



SIB 33 02 22

2022-07-28

SWINGARM DRAIN RETROFIT AND DRIVE SHAFT CHECK

**BMW
MOTORRAD****SERVICE ACTION – Swingarm Drain Retrofit and Driveshaft Check****MODEL**

Model	Model Description
K50	R 1200 GS / R 1250 GS
K51	R 1200 GS Adventure / R 1250 GS Adventure
K52 Authority	R 1200 RT Authority / R 1250 RT Authority

The affected vehicles have been marked with campaign number **0033130000** in AIR.

In order to determine if a specific vehicle is affected by this campaign it will be necessary to verify the vehicle VIN in AIR (Aftersales Information Research). Based on the response of the system, either proceed with the repair or take no further action. Please note, open campaigns or vehicle stops may not appear in DCS Warranty Vehicle Inquiry or sales systems until 24-72 hours after they are announced, therefore AIR is always the recommended method for determining open campaigns and vehicle stops.

SITUATION

Multiple factors may cause the driveshaft to become damaged; among them are corrosion in certain parts of the driveshaft, and wear and tear exacerbated by certain climatic conditions.

The following driveshaft failures can occur:

1. The driveshaft can rust onto its mating parts, hindering repair and maintenance work.
2. The splines of the driveshaft at the transmission output shaft or at the differential can corrode. Over time, this may lead to increased play in the splines which may eventually cause the driveshaft to fail.
3. The bearings of the universal joints may be damaged. This can cause the universal joints to start seizing, which over time may lead to further damage of the joint.

Letters will be mailed to owners via First Class mail advising them of this Service Action and asking them to schedule an appointment with an authorized BMW Motorrad dealer to perform the swingarm drain valve retrofit as well as a driveshaft test, if needed.

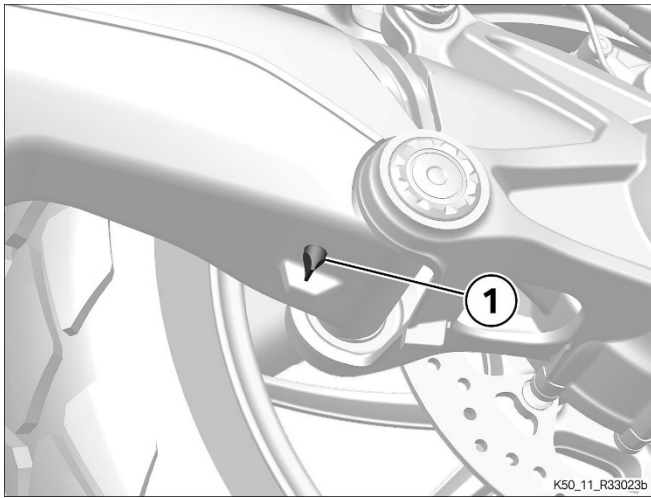
PROCEDURE

For the affected vehicles, this service action must be performed at the next workshop visit.



STEP 1: For all affected vehicles:

Follow repair instruction "*00 60 406 – Retrofitting drainage in rear wheel swinging arm*" to install a one-way drain valve in the rear wheel swing arm and punch a ventilation hole in the front rubber boot.



When drilling the hole in the swing arm, note whether any water drains out – this will be important when performing next steps, below.

STEP 2: Determine Mileage

Once the drain valve is installed, the following work must then be carried out, mileage dependent:

A. Vehicles with less than 1,200 miles:

No additional work is required.

1. Vehicles with mileage greater than 1,200 miles but less than 37,000 miles:

Test the driveshaft for damage according to repair instruction “33 73 002 – Checking Cardan shaft”.

1. Vehicles with greater than 37,000 miles:

Replace driveshaft according to the repair instruction “33 73 000 – Replacing Cardan shaft”. It is essential to ensure sufficient and thorough **greasing of all gearing** (Klüber lubricant LFT 71-402). Also observe the current **specification for the Paralever bolting** to the differential and secure the bolt with Loctite.

NOTICE: If the drive shaft is new, the “Check” is not Necessary.

TESTING THE DRIVESHAFT: Only if directed in STEP 2 above.

