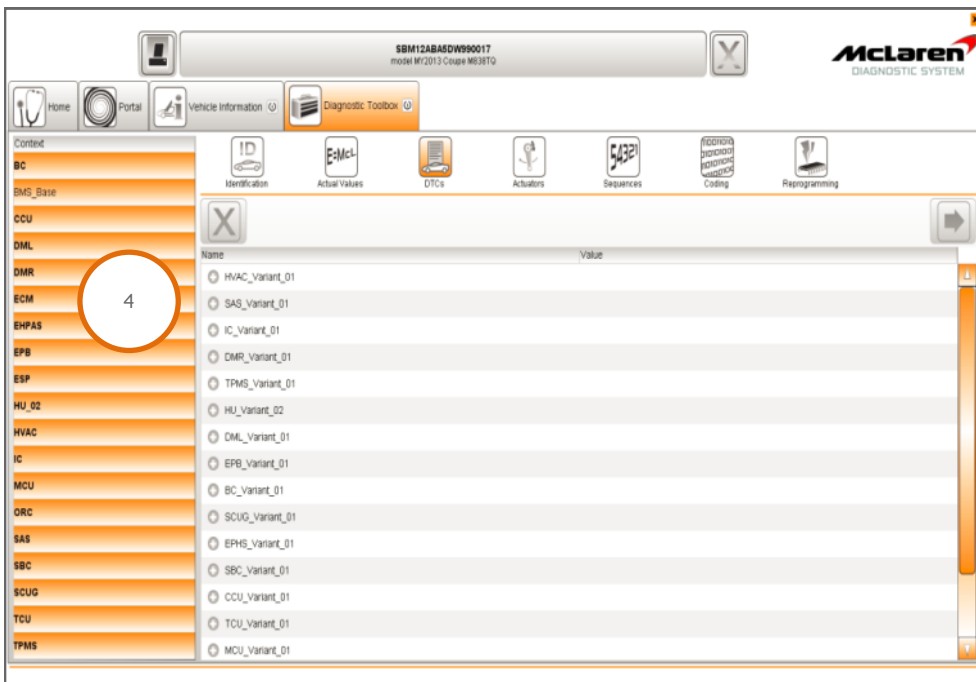
13. Select ECM (1), then Reprogramming (2), followed by the arrow button (3). Select YES to initiate programming.



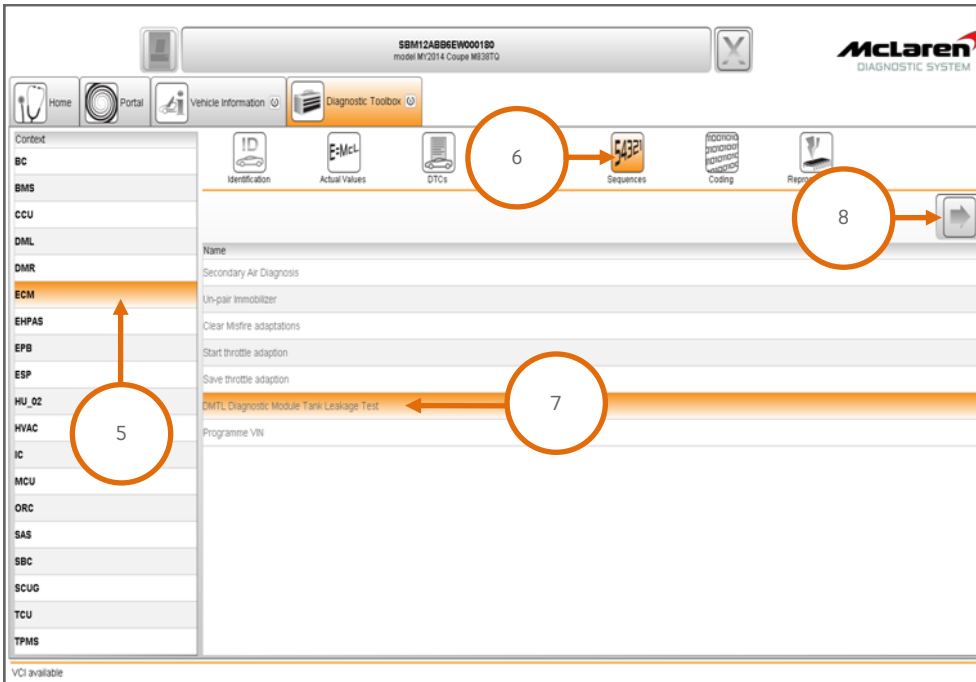
14. Cycle the ignition (off on off on) and wait for 30 seconds. Place the vehicle into a sleep mode, and then establish the vehicle back into ignition state 5.

