



SIB 17 03 20

2020-05-07

## COOLANT LINE QUICK DISCONNECTS LEAK IN LOW TEMPERATURES AT OR BELOW -15°C (5°F)

### MODEL

G01 (X3 Sports Activity Vehicle)	G02 (X4 Sports Activity Coupe)	G05 (X5 Sports Activity Vehicle)	G07 (X7 Sports Activity Vehicle)
built to March 31, 2019			

### SITUATION

- The coolant reservoir in the high or low temperature cooling system is low
- There may be a coolant leak under the vehicle
- There may be a check control message (ID166) to top up coolant
- The low temperature cooling system have a low level warning indicator. One or more faults may be stored related to the low temp cooling system:
  - DME - 20A201 - charge air cooling system: Coolant pump protective function due to dry running active
  - DME - 20A209 - charge air cooling system: Coolant pump protective function due to dry running active
  - IHKA - 80120A - Compressor: Switch off due to excess pressure in the refrigerant circuit
- The outside temperature at the time of the complaint **is at or below -15° C (5° F)**

### CAUSE

The O-rings that seal the quick disconnect coolant lines will not seal properly when **outside temperatures are at or below -15° C (5° F)**.

### CORRECTION

Replace the coolant lines listed in the attachments.

All coolant lines listed must be replaced if there are signs of coolant leaking from any of the listed coolant lines (see attachments).

**This repair is only intended for vehicles that have a confirmed coolant leak and the outside temperature is at or below -15° C (5° F).**

### PROCEDURE

Refer to the vehicle/engine appropriate attachment

### PARTS INFORMATION

Please refer to the corresponding attachment for the hose replacements that apply to the vehicle and engine combination requiring this repair.

Part Number	Description	Quantity
83 19 2 468 442	BMW Antifreeze/Coolant (1 gal) - HT-12	See below

### WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks.

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<b>Defect Code:</b>	<b>1712144800</b>	<b>Coolant hose including quick-release coupling not leaktight</b>
<b>Labor Operation</b>	<b>Description</b>	<b>Labor Allowance</b>
00 00 006	Performing vehicle test (with vehicle diagnosis system – checking faults) (Main work)	Refer to AIR
Or:		
00 00 556	Performing vehicle test (with vehicle diagnosis system – checking faults) (Plus work)	Refer to AIR
And:		
61 21 528	Connect an approved battery charger/power supply (indicated in AIR as Charging battery)	Refer to AIR
And:		
17 00 509	Check the cooling system for watertightness with the special tool (High Temperature)	Refer to AIR
And:		
17 00 529	Check the cooling system for watertightness with the special tool (Low Temperature)	Refer to AIR

If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead of 00 00 006.

Or:

<b>Labor Operation</b>	<b>Description</b>	<b>Labor Allowance</b>
17 00 009	Check the cooling system for watertightness with the special tool (High Temperature)	Refer to AIR
Or:		
17 00 509	Check the cooling system for watertightness with the special tool (High Temperature)	Refer to AIR
And		
17 00 529	Check the cooling system for watertightness with the special tool (Low Temperature)	Refer to AIR

If you are using a Main labor code for another repair, use the Plus code labor operation 17 00 009 instead of

And:

<b>Labor Operation</b>	<b>Description</b>	<b>Labor Allowance</b>
Refer to AIR	Replace all the coolant hoses listed in the repair Procedure attachment that applies. Refer to AIR for available flat rate labor operations for specific hoses and other required work to allow access including work time (WT with separate punch times) as necessary.	Refer to AIR

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

Please identify and itemize those flat rate labor operations with reduced FRU values on the repair order and in the claim comment section.

And:

### Sublet – Bulk Materials

<b>Sublet Code 4</b>	See sublet reimbursement calculation below	Reimbursement for replacing the drained quantity of antifreeze/coolant (Bulk container reference P/N <b>83 19 2 468 442</b> , one gallon container. Do not use this part number for claim submission)
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Sublet calculation: BMW antifreeze/coolant (1 gallon concentrate bulk container reference **P/N 83 19 2 468 442**) for approximately 8.5 - 10.5 liters (17 – 21 liters total depending on model and options) that is needed for this repair (50/50 mixture) at dealer net plus your center's handling.

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

#### Supporting Materials

[picture\\_as\\_pdf B170320 G05 and G07 N63M.pdf](#)

[picture\\_as\\_pdf B170320 G01 and G02 B58M.pdf](#)

[picture\\_as\\_pdf B170320 G05 and G07 B58C.pdf](#)

[picture\\_as\\_pdf B170320 G01 and G02 B46O.pdf](#)

