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Document Information

Location: Fuel Delivery System

Topic: DMTL 20 or 40 thou test not ok

Condition: Permanent

Diagnostic Trouble Codes:

P044200 Evaporative leak check :: 20 thou leak

P144100 DMTL Pump Module :: Reference frequency low

P240A00 DMTL Heater circuit cycle error :: Electrical range check :: open circuit failure

P240200 DMTL pump :: Electrical range check Short circuit to battery

P240400 DMTL Pump Module :: Current not Plausible

P241800 DMTL change :: over valve :: Electrical range check Open Circuit

Measure

If any of the following symptoms are present, there is potentially a leak in the fuel evaporative system:

- Fuel filling pump cut off when re-fuelling
- Engine warning light
- DMTL related DTC
- DMTL test not ok

Firstly, check for leaks around the fuel system during the DMTL leak test. Hissing or a smell of fuel vapour during this time may indicate where it is leaking from. Make sure there are no signs of damage to the filler neck.

Remove the charcoal/carbon cannister and weigh it without the bracketry attached, compare to weight of new part, or confirm weight tolerance through TR. If found overweight, this may have been saturated because of leakage through the purge valve.

Therefore, check the purge valve is holding pressure by attaching Miti-vac tool in opposite direction to arrow (As per below image) and draw vacuum to test for leak.



If the concern is still present after these checks, then proceed to investigate with smoke test by following the below steps:

1. Disconnect the breather from the fuel filler neck
2. Insert the smoke machine into the breather hose that runs to the tank
3. Attach a length of hose to the now open spigot that the breather hose was fitted, block

this hose with a bolt/jubilee

4. Open the filler door and tape cling film over, sealing the filler neck door opening so that you can see the area the door would close into but not blocking the filler itself
5. Fill the fuel tank with smoke for about 15 mins and see if you have any leakage
6. Check under the car (carbon canister vent valve), into the inlet manifold (Purge valve) and fuel filler neck (remove the cling film)
7. If you have no leakage turn off the smoke and run the DMTL test sequence again, the pressurising action of the DMTL test will push the accumulated smoke in the tank out of the area being detected as the small 20 or 40 thou leak

If DMTL issue is still present, please raise Technical Request for further support.

If the DMTL pump is found to be the cause, this can be ordered separate from the carbon canister using part number 14KA106CP.

Parts Information

DMTL pump 14KA106CP

Repair Time

N/A

Attachments

N/A

KA Update Information

16/09/2024- Initial release

24/05/2025 - KA Audited - Template updated

26/11/2025 - Added DMTL pump parts information

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