This test method is used to check the functional health of the driveshaft while installed in the vehicle and measures the vibrations of the rear-wheel flange to detect damage in universal joints or gearing.

In the guided measurement procedure, the technician will drive the special speed sensor wheel with a cordless drill (see the list of approved models, below) across several speed ranges defined in the ISTA procedure.

The service function required for this test is available in ISTA versions 4.36.14 and newer.

A **video** of the test procedure is available in TIS.

Measuring setup

Test procedure

NOTICE: Before the first check the dealer performs, please make sure the software in the special tools "Measuring control unit" is up to date using ISTA version 4.36.14 and newer. This can be claimed only once per a dealer.

NOTE: The aluminum pannier rack does not need to be removed to perform this check.

NOTE: Repair instruction 33 73 002 in AIR will be updated in the 08/2022 AIR update. Rotate clockwise as shown above.

POST-TEST STEPS:

- A. **If the test results in "Cardan shaft faulty"**, Replace the driveshaft according to repair instruction "33 73 507 – Replacing Cardan shaft with testing". It is essential to ensure sufficient and thorough **greasing of all gearing** with Klüber lubricant LFT 71-402 – PN 83 23 8 847 417.

The changed specification for the Paralever bolting to the differential must also be observed and the bolting must be secured correctly with Loctite.

1. **If the test results in "Cardan shaft OK" and there was no water leakage** after drilling the bore hole for the drain valve (or only a few drops), no additional work is required.
1. **If the test results in "Cardan shaft OK" but there was water leakage** when drilling the rear wheel swinging arm for the one-way drain valve (water that has accumulated in the rear wheel swing arm leaked out from the bore hole), then **the splines at the front and rear must be checked**, even with the test result "Cardan shaft OK".

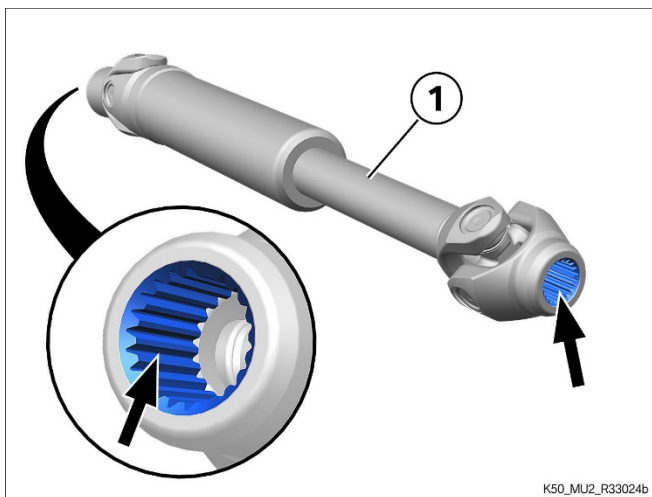
Replace the driveshaft if:

- Driveshaft is stuck to the transmission or differential from corrosion and cannot be removed
 - Submit a TSARA case if this necessitates replacing additional parts.
- Splines are worn out or have play when cleaned up and test-fitted.

Surface rust on the driveshaft or the universal joints has no functional effects and does not justify a part exchange.

If reusing the existing driveshaft, the splines must be cleaned thoroughly with a wire brush followed by a sufficient and thorough **greasing of all splines** using Klüber lubricant LFT 71-402 – PN 83 23 8 847 417.

NOTICE: The workshop specification for the lubrication of splines of the driveshaft has been revised. The relevant repair instructions in AIR have been updated.

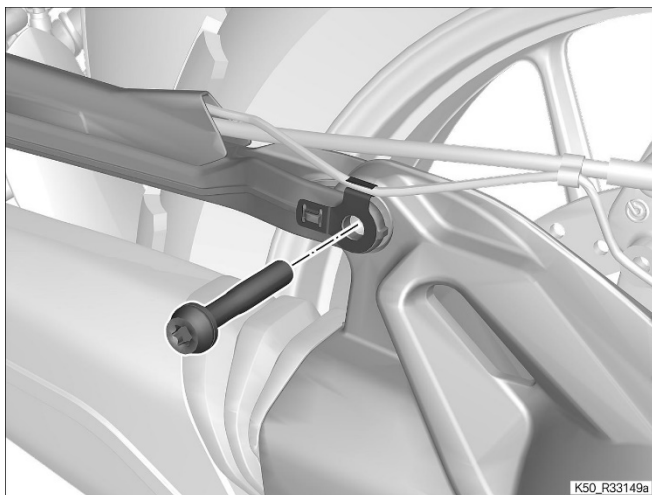


For replacement or re-greasing of the existing driveshaft, proceed as follows:

Carefully clean and lubricate gearing on driveshaft (1) with a wire brush, using Klüber lubricant LFT 71-402 – PN 83 23 8 847 417.

