SIB 27 01 20 2023-05-24

RECALL 20V-185: REPLACING THE FLEX DISC AND INSPECTING THE TRANSFER CASE

This Service Information Bulletin (Revision 7) replaces SI B27 01 20 **dated March 2021.**

What's New (Specific text highlighted):

- Part Number for Transfer Case changed
- Claim information updated

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 REPAIR IS MOBILE FRIENDLY

MODEL

F30 (3 Series Sedan)	F31 (3 Series Sports Wagon)	With xDrive and N47T diesel engine

AFFECTED VEHICLES

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 ISPA NEXT.
Recall letter and Q&A are attached.

SITUATION

BMW AG is conducting a Voluntary Safety Recall (effective March 25, 2020) on certain Model Year 2013 - 2016 BMW 3 Series Diesel vehicles that were produced between September 14, 2012 and June 30, 2015.

Friction rust may damage the output flange at the rear of the transfer case. This damage could result in a loss of power to the rear wheels. Power to the front wheels is maintained but may only be temporary. When the vehicle comes to rest, although the transmission lever could be moved to the "Park" position, the vehicle may not be in Park and could move.

CAUSE

Higher dynamic load on the aluminum flex disc (EGG), which connects the transfer case to the rear driveshaft, can form friction rust on the output flange of the transfer case.

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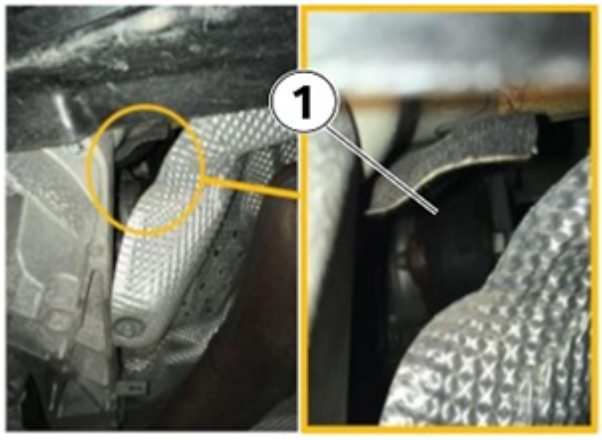
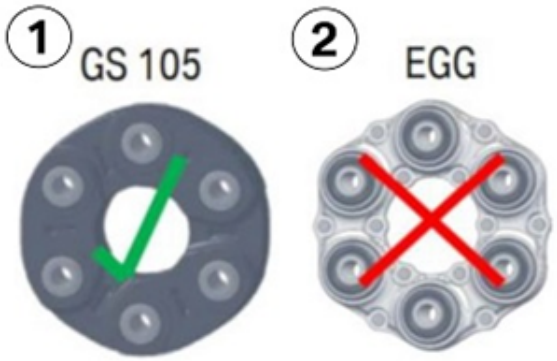
PROCEDURE



1. Raise the vehicle and determine which style flex disc is installed (1).



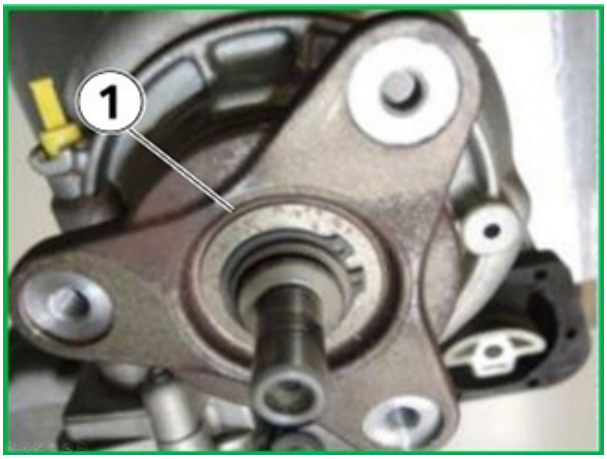
No further action is required if a black, corded rubber style (GS105) flex disc is installed (1).

If an aluminum style **"EGG"** (2) is installed, it **must** be replaced with a **"GS 105"** (1).