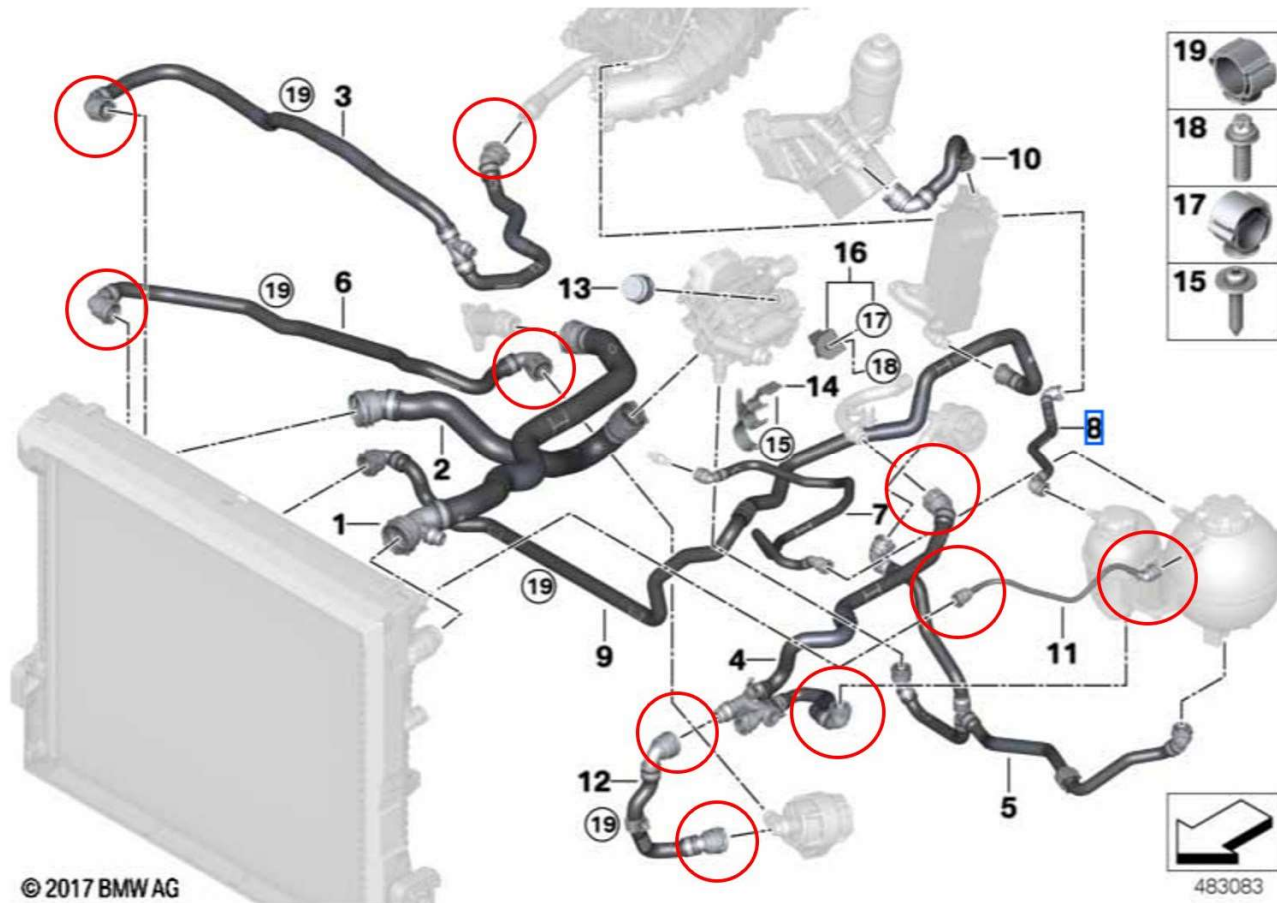
## LEAKING COOLANT LINES IN LOW OUTSIDE TEMPERATURES

### G01/G02 with the B46O

Check the cooling system (high and low temperature) for any active leaks following Repair Instruction **17 00 009 Check the cooling system for watertightness with the special tool (with tester).**

Repair any leaks found in the cooling system during this check.

### Checking the Quick Disconnects



Check the quick disconnects (red circles) on the above hoses for any traces of coolant loss (wet or dried coolant). Replace **all** hoses listed below if **any** of the quick disconnects (circled red) show signs of coolant loss.

List of affected hoses and replacement part numbers.

ETK #	Cooling Circuit	Old Part Number	New Part Number	Description
11	HT	17 12 7 535 527 or 17 12 7 562 164	<b>17 12 9 894 763</b> or <b>17 12 5 A02 2D6</b>	Hose radiator
12	LT	17 12 7 535 570	<b>17 12 9 894 744</b>	Hose heat management module
6	LT	17 12 7 535 540	<b>17 12 9 894 739</b>	Hose radiator
3	LT	17 12 7 535 542	<b>17 12 9 894 741</b>	Hose coolant radiator - intake plenum
4	LT	17 12 7 535 543	<b>17 12 9 894 753</b>	Coolant return line intake system

Refill and properly vent the cooling system following Repair Instruction **17 00 039 Vent the cooling system and check for watertightness with the special tool** and **17 00 040 Vent the cooling system and check for watertightness with the special tool (low-temperature coolant circuit)**.

