SI B11 17 18
Engine

January 2019
Technical Service

RECALL CAMPAIGN 18V-755: EXHAUST GAS RECIRCULATION (EGR) COOLER INSPECTION (VERSION 2)

Please perform the procedure outlined in this Service Information on all affected vehicles before customer delivery. In the event the customer has already taken delivery of the vehicle, please perform the procedure the next time the vehicle is in the shop.

This Service Information bulletin replaces SI B11 17 18 **dated October 2018**

What's New:

• Procedure, Parts and Warranty information

IMPORTANT:

This preliminary version of the Recall provides only the EGR cooler inspection procedure.

With an expected low failure rate (approximately 10%), the vast majority of vehicle's in dealer inventory would be inspected without any further repairs needed.

For vehicles which fail the EGR cooler inspection: Submit a TeileClearing PuMA case for additional information.

The Final customer notification mailing is anticipated to start at the end of March.

MODEL

F02 (740Ld)	F10 (535d)	F15 (X5 xDrive 35d)
F25 (X3 xDrive 28d)	F30 (328d)	F31 (328d Sports Wagon)

SITUATION

Over time, the Exhaust Gas Recirculation cooler (EGR cooler) could develop an internal coolant leak. The coolant could mix with normal soot / sediment and, in combination with high temperatures normally present in the EGR module, could create flammable deposits. This may lead to localized damage in the intake system, and could increase the risk of a fire.

AFFECTED VEHICLES

This Recall Campaign involves various Model Year 2013-2018 BMW vehicles with the N47T and N57T diesel engine that have been produced from September 12, 2012 to June 29, 2017.

Vehicles which require this Recall Campaign to be completed will show it as "Open" when checked either in AIR, the "Service Menu" of DCSnet (Dealer Communication System) or with the Key Reader

CORRECTION

Inspect the EGR cooler for contamination or clogging due to coolant loss inside the EGR cooler.

PROCEDURE

The procedure requires a borescope with a right angle (90˚) camera lens.

The mandatory specifications for the borescope are:

- Flexible line
- • Maximum diameter of the camera head (sensor) = 6mm,
- "Side View" and / or "Dual View" type
- Optimum length of the camera head is 36 mm with Side View
- Camera element in the lower third of the camera head
- Focus: Minimum 2 cm
- An adjustable light source
- Photo documentation must be possible.
- Mirror elements that are screwed on/attached **are not suitable** for side view (panel-plastic mirror)

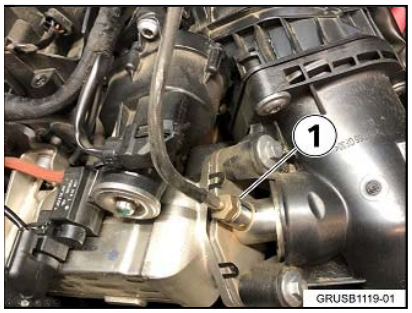
The BMW recommended Endoscope information can be found in SI B04 14 18.

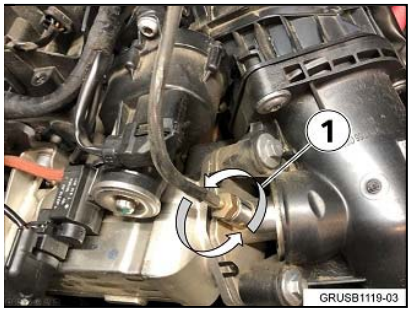
One Endoscope can be ordered per center, this tool can be charged back to the corresponding warranty claim entry as a sublet on the first affected vehicle inspected under this recall.

ONLY ONE ENDOSCOPE CAN BE ORDERED/CLAIMED PER CENTER.

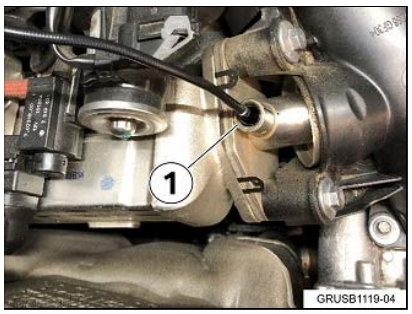
STEP ONE

- Switch off the ignition
- Inspection should be done on a cooled down engine (under 50˚)
- **NOTE:** Photo documentation of the EGR cooler must be attached to the Repair Order after Inspection.