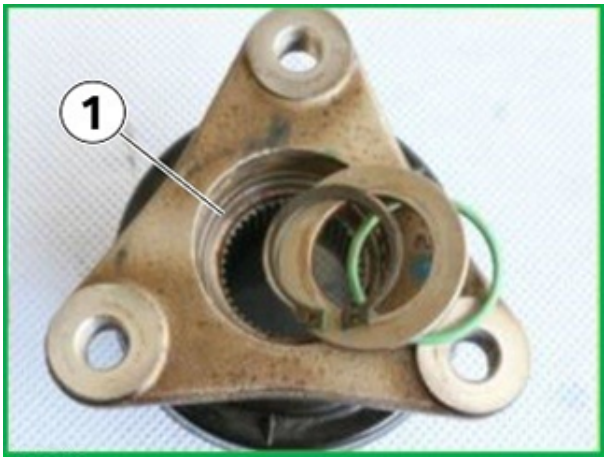
The transfer box output flange must then also be inspected for friction rust.

Continue to Step 2.

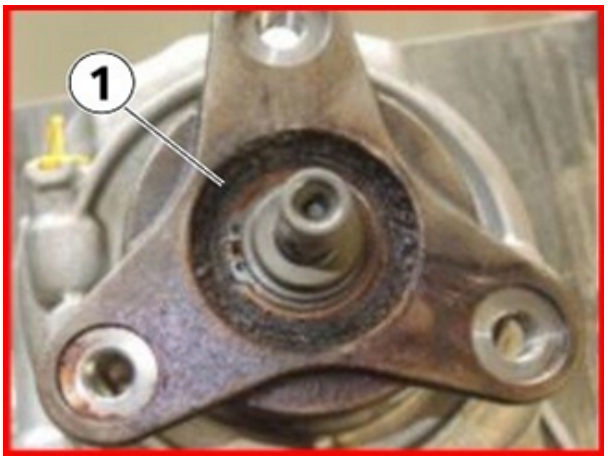
2. Use Repair Instruction **26 11 051 Replacing flexible disc for front propeller shaft** to access the output flange on the transfer case. Inspect the flange for friction rust. See examples below.



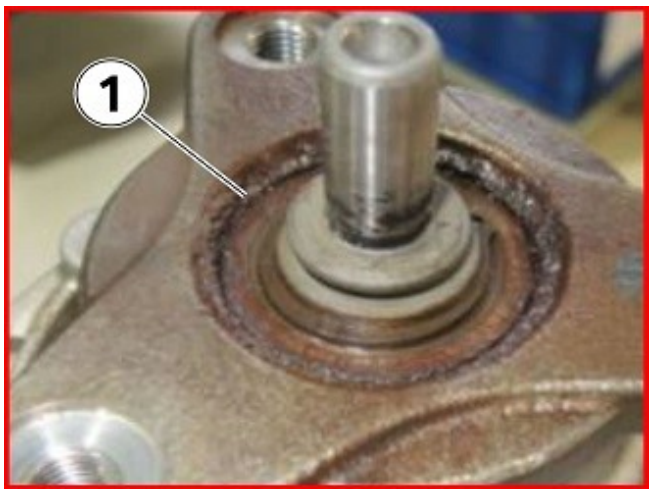
Typical output flanges without friction rust build up (1).



No further repair is necessary if there is no friction rust around the splines of the output flange.



Output flanges with friction rust (1). Flanges with excessive friction rust will require transfer case replacement.



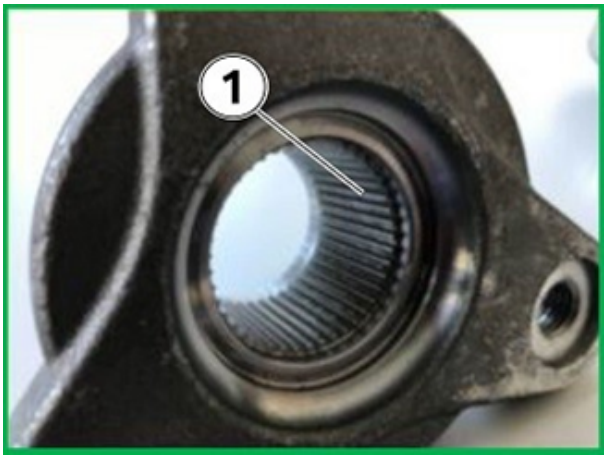
If rust build up cannot be determined by visual inspection, the flange will need to be removed for further diagnosis.