15. Highlight all modules within the Context field (4) and perform a global clear of all DTC's.

Care Point: The MCU will display some DTCs after programming which are not erasable. As long as there is no warning messages in the IC the vehicle is fine. The DTCs will self-clear after few drive cycles.

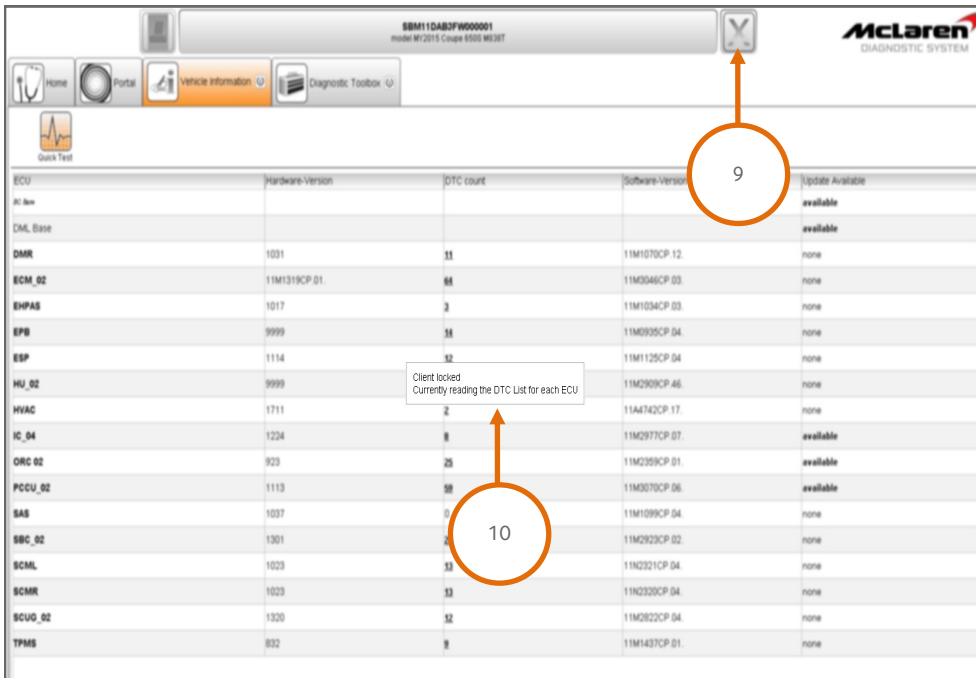


16. Select ECM (5), the select Sequences (6), then DMTL Diagnostic Module Tank Leakage Test (7), followed by the arrow button (8).



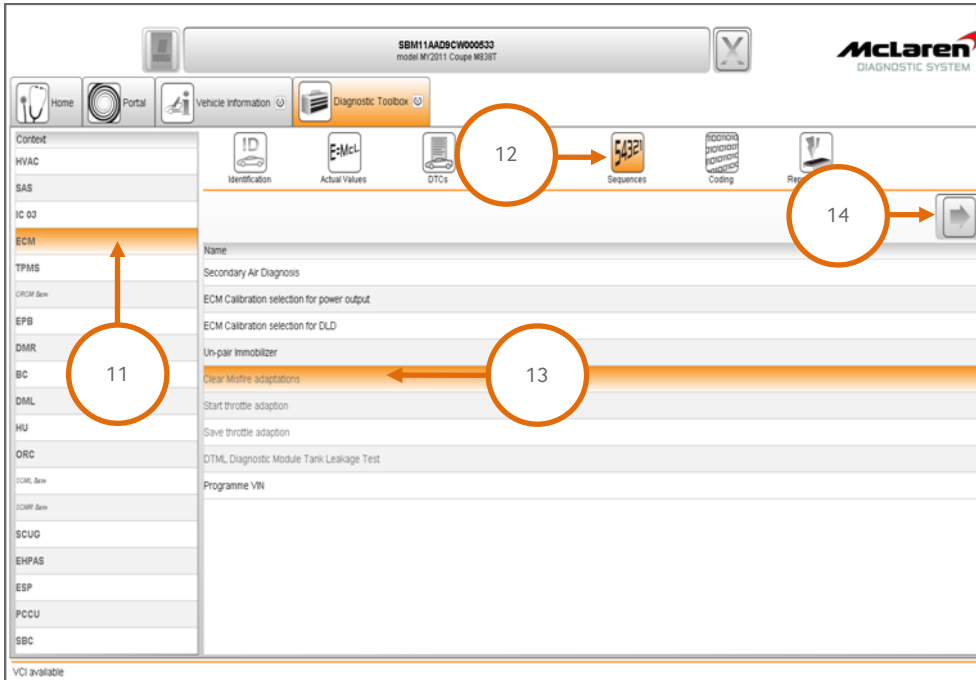
17. Close the current MDS diagnostic session by pressing at the X button (9).