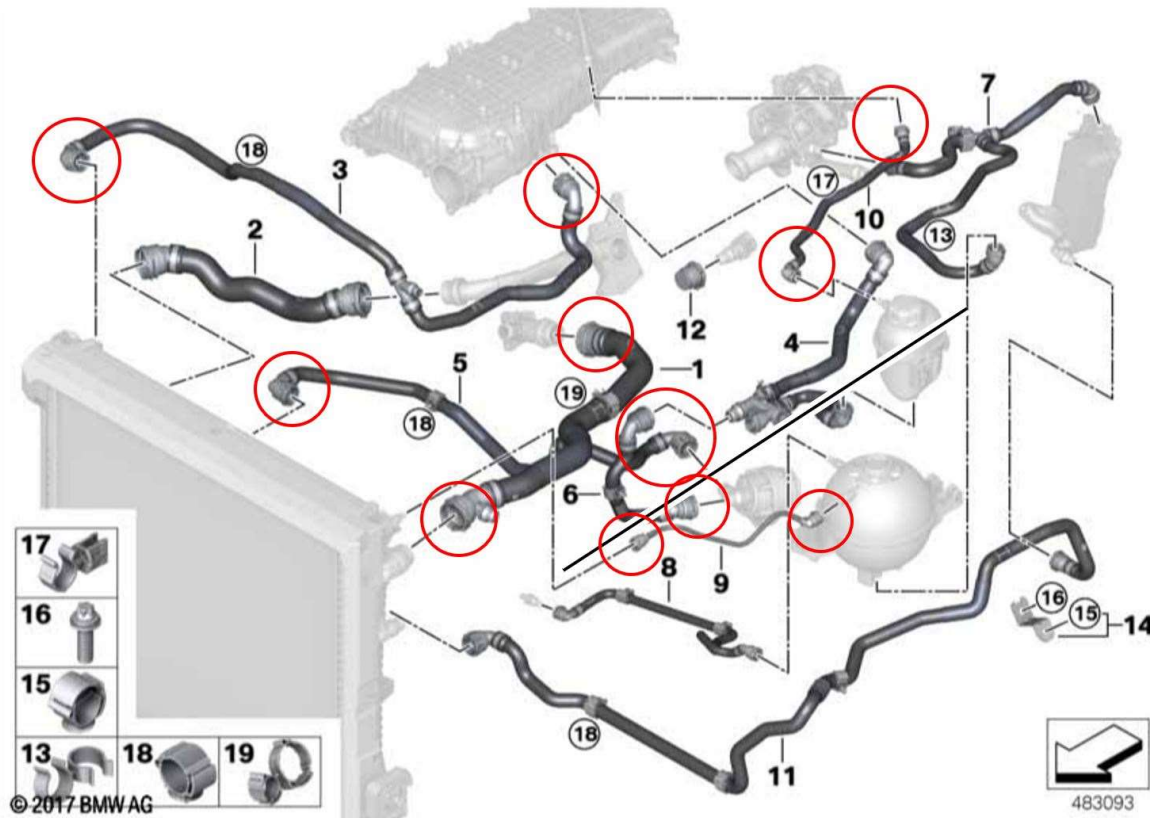
## LEAKING COOLANT LINES IN LOW OUTSIDE TEMPERATURES

### G01/G02 with the B58M

Check the cooling system (high and low temperature) for any active leaks following Repair Instruction **17 00 009 Check the cooling system for watertightness with the special tool (with tester).**

Repair any leaks found in the cooling system during this check.