Continue to Step 3.

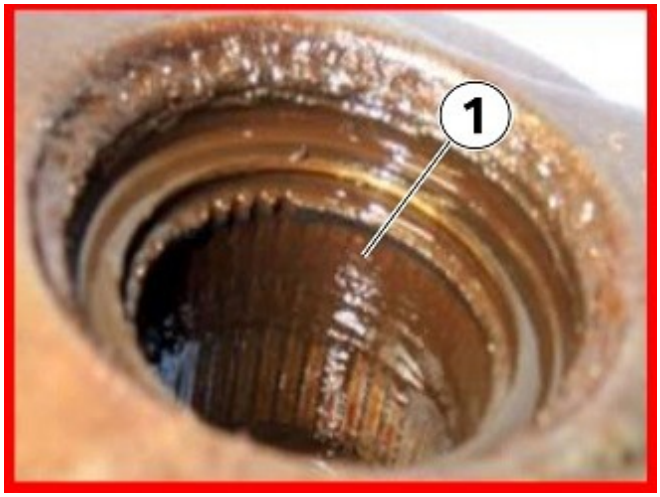
3. Check the flange for excessive play between the splines of the flange and the output shaft of the transfer case. No further dismantling of the flange is required if there is excessive play in the flange. Refer to the attached videos for reference (**V27 01 20 Acceptable Play in Transfer Case Flange** and **V27 02 20 Unacceptable Play in Transfer Case Flange**).

4. Remove the output flange following Repair Instruction **27 21 020 Replacing radial shaft seal for output flange (ATC 35L)**.

Inspect the splines on both the output flange and the transfer case output shaft (1).



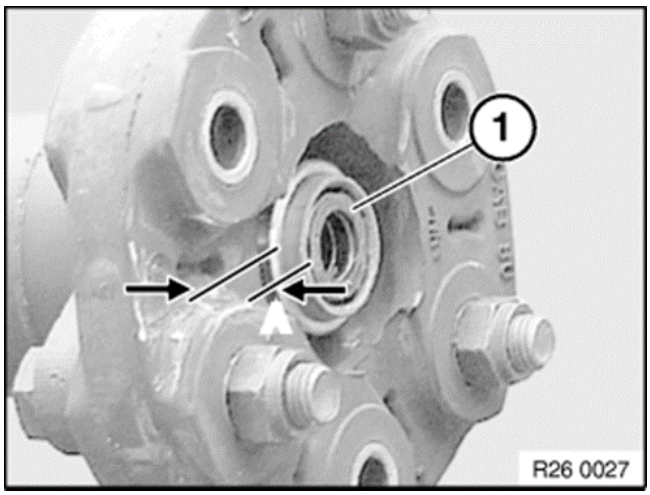
Typical flange and output shaft **without** any friction rust damage (1). Reinstall the flange (with new radial oil seal, O-ring and retaining ring) and reassemble the vehicle with new flex disc.



Flange and output shaft **with** friction rust damage (1). The transfer case will need to be replaced (with new flex disc).

NOTE: The transfer case needs to be replaced if either the flange or the output shaft are worn.

Follow Repair Instruction **27 10 020 Installing exchange transfer box (ATC 35L).**



IMPORTANT NOTE: The centering bushing (1) needs to be pressed in to properly fit with the new (GS 105) flex disc.

Refer to the Repair Instructions **26 11 051 Replacing flexible disc for front propeller shaft.**

PARTS INFORMATION

Please monitor the Parts Matrix and DCS messages for the parts ordering procedure.

Only use and invoice the part numbers below that apply.

Performing a part number look-up in ETK (EPC) by VIN or model in place of using/invoicing the following part numbers may result with the wrong part numbers being invoiced and installed, this could delay the payment of claim.