18. Due to the amount of data transferred, the MDS might be locked (10) for more than 5 minutes. Please do not switch off your MDS during this time.

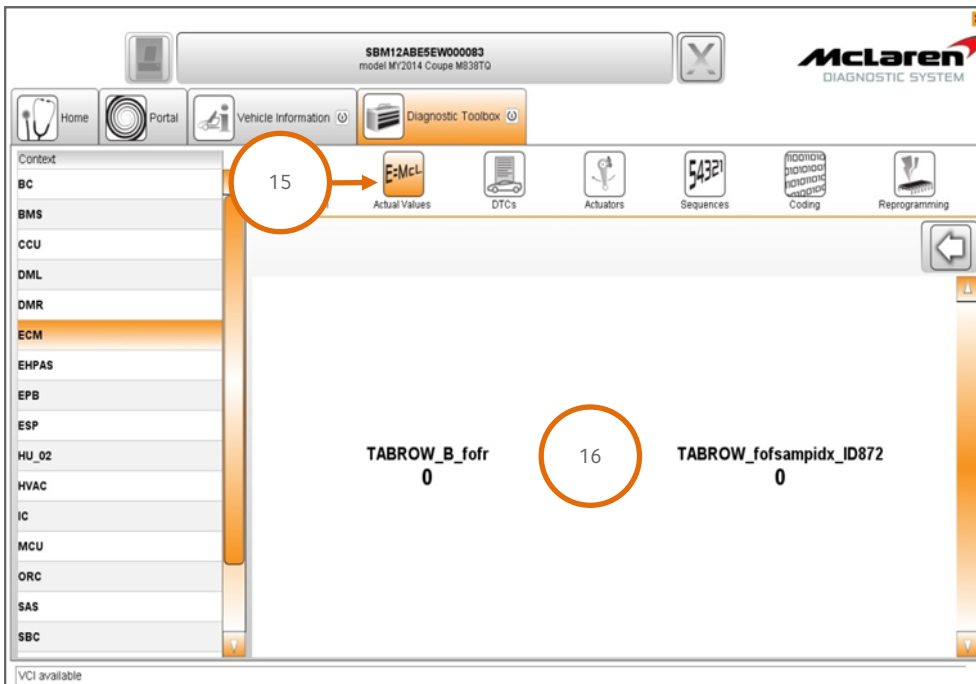


19. Install components in reverse order.

- 20. Start a new MDS session in MDS Offline mode (refer to SIB 11 S 011 McLaren Diagnostic System (MDS) Offline).
- 21. Select ECM (11), then Sequences (12), then Clear Misfire adaptations (13), followed by the arrow button (14).



- 22. Select Actual Values (15), select the following values as per the screenshot below (16), then select the play button to access the required data screen.



23. 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: The McLaren P1™ requires you to reach the 4000rpm gradually.

24. 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).

25. Once the TABROW_fofsampidx_ID872 reaches 11, the TABROW_B_fofr Counter will display 1; the misfire adaptations have been learned. The TABROW_B_fofr Counter will display Zero and then start to count again further fuel cuts offs, this is correct and no further action is required.

26. 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 8.0	BGMB0901A33A4A07	3.00 hours

PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY	ORDER PROCESS
N/A	N/A	N/A	N/A