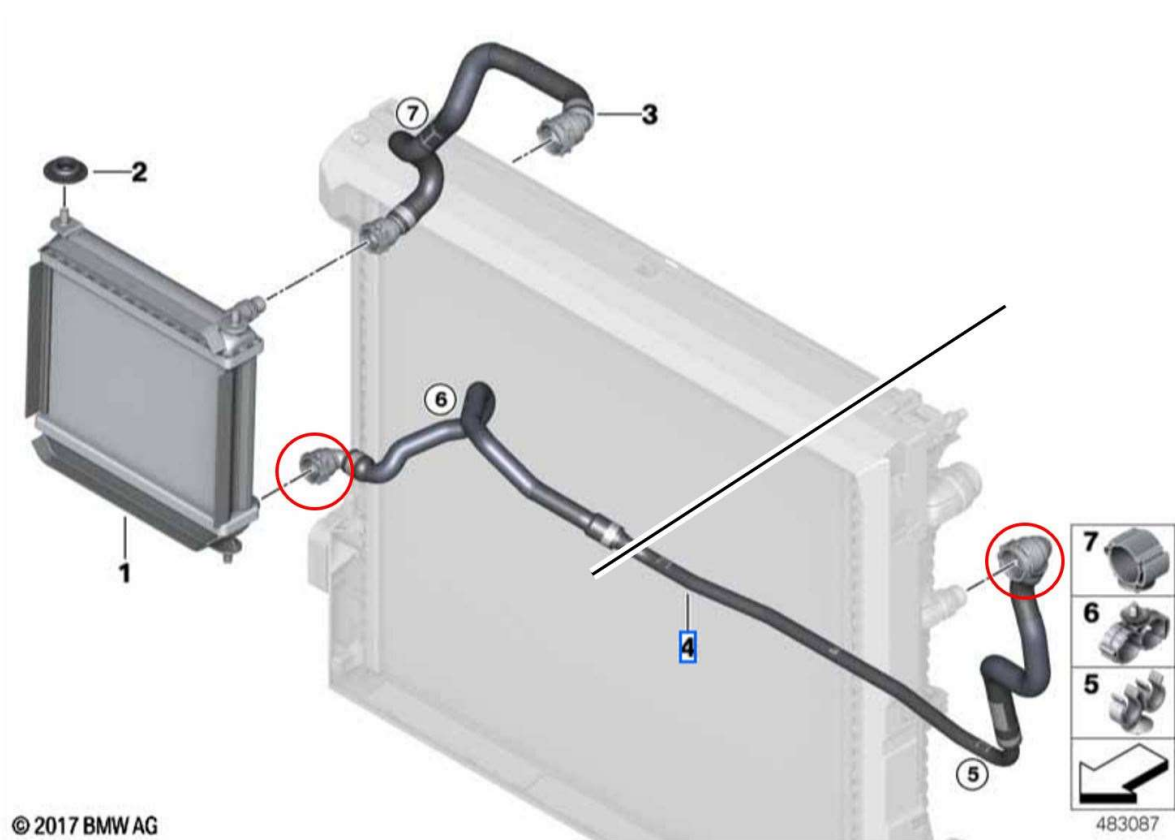
### Checking the Quick Disconnects



Check the quick disconnects (red circles) on the above hoses for any traces of coolant loss (wet or dried coolant). Replace **all** hoses listed below if **any** of the quick disconnects (circled red) show signs of coolant loss.

ETK #	Cooling Circuit	Old Part Number	New Part Number	Description
9	HT	17 12 7 535 527 or 17 12 7 562 164	<b>17 12 9 894 763</b> or <b>17 12 5 A02 2D6</b>	Hose radiator
6	LT	17 12 7 535 570	<b>17 12 9 894 744</b>	Hose heat management module
5	LT	17 12 8 673 201	<b>17 12 9 894 740</b>	Hose radiator
10	LT	17 12 7 535 567	<b>17 12 9 894 754</b>	Hose for expansion tank - Intake plenum
3	LT	17 12 7 535 568	<b>17 12 9 894 743</b>	Hose coolant radiator - Intake plenum

Vehicle may also be equipped with only one additional radiator. Check at the quick disconnects (circled red) for signs of coolant loss.



List of affected hoses and replacement part numbers.

ETK #	Cooling Circuit	Old Part Number	New Part Number	Description
4	HT	17 12 7 535 548	<b>17 12 9 894 749</b> or <b>17 12 5 A02 2D7</b>	Hose radiator

Refill and properly vent the cooling system following Repair Instruction **17 00 039 Vent the cooling system and check for watertightness with the special tool** and **17 00 040 Vent the cooling system and check for watertightness with the special tool (low-temperature coolant circuit)**.



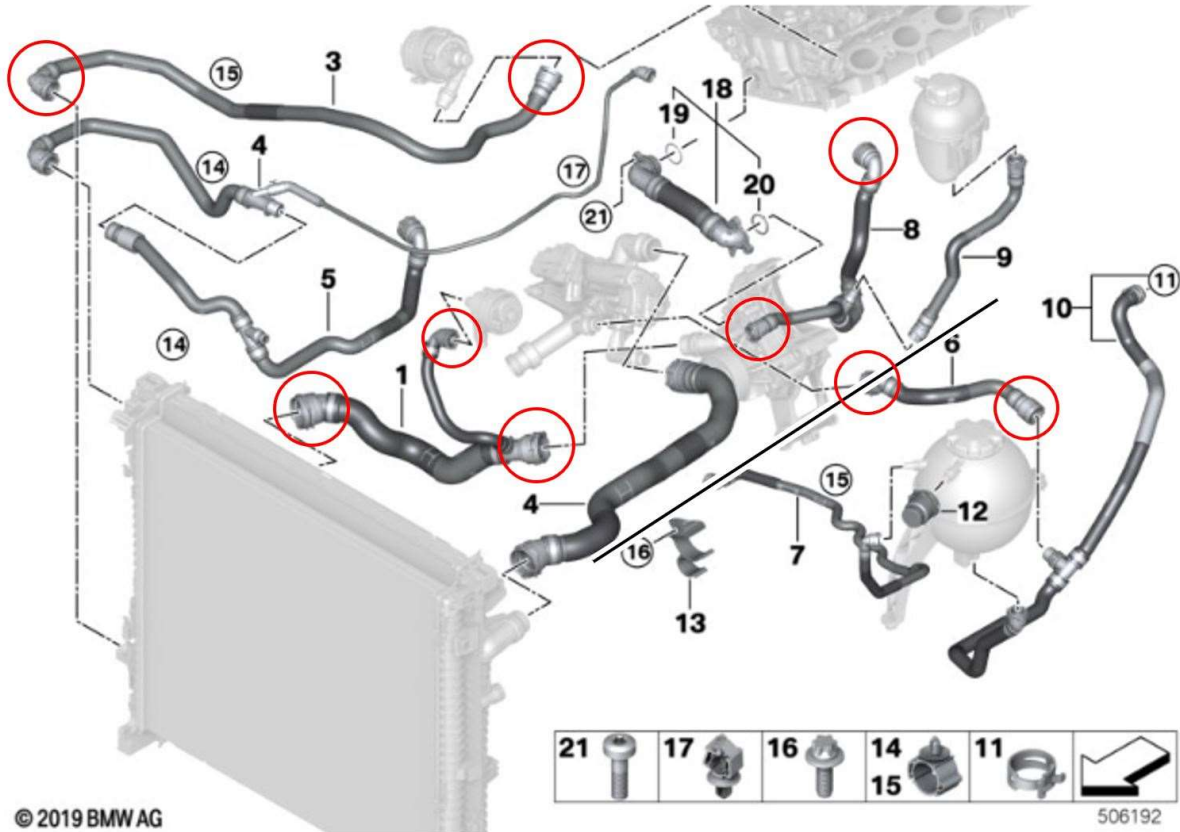
## LEAKING COOLANT LINES IN LOW OUTSIDE TEMPERATURES

