

## Document Information

**Location:** Powertrain Systems - HVAC

**Topic:** Set temperature not achieved or incorrect air/vent distribution

**Condition:** Intermittent and/or permanent

**Diagnostic Trouble Codes:** N/A

## Measure

This procedure can be applied to calibrate the HVAC system in the event of a customer complaint for HVAC performance issues and/or intermittent 'CAL' message displayed.

**Care Point:** The HVAC air filter housing also includes the fresh air re-circulation flap/motor. It is not uncommon that during maintenance of the HVAC air filter it is refitted in a position where it can restrict the movement of the re-circulation flap which in turn causes various HVAC operation concerns. Ensure this area is checked first.

**Care Point:** To ensure the HVAC calibration is successfully completed, save HVAC actual values in .pdf before and after the calibration procedure. Review and compare the minimum and maximum individual HVAC motor values to confirm that there has been a change. Depending on the initial position of the motors, the change in values may only be minimal but it shows that they have responded to the calibration sequence.

There are two different HVAC calibration procedures based on the model:

- **All Sports Series vehicles, 720S (Coupe & Spider), Senna, New GT**

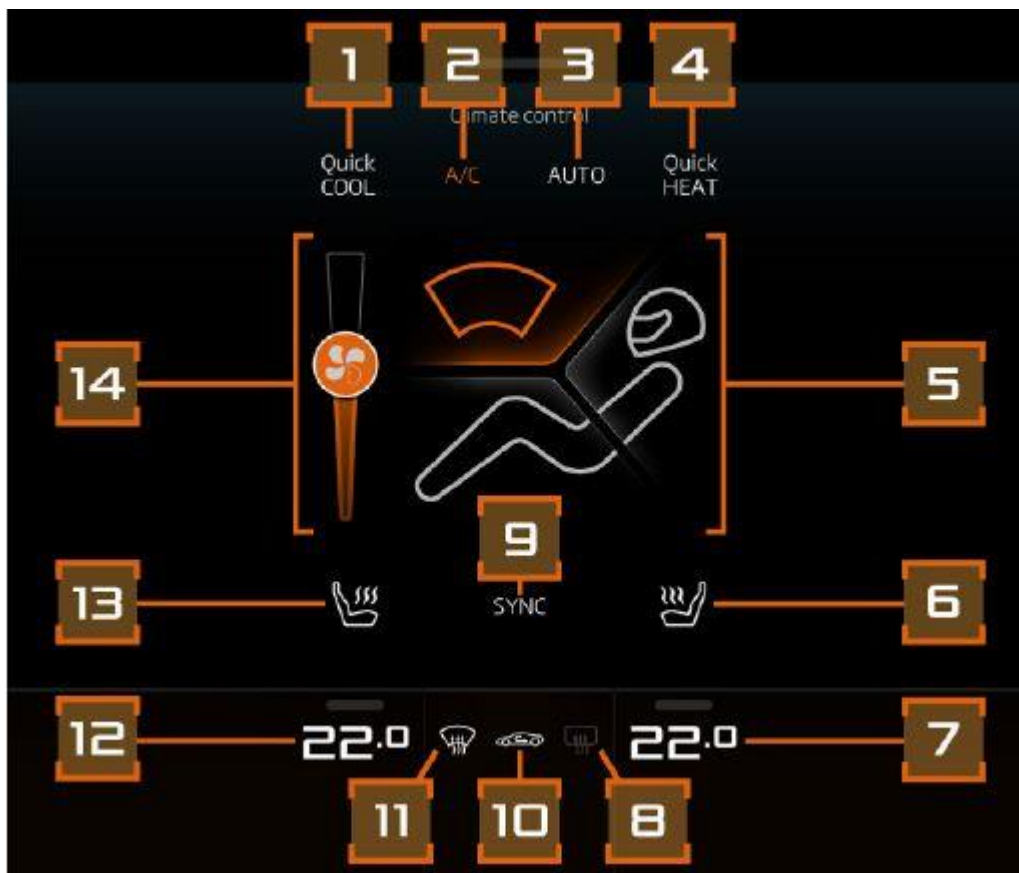
1. Turn the ignition ON
2. Unplug one of the HVAC motors (whichever is easier to access). Refer to the attachment area of this KA to identify the locations of the motors