Part Number	Description	Quantity
Group 1		
26 11 7 610 061	Flexible disc	1
26 12 7 536 563	Self-locking hexagon nut	6
26 11 7 635 643	Hexagon bolt	3
18 30 8 632 361	Clamp	1
07 11 9 904 024	Hexagon nut	2
26 11 7 527 475	Hex bolt (M12x1.5x71-ZNS3)	3
Group 2 **Parts required for flange inspection (inspection passed)**		
27 10 7 546 667	Shaft sealing ring	1
27 10 7 599 326	O-ring	1
27 10 7 539 525	Retaining ring	1
Group 3 **Only if the flange inspection fails**		
27 10 5 A4A 094	Transfer box exchange	1
26 11 7 529 387	Torx screw with ribs (M8x19-ZNS3)	4
22 31 6 861 324	Transmission bearing set	1

Bulk Fluid - Sublet

Part Number	Description	Quantity
83 22 2 409 710	DTF (1000 ml, 1 liter)	As needed

Additionally, other small parts that are not specified above, such as one-time use screws, nuts and seals, which must be replaced according to the ISTA repair instructions/ETK, must be selected from the Electronic Parts Catalogue according to the respective vehicle type and invoiced under the special defect code.

CLAIM INFORMATION

Refer to the Attachment.

Note: Submitting a TSARA case with photo documentation of the inspection is no longer necessary.

Reimbursement for this Recall will be via normal claim entry utilizing the applicable work package information provided in the attachment, and when applicable, the part numbers listed above that apply:

Defect Code:	**0027100100**	**F3x N47 Replace flexible disc and check and if required replace transfer box**

FEEDBACK REGARDING THIS BULLETIN

Technical Feedback	To submit feedback for the technical topic 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

Supporting Materials
picture_as_pdf B270120 Attachment Warranty 8_2020.pdf
picture_as_pdf 2020-F30-31-TransferCase-QA-(15June2020).pdf
Videos
27 01 20
27 02 20

RECALL 20V-185: REPLACING THE FLEX DISC AND INSPECTING THE TRANSFER CASE

WARRANTY INFORMATION

Revisions shown by yellow shading.

Note: The Administrative effort (photo documentation) with the VIN for submission with a TSARA case is no longer necessary to be performed (Labor operation 00 69 540).

Reimbursement for this Recall will be via normal claim entry utilizing the applicable work package information below, and when applicable, the part numbers listed above that apply:

Defect Code:	**0027100100**	**F3x N47 Replace flexible disc and check and if required replace transfer box**

The vehicle is already in the workshop-

Inspection Only

Work Pkg	Labor Operation	Description (Plus work)	Labor Allowance
# 1	00 68 969	Visually check which flexible disc is installed, **vehicles equipped with the GS 105 flexible disc (No repair is necessary)**	3 FRU

Or:

Installing the GS 105 Flexible Disc Only-

Work Pkg	Labor Operation	Description (Plus work)	Labor Allowance
# 2	00 68 970	Visually check which flexible disc is installed, **vehicles equipped with EGG flexible disc, remove the flexible disc and install a GS 105 flexible disc on the front propeller shaft (no friction rust is found on the connector gearing of the transfer box)**	Refer in AIR
And, if needed:	00 68 971	**Step 3:** Additional work to remove flange and checking splined shaft **(Transfer box is OK, replace the sealing ring and re-reassemble)**	6 FRU

Or:

Installing the GS 105 Flexible Disc and replacing the Transfer Box-

Work Pkg	Labor Operation	Description (Plus work)	Labor Allowance
#3	00 69 539	Checking, **vehicles equipped with EGG flexible disc and replacing the transfer box** (**includes installing a new rubber mount for the transmission bearing, programming and encoding the vehicle's control units**, connecting an approved battery charger/power supply and performing a vehicle test)	Refer in AIR
And, if needed:	00 68 972	**Step 3:** Additional work to remove flange and checking splined shaft (**Transfer box replacement is necessary**)	2 FRU
And:	00 68 986	Additional work to replace the flexible disc for front propeller shaft with the GS 105 **(With transfer box replacement)**	1 FRU

Or:

The vehicle arrives at your center and this Recall shows open (No other main work will be performed or claimed during this workshop visit)-