### G05/G07 with the B58M

Check the cooling system (high and low temperature) for any active leaks following Repair Instruction **17 00 009 Check the cooling system for watertightness with the special tool (with tester).**

Repair any leaks found in the cooling system during this check.

### Checking the Quick Disconnects



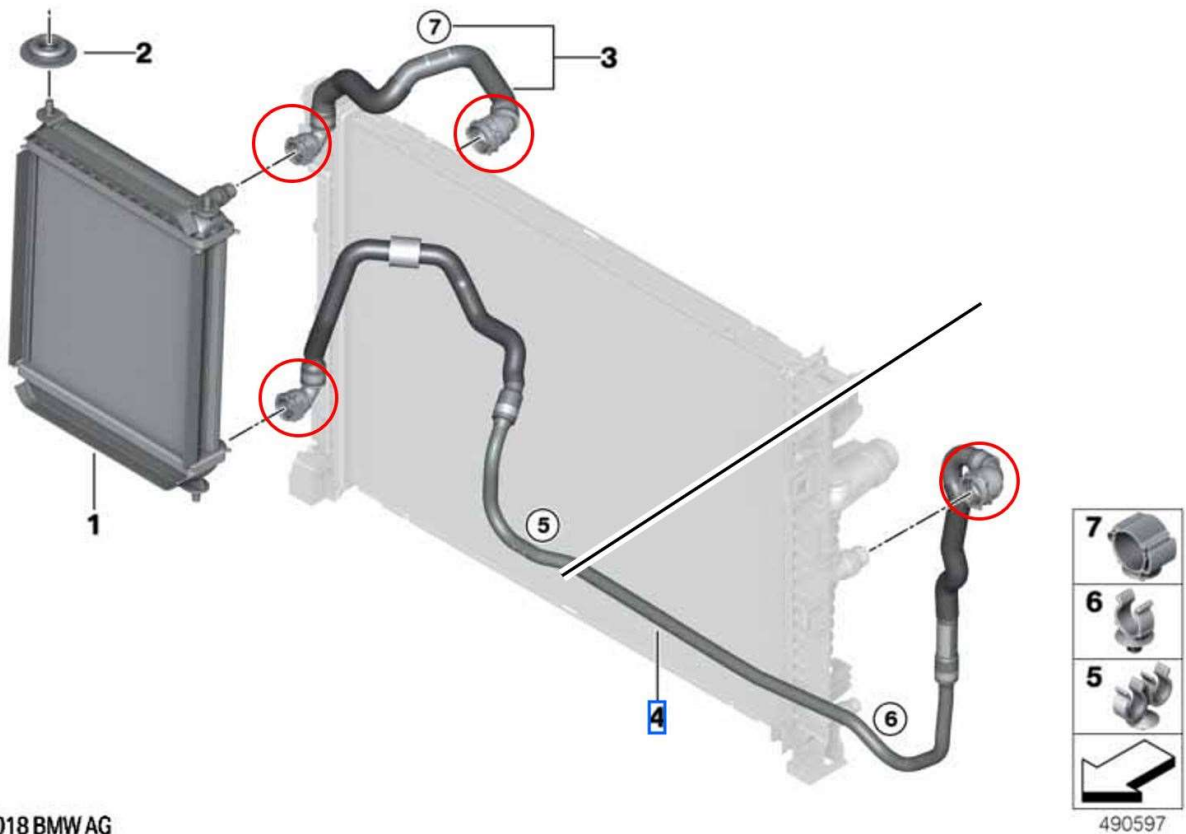
Check the quick disconnects (red circles) on the above hoses for any traces of coolant loss (wet or dried coolant). Replace **all** hoses listed below if **any** of the quick disconnects (circled red) show signs of coolant loss.