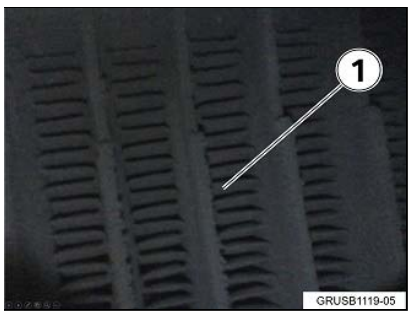
	• Measure the temperature at the EGR cooler outlet pipe (1).
	• The temperature of the cooler needs to be below 50˚C (1) before the probe of the digital video scope can be safely inserted to inspect the cooler.



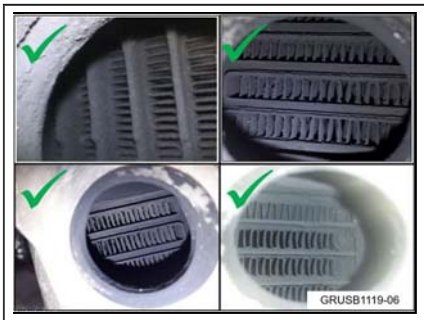
• Remove the EGR temperature sensor (1). **NOTE:** Count the number of revolutions (turns) required to remove the temperature sensor.
• **NOTE:** During installation, Pre-wind the temp sensor counterclockwise the number of turns it took to remove the sensor. This will keep the wires from twisting when reinstalled. Tightening torque 21Nm.



• Set the borescope to the 90˚ setting and install in the port temperature sensor (1).



• Inspect the fins on the EGR cooler for any build up or contamination. Black dry soot is a normal byproduct of the EGR system. An internally failed cooler will have a mix of soot and coolant which creates a moist “sludge” build-up.



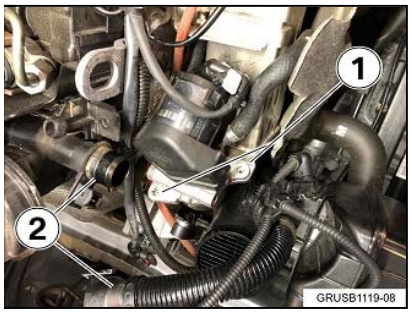
Clean or normal cooler with dry soot on fins (outlet side).

Contaminated or clogged coolers will have extensive soot/sludge build-up (outlet side).

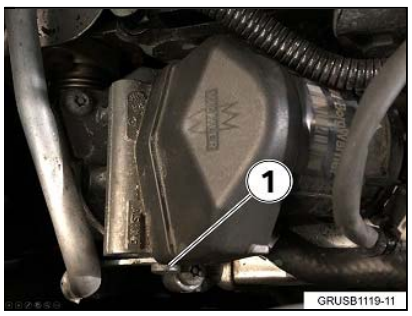
If the cooler is contaminated: Proceed to **STEP FIVE**.

If the cooler fins are clear (minimal dry soot build-up): Go to **STEP TWO**.

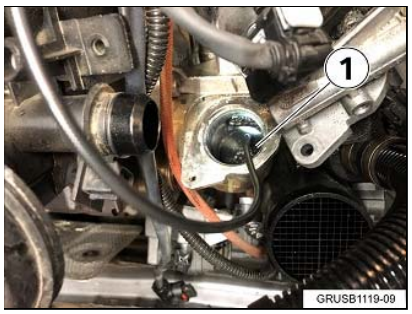
STEP TWO



• Loosen the tamperproof T30 screws (1) on the EGR valve and remove the valve from the EGR cooler. **NOTE:** The valve only needs to be removed from the cooler far enough to inspect the inside of the cooler. Do not disconnect the cooling lines from the EGR valve.
NOTE: (F25 is pictured) It is necessary to disconnect the crankcase breather line to access the EGR valve (2).



• **NOTE:** (F15 is pictured) Remove the T30 screw (1) before removing EGR valve.