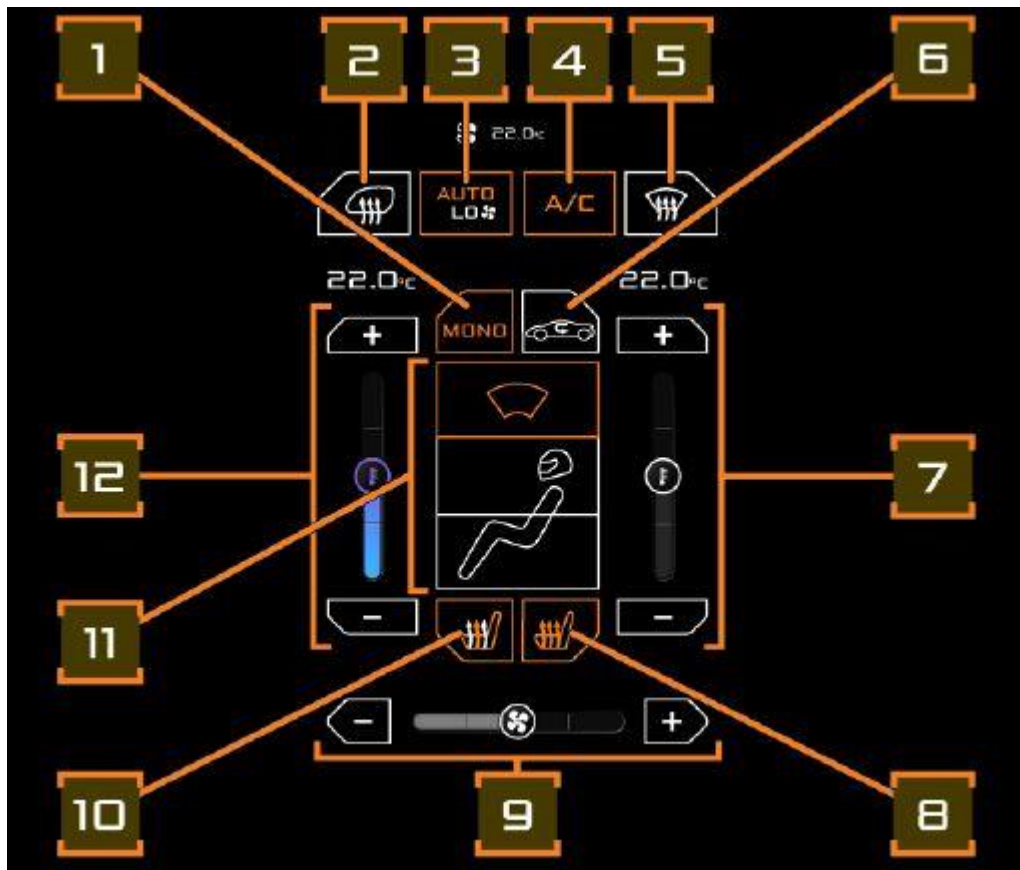
3. Cycle through the following A/C settings for at least 60 seconds. During this operation the error message message "Climate Control Fault" will be displayed on the driver's display

a) Air distribution buttons (5)

b) Recirc button (10)

c) Temperature control (left and right) (7, 12)





4. Then, connect the MDS and ensure there is at least one DTC stored for the disconnected motor. If no DTC is present, repeat Step 3 and this time cycle through the settings for longer time

5. Adjust the fan to minimum speed (do not turn it OFF), this will enable you to hear the flap motors calibrating when the ignition is turned ON at step 8

6. Turn the ignition OFF and allow the vehicle to go into sleep

7. Re-connect the motor that was disconnected at step 2

8. Turn the ignition ON

9. At this stage, the HVAC system will start calibrating and you should be able to hear all the motors moving during this time. Allow approximately 3-4 minutes for the calibration to complete

10. Once the calibration is finished (no message is displayed to confirm calibration is finished), check operation of the HVAC system

11. If the HVAC is operating as designed, delete all the DTCs and return the vehicle to the customer

■ 12C (Coupe & Spider), 625C, 650S (Coupe & Spider), 675LT (Coupe & Spider), P1

1. Turn the ignition ON

2. Turn the HVAC ON

3. Disconnect one of the motors (whichever is easier to access). Refer to the attachment area of this KA to identify the locations of the motors.