List of affected hoses and replacement part numbers.

ETK #	Cooling Circuit	Old Part Number	New Part Number	Description
3	LT	17 12 8 689 251	<b>17 12 9 894 780</b>	Hose electric water pump
1	LT	17 12 7 935 687	<b>17 12 9 894 783</b>	Hose radiator - water pump
6	LT	17 12 8 654 340	<b>17 12 9 894 779</b>	Hose heat management module
5	LT	17 12 8 742 670	<b>17 12 9 894 777</b>	Line radiator
8	LT	17 12 8 689 254	<b>17 12 9 894 784</b>	Hose electric water pump



Vehicle may also be equipped with only one additional radiator. Check at the quick disconnects (circled red) for signs of coolant loss.



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List of affected hoses and replacement part numbers.

ETK #	Cooling Circuit	Old Part Number	New Part Number	Description
3	HT	17 12 8 654 326	<b>17 12 9 894 789</b>	Hose, external radiator
4	HT	17 12 7 935 683 or 17 12 7 562 166	<b>17 12 9 797 624</b> or <b>17 12 5 A02 2E9</b>	Line radiator

Refill and properly vent the cooling system following Repair Instruction **17 00 039 Vent the cooling system and check for watertightness with the special tool** and **17 00 040 Vent the cooling system and check for watertightness with the special tool (low-temperature coolant circuit)**.

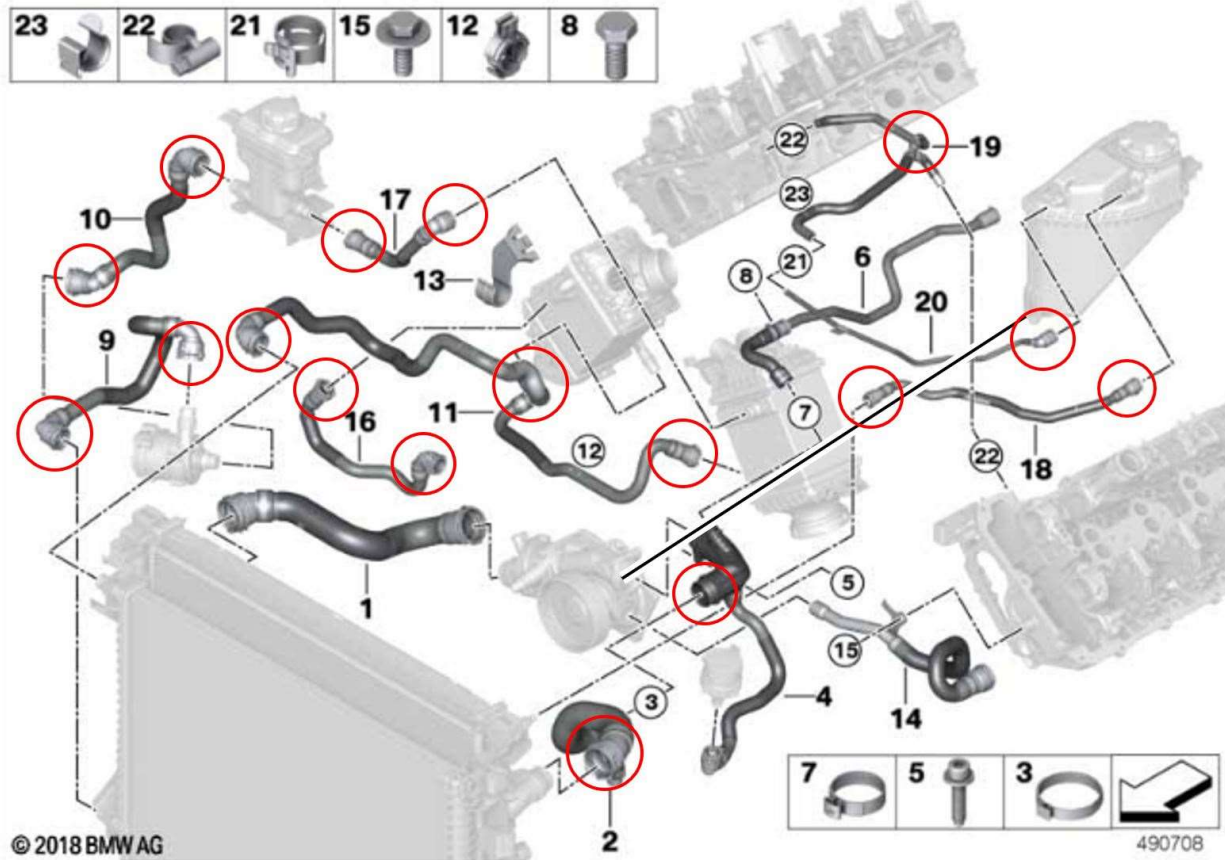
## LEAKING COOLANT LINES IN LOW OUTSIDE TEMPERATURES

### G05/G07 with the N63M

Check the cooling system (high and low temperature) for any active leaks following Repair Instruction **17 00 009 Check the cooling system for watertightness with the special tool (with tester).**

Repair any leaks found in the cooling system during this check.