Inspection Only

Work Pkg	Labor Operation	Description (Main work)	Labor Allowance
# 4	00 68 353	Visually check which flexible disc is installed, **vehicles equipped with the GS 105 flexible disc (No repair is necessary)**	5 FRU

Or:

Installing the GS 105 Flexible Disc Only-

Work Pkg	Labor Operation	Description (Main work)	Labor Allowance
# 5	00 68 354	Visually check which flexible disc is installed, **vehicles equipped with EGG flexible disc, remove the flexible disc and install a GS 105 flexible disc on the front propeller shaft (no friction rust is found on the connector gearing of the transfer box)**	Refer in AIR
And, if needed:	00 68 971	**Step 3:** Additional work to remove flange and checking splined shaft **(Transfer box is OK, replace the sealing ring and re-reassemble)**	6 FRU

Or:

Installing the GS 105 Flexible Disc and replacing the Transfer Box-

Work Pkg	Labor Operation	Description (Main work)	Labor Allowance
# 6	00 69 036	Checking, **vehicles equipped with EGG flexible disc and replacing the transfer box (includes installing a new rubber mount for the transmission bearing, programming and encoding the vehicle's control units**, connecting an approved battery charger/power supply and performing a vehicle test)	Refer in AIR
And, if needed:	00 68 972	**Step 3:** Additional work to remove flange and checking splined shaft (**Transfer box replacement is necessary**)	2 FRU
And:	00 68 986	Additional work to replace the flexible disc for front propeller shaft with the GS 105 **(With transfer box replacement)**	1 FRU

Also, only one Main work flat rate labor operation code can be claimed per workshop visit.

Claim Repair Comments (Repair without Transfer Box Replacement)-

Only reference the SIB number and the work package (Pkg) number performed in the RO technician notes and in the claim comments (For example: B27 01 20 WP 1, 2, 4 or 5), unless otherwise required by State law.

Consequential Repair (Transfer Box Replacement – Labor operation 00 69 539/00 69 036)-

Claim this item (WP 3 or 6) under the special defect code listed above with the applicable additional special labor operations provided.

Please explain this consequential repair work (the why and what) on the repair order and in the claim comments section.

During this workshop visit, the affected vehicle may also show one or more programming and encoding Technical Campaign repairs open, the programming and encoding procedure may only be invoiced one time.

When replacing the transfer box is required, update the vehicle to the required i-level by performing and submitting it as outlined in this Recall Campaign (labor operation code 00 69 539/00 69 036).

For the other open campaign repairs, please be sure to also perform any additional work (before and/or after) these repairs require and/or close the remaining programming and encoding Technical Campaign repairs as outlined in the corresponding Service Information Bulletin.

And, as needed:

Sublet – Bulk Materials (RO and Claim Comments Required)-

Sublet Code 4	Up to $20.00	Reimbursement for the repair-related bulk material (Top-up) (Do not use the BMW part number for claim submission)

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

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

And, as applicable:

Alternative Mobility Solution (AMS) for Vehicle Owners (RO and Claim Comments Required)-

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.

Programming and Encoding - Vehicle Control Units (RO and Claim Comments Required)

The programming procedure automatically reprograms and encodes all vehicle control modules which do not have the latest software I-level. If one or more control module failures occur during this programming procedure:

- Please claim this consequential control module-related repair work (including performing the IRAP Control Unit Recovery procedure first as required, refer to the SIB in AIR) under the defect code listed in this bulletin with the applicable AIR labor operations.

Please explain this additional work (The why and what) on the repair order and in the claim comments section

For control module failures that occurred prior to performing the programming procedure (only required when the transfer box must be replaced):

- If covered under an applicable limited warranty, claim the applicable test plan and the corresponding control module-related repair work using the applicable defect code and labor operations in AIR (including diagnosis with separate punch times).

TREAD Act Reimbursement - Qualifying Prior Customer-Pay Repairs-

If your center is presented with a reimbursement request, BMW of North America, LLC will reimburse qualifying customer-pay repairs to address the issue described in this bulletin that were performed on Affected Vehicles **prior** to the release of this Recall Service Information bulletin.