• Insert the probe for the borescope and inspect the fins on the inlet side of the EGR cooler for any build up or contamination (1).

Contaminated or clogged coolers will have extensive build-up (inlet side).

If the fins on the inlet side of the cooler are free from sludge build-up: Reinstall the EGR valve (with new seal PN 11 71 7 794 785) and continue to **STEP THREE**.

If the cooler is clogged or contaminated: Continue to **STEP FIVE**.

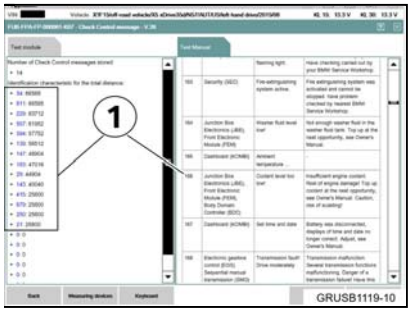
STEP THREE

Checking the cooling system.

Connect the vehicle to ISTA/D and read out the fault memory of the DDE control unit and check if there is a stored Check Control “CC” message "Coolant level too low" (code 166) in the KOMBI.

Procedure to check the CC message with the diagnosis system:

- Vehicle Management
- Service functions
- Vehicle information
- Check Control messages
- ABL Read the Check Control history memory
-



Check the CCM history for message 166 “Coolant level to low” (1).

If possible, check the warranty and repair history for complaints of low coolant warnings with no history of repairs to the cooling system.

If there are no Check Control messages stored and no service records of low coolant complaints: Reassemble removed components and release the vehicle. **Attach the pictures of the inspected cooler to the Repair Order**.

If the vehicle is low on coolant or has stored CC message for low coolant: Continue with **STEP FOUR**.

STEP FOUR

Top up the coolant level to specification and check the cooling system for leaks. Follow Repair instruction **17 00 009 Checking cooling system for watertightness.**

No external leaks from the cooling system: Coolant can be leaking from the EGR cooler (internal leak). Continue to **STEP FIVE**.

In case of a diagnosis of a possible coolant loss which is not caused by the exhaust-gas recirculation cooler, but by the other components of the cooling system, it must be diagnosed and repaired separately if necessary (consultation with the customer if necessary) and must not be invoiced using the special defect code of this Technical Campaign.

After these repairs are made, the cooling system will need to be pressurized again (repeat Step Four) to determine if there is a leak within the EGR cooler (loses pressure during pressure check).

STEP FIVE

The EGR Cooler fails the inspection

If the EGR cooler fails either during Steps One, Two, Three or Four:

• Submit a TeileClearing PuMA Case (BMW Exhaust Gas after Treatment TC action) with clear, focused, pictures of the cooler inspection attached and the subject: “**Failed EGR Cooler Inspection**”.

• TeileClearing will review the case and provide further instructions.

The EGR Cooler passes the inspection procedures

If the EGR cooler passes the inspections:

• Replace the O-ring and reassemble the vehicle, no further action is necessary.

PARTS INFORMATION

Only needed for the full inspection of EGR cooler

Part Number	Description	Quantity
11 71 7 794 785	O-ring	1

WARRANTY INFORMATION

Reimbursement for this Recall will be via normal claim entry utilizing the following information:

Defect Code:	**0011050500**	**Checking F02 F10 F25 F30 F31 N47 N57 EGR cooler**
Labor Operation:	**Labor Allowance:**	**Description:**
00 67 583	Refer to AIR/KSD2	Visual inspection of the exhaust-gas recirculation cooler outlet and inlet. Check for Check Control message. Check coolant level. Delete fault memory (includes connecting an approved battery

		charger/power supply and performing a vehicle test) (Plus work)
00 67 584	Refer to AIR/KSD2	Visual inspection of the exhaust-gas recirculation cooler outlet and inlet. Read out Check Control message. Check coolant level. Checking the cooling system for tightness. Delete fault memory (includes connecting an approved battery charger/power supply and performing a vehicle test) (Plus work)

Refer to AIR/KSD2 for the corresponding flat rate unit (FRU) allowances.