### Checking the Quick Disconnects

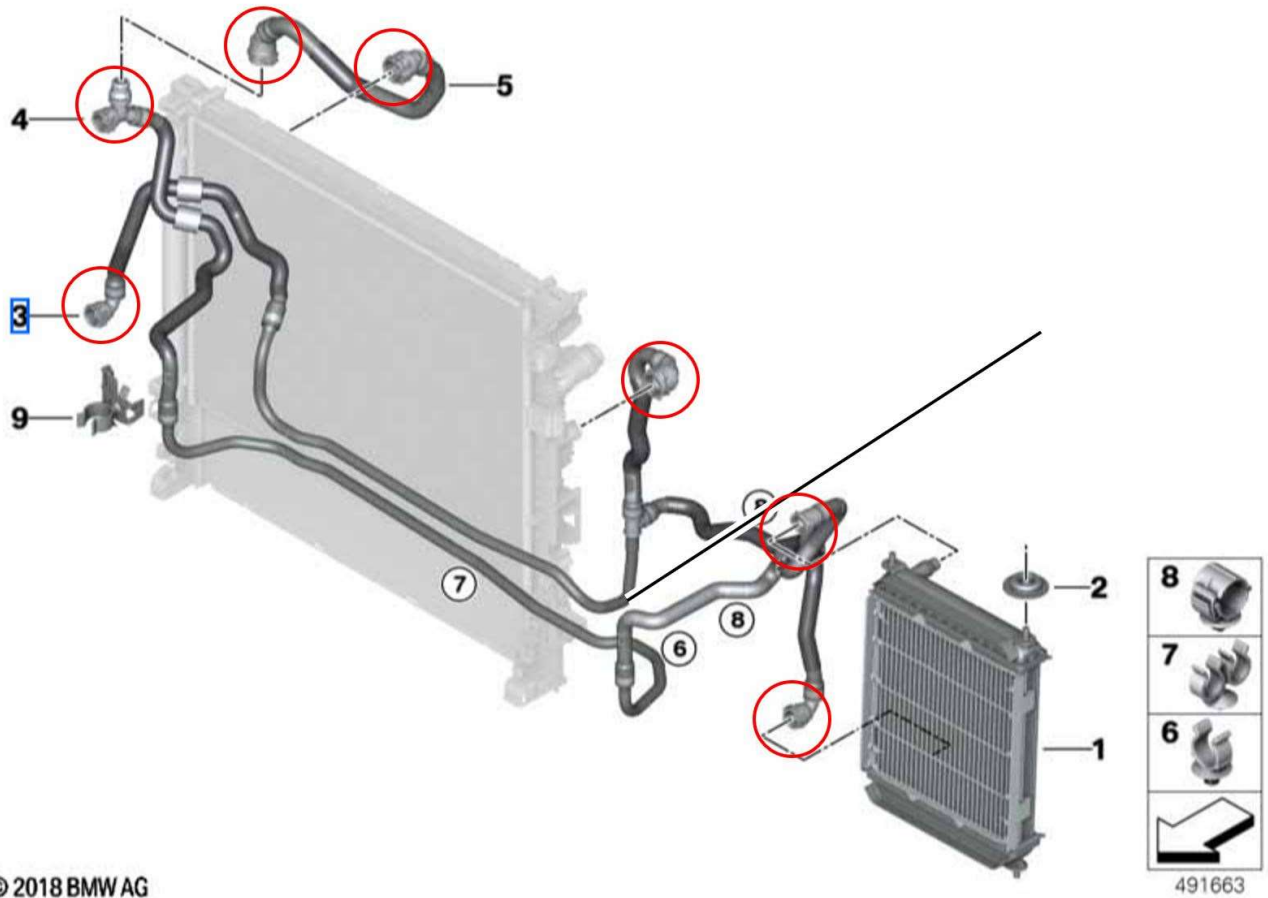


Check the quick disconnects (red circles) on the above hoses for any traces of coolant loss (wet or dried coolant). Replace **all** hoses listed below if **any** of the quick disconnects (circled red) show signs of coolant loss.

List of affected hoses and replacement part numbers.

ETK #	Cooling Circuit	Old Part Number	New Part Number	Description
18	HT	17 12 8 664 104	<b>17 12 9 894 775</b>	Hose radiator
20	HT	17 12 7 536 481	<b>17 12 9 894 790 or 17 12 5 A02 2F0</b>	Pipe, expansion tank - cylinder head
2	HT	17 12 7 536 483	<b>17 12 9 894 786</b>	Hose radiator
9	LT	17 12 7 536 487	<b>17 12 9 894 765</b>	Hose electric water pump
11	LT	17 12 8 689 252	<b>17 12 9 894 778</b>	Hose radiator
16	LT	17 12 7 536 489	<b>17 12 9 894 788</b>	Hose charge air cooler
17	LT	17 12 7 536 490	<b>17 12 9 894 787</b>	Hose charge air cooler
10	LT	17 12 7 536 491	<b>17 12 9 894 766</b>	Hose for expansion tank

The vehicle may also be equipped with two additional radiators. Check at the quick disconnects (circled red) for signs of coolant loss.