- • Brush on lubricant with brush in recesses of gearing all the way around.
- • Apply lubricating material over full length of gearing.

NOTICE: The bolting specification for the Paralever link on the rear axle has been changed. The relevant repair instructions in AIR have been updated.



Since the existing screw is being re-used, it is essential to clean the screw as well as the thread in the differential, and use **Loctite 2701** - PN 33 17 2 331 095 when re-installing.

Summary of steps to consider the Service Action as completed.

- • The one-way drain valve is inserted correctly in the rear wheel swinging arm and the front gaiter is punctured.
- • The measure was carried out correctly based on the mileage of the vehicle.

- During a visual check or an exchange of the driveshaft, both splines were sufficiently and thoroughly greased (PN 83 23 8 847 417 – Klüber lubricant LFT 71-402).
- During a visual check or an exchange of the driveshaft, the Paralever bolting was secured correctly with Loctite (PN 33 17 2 331 095 – Loctite 2701).

TOOLS:

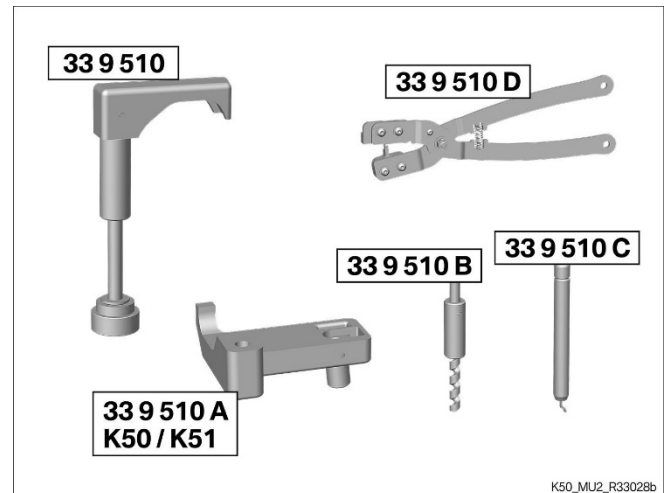
Special tool for retrofitting a one-way drain valve:

Overview tool set (33 9 510):

- Bow with threaded rod
- Bottom shell A
- Drill with bush B
- Universal deburring tool C
- Set of pliers D

Bottom shell of drilling template is model specific:

- 33 9 510 A: K50 / K51
- 33 9 511: K52



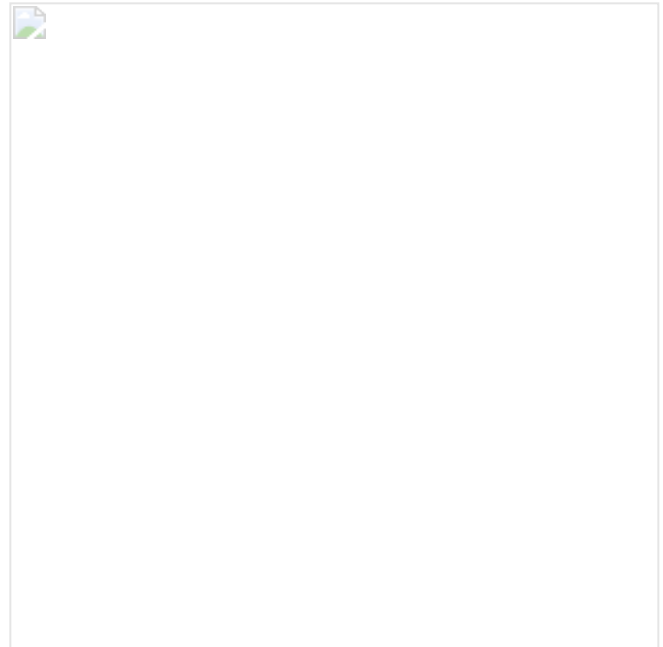
Special tool for checking the driveshaft:

