

SIB 17 06 17

2022-12-08

COOLANT LEAK FROM LOW TEMPERATURE COOLING CIRCUIT (N63R)

This Service Information Bulletin (Revision 7) replaces SI B17 06 17 dated July 2020

What's New:

- Production dates and engine variants added
- · Parts, Claim information updated

MODEL

| E-Series | Model Description | Production Date | Affected Option |
|----------|------------------------------|-----------------------|-----------------|
| | | | Code |
| G05 | (X5 Sports Activity Vehicle) | Up to August 26, 2019 | N63M engine |
| G06 | (X6 Sports Activity Vehicle) | Up to August 26, 2019 | N63M engine |
| G07 | (X7 Sports Activity Vehicle) | Up to August 26, 2019 | N63M engine |
| G12 | (7 Series Sedan) | Up to May 31,2018 | N63R engine |
| G30 | (5 Series Sedan) | Up to May 31,2018 | N63R engine |

SITUATION

Coolant leaking from the engine compartment. Traces of coolant leaking from the expansion tank of the low temperature cooling system.



Coolant in the low temperature cooling circuit may also have an acrid smell and discoloration (1).

CAUSE

Aluminum corrosion in the charge air intercoolers, or in the radiator for the low temperature cooling is causing an unfavorable chemical reaction to the coolant.

CORRECTION

Replace the radiator and both charge air coolers for the low temperature cooling circuit. Allow all the coolant in the system to drain during repairs (do not clamp off hoses).

PROCEDURE

- 1. Replace the low temperature radiator.
 - Refer to Repair Instruction 17 11 006 "Remove and install/ replace low temperature cooler".
- 2. Replace the left charge air cooler.

- Refer to Repair Instruction 17 51 001 "Removing and installing/replacing the left charge air cooler".
- 3. Replace the right charge air cooler.
 - Refer to Repair Instruction 17 51 002 "Removing and installing/replacing the right charge air cooler".
- 4. Refill and bleed the low temperature cooling system.
 - Refer to Repair Instruction 17 00 040 "Bleed the cooling system and check for water tightness with the special tool (coolant circuit for low temperature)".
- 5. Test drive the vehicle for one hour (10 FRU) so that the engine is subjected to many load changes and coolant system activation cycles.
- 6. After the test drive, let the engine idle (with proper ventilation) for one more hour (1 FRU to monitor only).
- 7. Drain the low temp cooling system again and refill with new coolant.
 - Refer to Repair Instruction 17 00 011 "Draining and topping up the coolant for the low-temperature circuit".

PARTS INFORMATION

Obtain and confirm the part numbers for your specific vehicle by entering the chassis number in either ETK or AIR which takes into account specific equipment and/or options.

| Part Number: | Description: | Quantity: |
|-----------------|--------------------------------------------------|-----------|
| 17 11 8 484 639 | Radiator (G12 4/17 or later production, G30 all) | 1 |
| 17 51 8 619 390 | Charge air cooler cylinders 1-4 (G12 and G30) | 1 |
| 17 51 8 619 391 | Charge air cooler cylinders 5-8 (G12 and G30) | 1 |
| 17 11 8 697 883 | Radiator (G05/07) | 1 |
| 17 51 8 660 688 | Charge-air cooler Cyl. 1-4 (G05/07) | 1 |
| 17 51 8 660 689 | Charge-air cooler Cyl. 5-8 (G05/07) | 1 |
| 07 14 9 390 155 | Hex bolt with washer M8X28-10 9-ZNS3 | 2 |
| 51 71 6 966 566 | Hexagon screw with flange M10X45 | 6 |

Bulk Materials - Sublet

G05, G07, G12 and G30 up to 7/31/2018

| Part Number | Description | Quantity |
|-----------------|-----------------------------------|------------------|
| 82 14 1 467 704 | Antifreeze (1 Gallon Concentrate) | Sublet as needed |

G05, G06 and G07 from 8/1/2018

| Part Number | Description | Quantity |
|-----------------|-----------------------------------------------------|------------------|
| 83 19 2 468 442 | BMW Antifreeze/Coolant (1 Gallon Concentrate HT-12) | Sublet as needed |
| Or: | | |
| 83 19 5 A32 851 | HT-12 Antifreeze RTU (Bulk 1/10 Liter) (Pre-mix) | Sublet as needed |

CLAIM INFORMATION

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| Defect Code: | 1751017600 | Charge air cooler dirty/blocked |
|--------------|------------|---------------------------------|

Refer to AIR for the corresponding flat rate unit (FRU) allowances.

| Labor Operation Description | | Labor Allowance |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 17 51 005 Removing and installing or replacing both intercoolers (Main work) | | Refer to AIR |
| Or: | | |
| 17 51 505 | Removing and installing or replacing both intercoolers (Plus work) | Refer to AIR |
| And, as necessary: | | |
| 17 00 509 | Check the cooling system for watertightness with the special tool (high temperature) | Refer to AIR |
| And/or: | | |
| 17 00 529 Check the cooling system for watertightness with the special tool (low-temperature coolant circuit) | | Refer to AIR |
| And: | | |
| 17 99 000 | Work time for removing and installing or replacing low temperature cooler (Associated work in conjunction with 17 51 005/505) | 5 FRU (G12/G30) |
| Or: | | |
| 17 11 576 | Remove and install/ replace low temperature cooler (G05/07) | Refer to AIR |
| And: | | |
| Work time to test drive and idle the vehicle with new coolant | | 11 FRU |
| And: | | |
| Work time for the second (2 nd) drain and refill low- temperature circuit (17 00 580) procedure (after test drive and idling) | | 19 FRU |

If you are using a Main labor code for another repair, use the Plus code labor operation 17 51 505 instead of 17 51 005.

Work time labor operation codes 17 99 000, 11 99 000 and 00 50 000 are not considered Main labor operations.

Sublet – Bulk Materials (RO and Claim Comments Required)

| Sublet Code 4 | See the sublet reimbursement calculations below | Reimbursement for the repair-related bulk material (Do not use the BMW part number for claim submission) |
|------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| | calculations below | |

Sublet reimbursement calculation for claiming the applicable repair-related bulk material (BMW part number) is at the dealer net price amount for the proportional quantity used plus your center's handling.

BMW Antifreeze/Coolant: Claim the corresponding sublet dollar amount for the quantity needed to replace what was drained. The one-gallon concentrate part number at the proportional quantity needed for a 50/50 coolant/water solution.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.

Overlapping Labor Procedure – Other Repairs

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If invoicing the AIR flat rate labor operation codes for other repair work results in overlapping labor, for those flat rate labor operations that are affected, you are able to:

• Replace the stated AIR FRU allowance with a reduced FRU value to eliminate the overlapping labor.

For help in identifying the overlapping labor, please refer to the AIR FRU Plausibility Check (Overlapping Labor Tool) that is located in the AIR Client.

Eligible other repair work being claimed under a different defect code will require separate punch times.

On the repair order and in the claim comment section, please identify and itemize those labor operations being claimed with a reduced FRU value.

FEEDBACK REGARDING THIS BULLETIN

| Technical Feedback | To submit feedback for the technical topics of this bulletin: Submit your feedback in the rating box at the top of this bulletin |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warranty Feedback | To submit feedback for the CLAIMS section of this bulletin: Submit an IDS ticket to the Warranty Department, or use the chat available in the Warranty Documentation Portal |
| Parts Feedback | To submit feedback for the PARTS section of this bulletin: Submit an IDS ticket to the Parts Department |