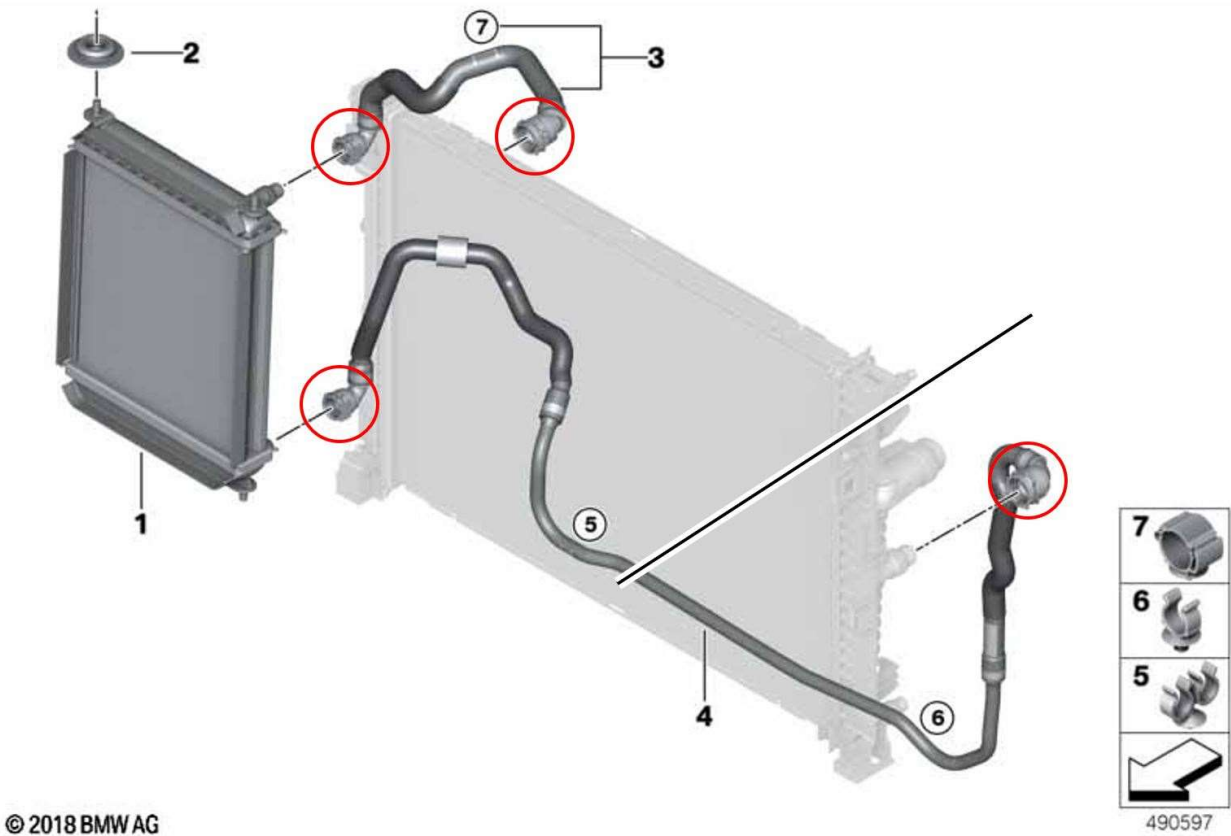


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List of affected hoses and replacement part numbers (one additional radiator).

ETK #	Cooling Circuit	Old Part Number	New Part Number	Description
4	HT	17 12 7 536 472	<b>17 12 9 894 773</b>	Hose, external radiator
3	HT	17 12 8 697 856 or 17 12 7 562 167	<b>17 12 9 797 613</b> or <b>17 12 5 A02 2F4</b>	Line external radiator
10	HT	17 12 8 697 862	<b>17 12 9 797 619</b> or <b>17 12 5 A02 2F5</b>	Line external radiator

Vehicle may also be equipped with only one additional radiator. Check at the quick disconnects (circled red) for signs of coolant loss. **NOTE:** If the vehicle is equipped with two additional radiators this check isn't necessary (these hoses will not be installed in the vehicle).



List of affected hoses and replacement part numbers (one additional radiator).

ETK #	Cooling Circuit	Old Part Number	New Part Number	Description
4	HT	17 12 7 935 683 or 17 12 7 562 166	<b>17 12 9 797 624</b> or <b>17 12 5 A02 2E9</b>	Line radiator
3	HT	17 12 8 654 354	<b>17 12 9 894 790</b> or <b>17 12 5 A02 2F0</b>	Line radiator

Refill and properly vent the cooling system following Repair Instruction **17 00 039 Vent the cooling system and check for watertightness with the special tool** and **17 00 040 Vent the cooling system and check for watertightness with the special tool (low-temperature coolant circuit).**