Overview mechanical tool set (33 1 920):

- Hook
- Sensor bracket
- Wheel flange adapter with screws
- Sensor wheel

Overview, scope of electrical tools:

- Measuring wiring harness
- Measuring control unit
- Speed sensor



Cordless screwdriver is not part of tool set:

For a valid test result, it is essential to use a BMW Motorrad **approved brushless cordless screwdriver** as a test device:

- Makita XFD14
- Milwaukee 2803

Other brands/models, especially corded models and those with an impact hammer-drill function can lead to an invalid test result.

NOTICE: The approved brushless screwdriver can be claimed once, on the first warranty claim under sublet.

PARTS INFORMATION

Part Number

33 17 8 358 789	Drain valve	Qty: 1
07 11 9 908 207	Cheese head screw (M12×75-10.9-MK)	Qty: 1
07 12 9 908 076	Cheese head screw (M6×20-8-8 MK)	Qty: 3 AS NEEDED
46 63 9 908 452	Cheese head screw (M8×30-8.8-MK)	Qty: 2
07 12 9 908 467	Cheese head screw (M8×25-8.8-MK)	Qty: 2 (Alternative)
33 73 8 531 102	Driveshaft (ONLY IF REQUIRED)	Qty: 1
83 23 8 847 417	Klüber lubricant LFT 71-402	Can be entered on the warranty claim under a Sublet 04
33 17 2 331 095 or source locally	Loctite 2701	

NOTICE: The preferred lubrication is Klüber lubricant LFT 71-402 (83 23 8 847 417) and should be used if available. If Klüber lubricant LFT 71-402 is not available please source Klüberplex BEM 34-132 as an alternative.

NOTE: If re-using the cheese head screws 07 12 9 908 076 for the mudguard, please clean the threads and apply Loctite 2701

Special tools

83 30 5 A64 813	Drilling template K50, K51 (339510)
83 30 5 A6D DB8	Drilling template K52 (339511)
83 30 5 A68 857	Kit Measuring tool (331920)
83 30 5 A67 885	Cable Harness
83 30 5 A67 886	Measuring adapter module
13 62 8 623 437	Sensor

NOTICE: One special tool kit will be autoshipped to each dealer and can be claimed one time on the first warranty claim.

NOTE: Due to limited availability dealers requiring the K52 drilling template should submit an IDS ticket requesting the drilling template. The IDS ticket needs to include the affected VIN. The request will be examined to ensure requirements for the K52 drilling template are met before shipping.

CLAIM INFORMATION

Please submit claims via the normal claim process using the information below:

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ALL CLAIMS:**Defect code**

00 33 13 00 00	Retrofitting drain valve in swing arm and checking Driveshaft
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Labor Operation

00 60 406	Retrofitting drainage in rear wheel swinging arm	3 FRU
+00 60 906	Retrofitting drainage in rear wheel swinging arm	2 FRU
46 52 510	Mounting and dismounting the rear-wheel stand with special tools (for motorbikes without a center-stand)	1 FRU

ADDITIONALL: ONE TIME CLAIM FOR SOFTWARE CHECK/UPDATE OF THE MEASURING ADAPTER MODULE, CAN ONLY BE CLAIMED ONCE PER A DEALER

Labor Operation

61 00 502	Checking the software	2 FRU
61 00 510	Performing software update	2 FRU

ADDITIONALL: FOR VEHICLES THAT QUALIFY FOR A DRIVESHAFT REPLACEMENT WITHOUT A TEST

Labor Operation

+33 73 500	Removing/installing or replacing the Cardan shaft	6 FRU (K50, K51) 7 FRU (K52)
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ADDITIONALL: FOR VEHICLES REQUIRING A DRIVESHAFT TEST:

Labor Operation

+33 73 502	Checking Cardan shaft	6 FRU (K50, K51) 10 FRU (K52)
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ADDITIONALL: FOR VEHICLES THAT NEED DRIVESHAFT REMOVAL OR REPLACEMENT AFTER THE TEST:

Labor Operation

33 73 507	Replacing Cardan shaft on inspection *OR* cleaning/re-greasing existing driveshaft.	3 FRU (K50, K51) 4 FRU (K52)
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FRUs includes all repair procedures to complete the task with allowance for necessary ancillary tasks (e.g., visual inspection, lubrication, cleaning parts etc.) and administrative tasks.