And, as applicable:

Sublet – Bulk Materials

Sublet Code 4	Up to $30.00	Reimbursement for the repair-related bulk materials (Do not use part numbers for claim submission)

Sublet reimbursement calculation for claiming the applicable repair-related bulk materials (BMW part numbers) is at the dealer net price for the “quantities used” plus your center’s handling.

BMW Antifreeze/Coolant: Claim for the amount that is needed to top-up the cooling system with 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.

And:

Sublet – One-Time Claimable Item: One Endoscope (PN 83 30 2 468 102)

Sublet Code 3	$1,010.00	Reimbursement for one (1) BMW Part Number Endoscope (Tool P/N 83 30 2 468 102)

Sublet reimbursement calculation for one (1) BMW Part Number Endoscope (Tool P/N 83 30 2 468 102 Endoskop - BK6500Dual55) **at cost with no handling.**

Enter the Endoscope tool cost in sublet **only one time** and itemize the amount by providing the Tool’s P/N 83 30 2 468 102 in the claim comment section.

And, as applicable:

Alternative Mobility Solution (AMS) for Vehicle Owners

This Recall repair qualifies for Alternative Mobility Solution (AMS) expense reimbursement, claim this item under the Defect Code noted above as follows:

• Sublet Code 2 - Itemize the AMS sublet amount on the repair order and in the claim comment section.

Please refer to SI B01 29 16 for additional information.

Posted: Tuesday, January 15, 2019

ATTACHMENTS

View PDF attachment **B111718 Recall Notice**.

View PDF attachment **18V-xxx -VariousModels-Diesel-EGR-Cooler-(QA)-(25Oct2018)**.

SAFETY RECALL NOTICE

To: All Center Operators, Sales Managers, Service Manager, Parts Manager and Warranty Processor

RE: Recall 18V-XXX: Exhaust Gas Recirculation (EGR) Cooler (B11 17 18)

BMW of North America, LLC is conducting a Voluntary Safety Recall (effective October 25, 2018) on various Model Year 2013-2017 BMW vehicles with a diesel engine that have been produced between September 12, 2012 – June 19, 2017.

Owners will be notified by First Class mail about the Recall and will be instructed to bring their vehicles in for a free repair when parts are available.

Please be reminded that it is a violation of federal law (The Safety Act) for you to sell, lease or deliver any new motor vehicle covered by this notification until the recall repair has been performed. This means that centers may not legally deliver new motor vehicles to consumers until they are fixed or use/sell replacement equipment/parts subject to this recall. Note also that substantial civil penalties apply to violations of the Safety Act.

Also, you should not sell, lease or deliver any Certified Pre-Owned or used vehicles subject to a safety recall until the repair is completed.

Please follow any special instructions that we provide to you for the return or disposition of recall parts.

We appreciate all your assistance with this Recall.

Exhaust Gas Recirculation (EGR) Cooler
Safety Recall 18V-xyz
Model Year 2013-2018
BMW Models w/Diesel Engines
Diesel Engines (4-cyl. – N47 / 6-cyl. – N57)
Last updated October 25, 2018

Q1. Which BMW Group models in the US are potentially affected by this Safety Recall?
Approximately 44,368 Model Year 2013-2018 BMW vehicles with a diesel engine, produced between September 2012 and June 2017, are potentially affected. The vehicles have the 4-cylinder ("N47") and 6-cylinder ("N57") diesel engines. Please refer to the table below for additional information.

Series	Model Year	Model	Approx. Volume	Production Dates
F30	2013-2018	328d, 328xd	12,781	Sep 2012 – Jun 2017
F31	2014-2018	328d/xd Sports Wagon	4,766	Mar 2013 – Apr 2017
F10	2014-2016	535d, 535xd	7,551	Feb 2013 – Sep 2016
F02	2015	740Lxd	331	Aug 2013 – May 2015
F25	2015-2017	X3 xDrive 28d	4,061	Sep 2013 – Dec 2016
F15	2014-2017	X5 xDrive35d	14,878	May 2013 – Jun 2017

Q2. What is the specific issue?
The issue involves the Exhaust Gas Recirculation (EGR) system which contains an integrated cooling component ("Cooler"). Over time, a leak of cooling fluid (glycol), could develop in the EGR Cooler.