4. Re-connect the motor that was disconnected

5. The message 'CAL' will be displayed, and the system will start calibrating

6. Once the calibration is completed, check operation of the HVAC system

7. If the HVAC is operating as designed, delete all the DTCs and return the vehicle to the customer

## Parts Information

N/A

## Warranty Information

Resolution Category

Casual Part Number: N/A

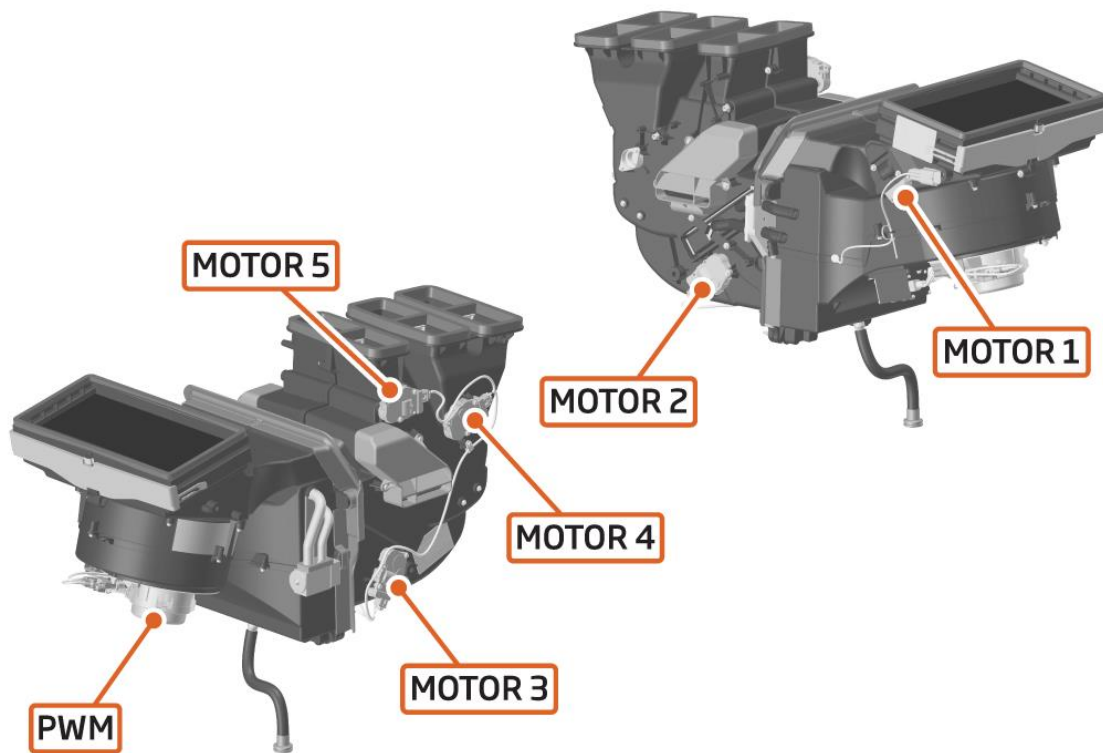
Casual Part Name: N/A

Casual Issue: N/A

Rectification: N/A

Time: N/A

## Attachments



Motor descriptions:

Motor 1: Fresh/Re-circulation flap

Motor 2: Right side temperature blend flap

Motor 3: Left side temperature blend flap

Motor 4: Face, side vent flap

Motor 5: Demist/Foot flap

## KA Updates Information

17/09/2020: Few additional comments added to the top calibration method.

**This document is uncontrolled when printed. Before use, check the Knowledge Base within the McLaren Retailer Portal to verify that this is the current version.**