QUESTIONS REGARDING THIS BULLETIN

Technical inquiries	Contact the BMW Technical Support Group via TSARA
Warranty inquiries	Submit an IDS ticket to the Warranty Department
Parts inquiries	Submit an IDS ticket to the Motorrad Parts Department

Supporting Materials

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[picture_as_pdf 33 02 22 Drain Retrofit and Driveshaft Check.pdf](#)

Service Information Bulletin

Rear Axle, Rear Drive

June 7, 2022

33 02 22

SERVICE ACTION – SWINGARM DRAIN RETROFIT AND DRIVESHAFT CHECK



**BMW
MOTORRAD**

MODEL

Model	Model Description
K50	R 1200 GS / R 1250 GS
K51	R 1200 GS Adventure / R 1250 GS Adventure
K52 Authority	R 1200 RT Authority / R 1250 RT Authority

The affected vehicles have been marked with campaign number **0033130000** in AIR.

In order to determine if a specific vehicle is affected by this campaign it will be necessary to verify the vehicle VIN in AIR (Aftersales Information Research). Based on the response of the system, either proceed with the repair or take no further action. Please note, open campaigns or vehicle stops may not appear in DCS Warranty Vehicle Inquiry or sales systems until 24-72 hours after they are announced, therefore AIR is always the recommended method for determining open campaigns and vehicle stops.

SITUATION

Multiple factors may cause the driveshaft to become damaged; among them are corrosion in certain parts of the driveshaft, and wear and tear exacerbated by certain climatic conditions.

The following driveshaft failures can occur:

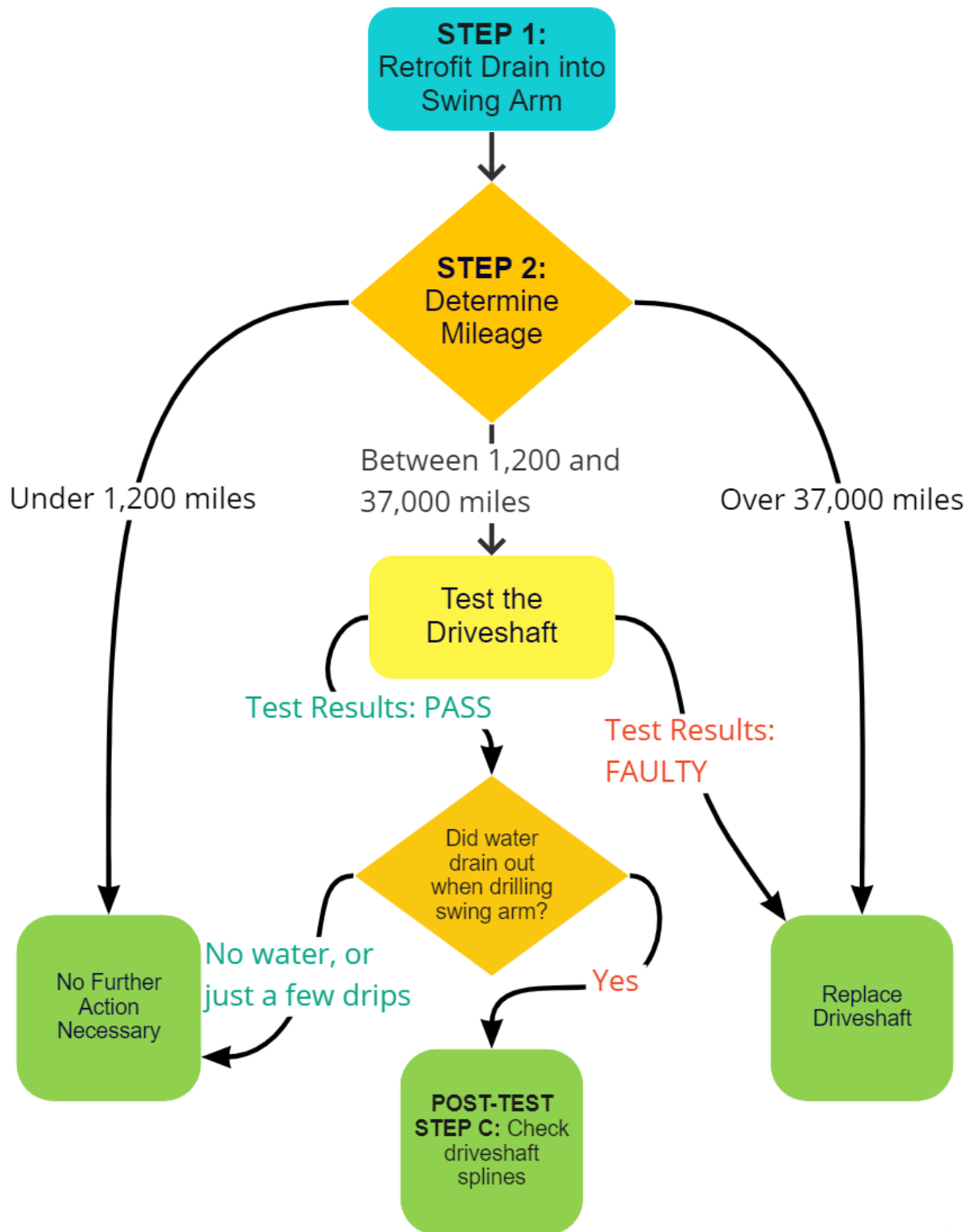
1. The driveshaft can rust onto its mating parts, hindering repair and maintenance work.
2. The splines of the driveshaft at the transmission output shaft or at the differential can corrode. Over time, this may lead to increased play in the splines which may eventually cause the driveshaft to fail.
3. The bearings of the universal joints may be damaged. This can cause the universal joints to start seizing, which over time may lead to further damage of the joint.

