

Yellow "Coolant" Message In Instrument Cluster

Topic number	LI20.00-P-073432
Version	1
Function group	20.00 - General
Date	8/4/21
Validity	Model series 167 with M177LS2 48 V
Reason for change	

Complaint

Yellow "Coolant" message in instrument cluster

The following fault code may also be present in the PTCU:

P2B2A7A - The speed of the 'Coolant pump' component part is too high. A leak or defective seal was detected.

Notes on fault code:

The fault code affects the 15W pump at the rear right of the vehicle. It is located on the side of the transmission (Fig. 1, position C).

This fault code is set because there is air in the system, so it performs an emergency dry run function.

Cause

Various possible causes

Remedy

PLEASE READ ALL THE STEPS AND NOTES BELOW BEFORE PERFORMING ANY STEPS.

Then perform the following steps. Document any findings and discrepancies, where applicable, and create a PTSS case if the following do not remedy the complaint.

Step 1:

Disassemble underfloor paneling and wheel well interior trim at front right to gain access to the two low temperature pumps.

Take note of or photograph the part number of the pump holder, along with the production date.

Step 2:

Check the installation position of the pumps at the front right of the low-temperature circuit (Fig. 1) :

SPECIFIED PART NUMBER AT EACH LOCATION:

XENTRY TIPS

Outer: A 000 500 5500 (Fig. 1, position A)

Inner: A 000 500 3800 (Fig. 1; position B)

- a. If installation position is OK, skip to step 6
- b. If installation position is not OK, continue to step 3

Step 3:

Photograph the pump part numbers at the front right so that the QR-code/DMC code and the part number are visible and legible. Please label the pictures with the original installation position, upload them to the case and proceed to step 4.

Operation step 4:

Order new pump(s) (where the item numbers differ from the specified part number)

SPECIFIED PART NUMBER:

Outer: A 000 500 5500 (Fig. 1, position A)

Inner: A 000 500 3800 (Fig. 1; position B)

Operation step 5:

Use a vacuum bleeder to fill the cooling system of the low-temperature circuit

Operation step 6:

Vent the cooling system of the low-temperature circuit using XENTRY.

Notes on venting:

Please ensure that add-on 19830 for DVD 03/21 or 19831 for DVD 06/21 is installed on XENTRY

The cooling system of the low-temperature circuit is vented in various stages:

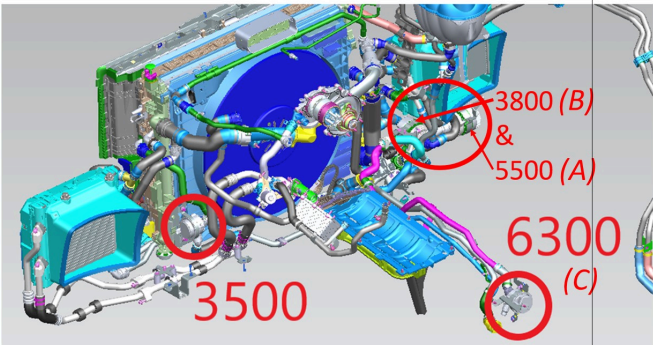
To start with, the pumps at front right are actuated at approx. 30%, then 50% and finally at 100%. At 100% actuation, the valve of the coolant circulating the pump at the side of the transmission is opened (Fig. 1; position C).

Please ALWAYS observe the following points during the venting procedure:

- The pumps at front right (Fig. 1, position A and B) always run together. These pumps must NEVER be operated separately of each other for actuation or for test purposes.
- The pump at the rear of the transmission must run permanently after being actuated. If the pump only briefly starts-up and then stops again, it is in an emergency dry run mode because there is too much air in the system. Please repeat the venting routine. If the rear pump at the side of the transmission remains in the emergency dry run mode, STOP and create a PTSS case, add the previously discovered findings to it and escalate it.
- If venting is successful, very little coolant flow noise will be present. It may be necessary to perform the venting routine several times. If after 3 venting attempts the system still has air in it, STOP create a PTSS case, add the previously discovered findings to it and escalate it.

Attachments

XENTRY TIPS

File	Description
<p data-bbox="111 271 674 331">Positionen der Pumpen Niedertemperaturkreislauf_location of pumps lower temperature cir-</p>  <p data-bbox="111 701 200 730">cuit.jpg</p>	<p data-bbox="801 271 1160 300">Figure 1; positions A, B and C</p>

Symptoms
Power generation > Engine cooling system > Indicator lamp > Illuminates yellow
Power generation > Engine cooling system > Display message > Coolant - Serviced Required

Control unit/fault code	
Control unit	Fault text
N127 - Control unit 'Powertrain' (PTCU)	P2B2A7A - The rpm of component 'Coolant pump' is too high. Leakage or a defective seal was detected.

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			20701**	Please refer to this TIPS document in the dealer text