Please proceed as applicable:

The customer arrives with an affected vehicle to your workshop-

Perform the open Recall repair outlined in this bulletin, and if the prior repair qualifies (see below), submit for both the Recall repair and the customer-pay reimbursement (Separate repair line items/separate defect codes).

Or:

The customer only presents your center with a customer-pay invoice for the prior repair-

If the vehicle and the prior repair qualifies (see below), submit for the customer-pay reimbursement portion only.

Customer-pay Invoice Review and Reimbursement Procedure-

Review and verify that the prior customer-pay invoice (BMW center or independent repair shop) contains a repair that was performed to address the issue described in this Recall Service Information bulletin.

If this prior repair qualifies, reimburse the customer (labor and parts).

Submit for this customer-paid repair expense under Defect Code **85 99 00 12 NA**, as follows:

- Sublet Code 3
- Dollar amount (with no markup)
- Comment: RECALL 20V-185: REPLACING THE FLEX DISC AND INSPECTING THE TRANSFER CASE - Reimbursement for allowable expenses that relate to performing the prior qualifying customer-pay repair
- Additionally, explain and itemize the claimed sublet amount on the repair and in the claim comments

Retain the original customer pay invoice in your files; this documentation may be requested by BMW during the claim review process.

Repairs that do not qualify for Reimbursement-

Repairs that do not qualify for reimbursement include repairs performed on non-affected vehicles, and/or the diagnosis and repair of other unrelated issues. This exclusion applies to repairs that were performed using non-genuine BMW parts and/or used passenger car or light truck parts.

This claim submission for the prior customer-pay reimbursement, when it is submitted as outlined under Defect Code 85 99 00 12 NA, **will not close** the Open Safety Recall on the vehicle.

Unless the Recall Service Information Bulletin provides an option to submit a claim to close the open Recall because a prior repair (claim submission, customer-pay, etc.) completely met the Recall repair requirements, the Recall repair must still be performed.

Constant-Velocity Joint / Transfer Case
Safety Recall 20V-185
Model Year 2013-2016
BMW 3 Series Diesel AWD

Last Updated 06/15/2020

Q1. **Which BMW Group models in the US are potentially affected by this Safety Recall?** Certain Model Year 2013-2016 BMW 3 Series Diesel all-wheel-drive (AWD) vehicles in the US, produced between September 2012 and June 2015, are potentially affected.

Q2. **What is the specific issue?**
The constant-velocity joint, which transfers power between the transfer case and the rear drive shaft, could become worn over time. This could affect power to the rear wheels. Power to the front wheels is maintained but may only be temporary. When the vehicle comes to rest, although the transmission lever could be moved to the "Park" position, the vehicle may not be in Park and could move.

Q3. **Why are other BMW Group vehicles not included in this Safety Recall?**
Other vehicles were equipped with a different type of constant-velocity joint.

Q4. **How did BMW Group become aware of this issue?**
BMW Group became aware of this issue through its quality control procedures.

Q5. **Can I determine if this issue exists in my vehicle?**
No.

Q6. **Can I continue to drive my vehicle (before I receive my letter)?**
Yes. However, when you receive a letter requesting you to make an appointment 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.

Q7. **How will my vehicle be repaired?**
The constant-velocity joint and transfer case will be inspected and, if necessary, replaced for free and will take several hours.

Q8. **Is BMW Group aware of any accidents or injuries in the US, involving these BMW Group vehicles associated with this Safety Recall?**
No.

Q9. **How will I be informed of this Safety Recall?**
Letters will be mailed in May via First Class mail advising owners of this Safety Recall and, if parts are available, to schedule an appointment with an authorized BMW center to have this Safety Recall performed. If parts are not available, a follow-up letter will be mailed when parts become available, advising owners to schedule an appointment to have the Safety Recall performed. You can locate your nearest authorized BMW center at www.bmwusa.com/dealer. To ensure the BMW Group has your most recent contact and vehicle information, please register your BMW 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.

Q10. **Do I have to wait for my letter to have my vehicle serviced?**
No. Please contact an authorized BMW center immediately to schedule an appointment to have this important and free Safety Recall performed. For the latest updates to this Safety Recall, please visit www.bmwusa.com/recall.