

Document Information

Location: Powertrain

Topic: McLaren Artura Cold Climate Engine Idling (CCV system and oil tank protection)

Condition: Permanent

Diagnostic Trouble Codes: N/A

Measure

McLaren Artura vehicles should not be left idling in very cold conditions (ambient temperatures below -5 degrees Celsius) solely to maintain or recharge the 12V battery.

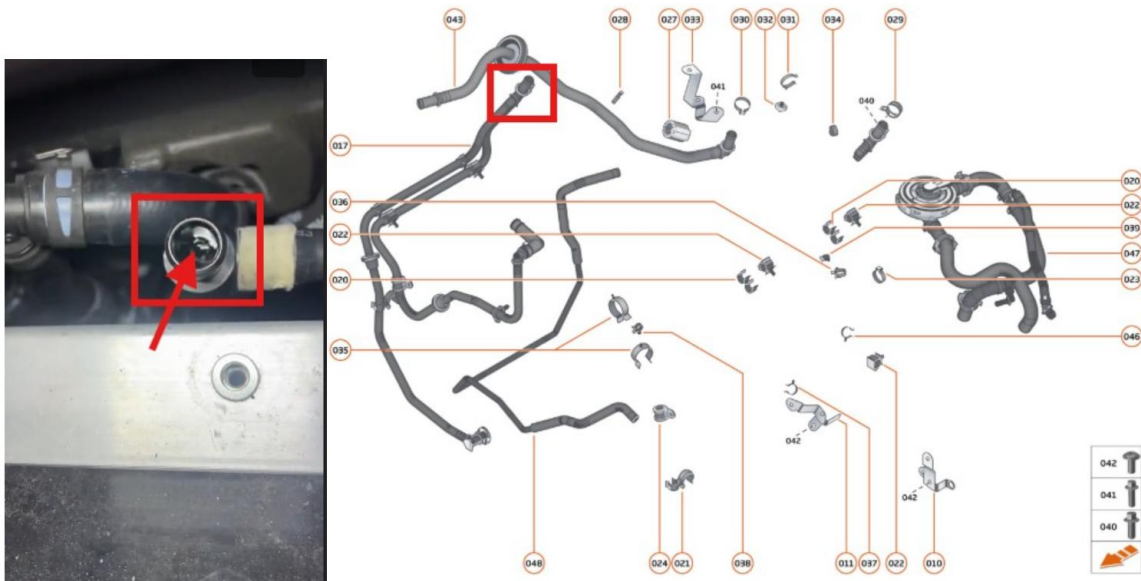
Artura vehicles do not need to be idled to maintain the 12V battery, the high voltage battery system has been developed to monitor and maintain the low voltage battery when necessary.

If a vehicle is to be left running in cold climates, sustained and regular idling cycles should be avoided. Short drives should be taken instead to bring the engine up to operating temperature and allow the cooling, lubrication, after-treatment and CCV systems to operate as expected.

Cold climate static running combined with low oil and coolant temperatures, and a lack of utilisation of the engine full-load breather system, may lead to water vapour/condensate build up in the CCV system pipework, PCV and one-way valves through reduced evaporation rates.

Consequently, there is a risk of oil - water emulsification, or freezing of any trapped condensate leading to blocked or sticking valves.

Additionally, any build-up of condensate in system low points could also potentially cause system blockages, and a risk of hose, pipe or oil canister damage.



If testing or servicing requirements dictate that an extended cold idle is required; the following CCV system components should be monitored and inspected throughout and after the test:

- CCV Pipework and Hoses: Inspect hoses for visual damage or internal blockage; including checks for frozen sections, paying particular attention to system low points and directly above one-way-valves. Remove any blockages or replace any damaged parts as required
- PCV Valve: Remove and inspect the PCV valve and associated hoses, checking for condensation build up and signs of oil - water emulsification. Replace the PCV if evidence of emulsification found
- Oil Tank: Check and replace the oil tank if showing any signs of deformation, cracking or expansion

Parts Information

- 16FA662CP VALVE-PCV
- 16FC831CP OIL TANK-ENGINE-MID-RHS

Attachments

N/A