

M17x with CEL for P012800 in the ME Control Unit: "The Coolant Temperature is Below the Specified Temperature"

Topic number	LI20.10-P-072886
Version	14
Function group	20.10 - Coolant pump, coolant thermostat
Date	8/16/22
Validity	M177 and M178 Engines
Reason for change	Formatting

Complaint

CEL on with Code P012800 "The Coolant Temperature is Below the Specified Temperature"

Cause

Under investigation.

This is not an issue that affects drivability or performance and is not a safety concern. The vehicle remains safe to operate with this code, but the measures listed in the "Remedy" section are recommended.

Remedy

Due to formatting issues please see [remedy instructions](#) in attachments

Attachments	
File	Description
LI20.10-P-072886 Remedy Instructions.pdf	Remedy Instructions

WIS-References		
Document number	Title	Note
AR20.00-P-1142-04A	Pour in coolant and bleed coolant system	none

Symptoms
Power generation > Engine management > Indicator lamp > Engine diagnosis > lit

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A1772005500			THERMOSTAT	1		X
A1772000815			Thermostat	1		X

Operation numbers/damage codes

XENTRY TIPS

Op. no.	Operation text	Time	Damage code	Note
---------	----------------	------	-------------	------

Please read the below instructions carefully. How you proceed is based on the vehicle's prior history.

1. If the vehicle has visited the workshop before with this complaint, had this LI applied, **AND** had the thermostat replaced:
 - DO NOT proceed any further. Open a PTSS case and take no further action
2. If the vehicle has visited the workshop before with this complaint, had the LI applied, but **DID NOT** have the thermostat replaced:
 - Replace the thermostat and bleed the system as outlined in AR20.00-P-1142-04A, evacuate the system for 20-30 minutes instead of the 5 minutes specified in step 22
 - a) NOTE: Please use all the tools specified in the AR document
 - b) NOTE: There are two valid thermostats to choose from in the parts section of this LI. Please verify which PN is applicable for the vehicle being worked on via EPC/XPPI
 - After bleeding perform the "WARM START" and "COLD START" tests below
 - If the code does not reappear after the tests, release the vehicle. If the code reappears, open a PTSS case for assistance.
3. If the vehicle has not visited the workshop before with this complaint:
 - Clear the code and perform the "WARM START" and "COLD START" tests below
 - If the code does not reappear after the tests, release the vehicle. If the code reappears, process the vehicle starting at step 2(a) above.

NOTE: Each of the following tests must be performed twice

WARM START

- Begin with the engine coolant temperature at approximately 50 degrees C
- Activate the AC system, if defrost is not in use open the windows
- Drive the car normally until a coolant temperature of 75 degrees C is achieved
- Depress the accelerator pedal 50% for ~5 seconds (partial acceleration)
- Let off the accelerator pedal and let the car coast for ~10 seconds
- Continue to drive the car normally

COLD START

- Drive for ~7 miles (normal driving)
- Shut off the engine in a parking lot (or similar), wait 30 seconds, then restart and continue driving
- Depress the accelerator pedal 50% for ~5 seconds (partial acceleration)
- Let off the accelerator pedal and let the car coast for ~10 seconds
- Continue to drive the car normally