Q3. What can happen as a result of this issue?
If cooling fluid leaks in the EGR Cooler, and combines with typical diesel engine soot deposits while the temperature is high (which is normal), this could create smoldering particles. In very rare cases, these particles could contact the engine intake manifold and cause damage by creating small holes in the manifold due to melting. In extremely rare cases, due to the holes in the manifold, this could increase the risk of a fire.

Q4. If I had a similar issue occur previously, and I had a repair performed, will I need to have this Safety Recall performed? Why?
Yes. Your vehicle will need to have the 2018 Safety Recall performed. The EGR Cooler will be inspected and, if necessary, replaced. If it is determined that the EGR Cooler has leaked, then the engine intake manifold will also be replaced.

Q5. Are BMW Group models, which are not Diesel, affected? Why not?
No. They are not affected because they have a different engine design.

Q6. Are BMW Group models with Diesel engines, but of different Model Years, affected? Why not?
No. They are not affected because they have a different engine design.

Q7. How did BMW Group become aware of this issue?
BMW Group became aware of this issue through its quality control procedures.

Q8. Is BMW Group aware of any accidents, injuries or fires, in the US, involving these BMW Group vehicles associated with this Safety Recall?
No. BMW is continuing to monitor this issue, and it is too early to determine if specific cases, involving fires, have occurred in the US due to this particular issue.

Q9. Can I determine if this issue exists in my vehicle?
You may or may not be able to determine if this issue is occurring to your vehicle. Your vehicle may display a warning symbol indicating a loss of engine coolant. In some cases, your vehicle may experience a reduction in engine power. You may notice an unpleasant odor, i.e., an odor of exhaust gas, and/or hear an unusual noise from the engine compartment. In rare cases, you may see smoke from the engine.

Exhaust Gas Recirculation (EGR) Cooler
Safety Recall 18V-xyz
Model Year 2013-2018
BMW Models w/Diesel Engines
Diesel Engines (4-cyl. – N47 / 6-cyl. – N57)
Last updated October 25, 2018

Q10. What should I do if I notice this condition in my vehicle?
If this condition occurs, pull off the road to a safe location away from traffic, and switch off the engine. Do not open the hood. All occupants should carefully exit the vehicle and move to a safe location away from traffic. Do not continue to drive your vehicle.

Contact BMW Roadside Assistance at 1-800-332-4269 immediately to have your vehicle brought to the nearest authorized BMW center.

Q11. Can I continue to drive my vehicle (before I receive my Safety Recall letter)?
Yes. The likelihood of this issue occurring to your vehicle is extremely low. However, when you receive a letter asking you to have this Safety Recall performed by an authorized BMW center, please do so as soon as possible. If you are not the only driver of this vehicle, please advise all other drivers of this important information.

Q12. How will I be informed of this Safety Recall?
You will receive a letter in December via First Class mail advising you of this Safety Recall, and to schedule an appointment with an authorized BMW center as soon as possible to have this Safety Recall performed. You can locate your nearest authorized BMW center at www.bmwusa.com/dealers.

To ensure the BMW Group has your most recent contact and vehicle information, please register your vehicle at www.bmwusa.com/myBMW. Registration is free, and will give you access to factory initiated campaigns and other information specific to your vehicle.

Q13. How will my vehicle be repaired?
The EGR Cooler will be inspected and, if necessary, replaced. If it is determined that the EGR Cooler has leaked, the engine intake manifold will also be replaced.

Q14. Is a loaner vehicle, or alternate transportation available?
Your dealer can provide you with a loaner vehicle during the service appointment.

Q15. How long will the repair take?
Depending upon the repair, and the specific model, this could take up to several hours to perform.

Q16. Do I have to wait for my letter to have my vehicle serviced?
Yes. We are in the process of implementing this Safety Recall campaign to ensure that the necessary parts are at the BMW centers. For the latest updates to this Safety Recall, please visit www.bmwusa.com/recall.

Q17. I see the "TREAD Act Customer Reimbursement Plan" attached to my letter. Can you explain what that is about? Am I eligible for reimbursement?

If you have already had this repair performed at your own expense, you may be eligible for reimbursement of certain expenses that you incurred.