Letters will be mailed to owners via First Class mail advising them of this Service Action and asking them to schedule an appointment with an authorized BMW Motorrad dealer to perform the swingarm drain valve retrofit as well as a driveshaft test, if needed.

PROCEDURE

For the affected vehicles, this service action must be performed at the next workshop visit.

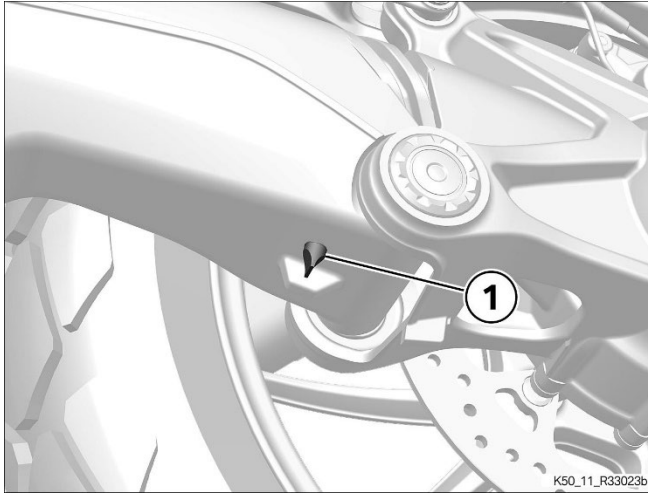
Procedural Flow Chart; Further Details Below



miro

STEP 1: For all affected vehicles:

Follow repair instruction "00 60 406 – Retrofitting drainage in rear wheel swinging arm" to install a one-way drain valve in the rear wheel swing arm and punch a ventilation hole in the front rubber boot.



When drilling the hole in the swing arm, note whether any water drains out – this will be important when performing next steps, below.

STEP 2: Determine Mileage

Once the drain valve is installed, the following work must then be carried out, mileage dependent:

- A. Vehicles with less than 1,200 miles:**
No additional work is required.
- B. Vehicles with mileage greater than 1,200 miles but less than 37,000 miles:**
Test the driveshaft for damage according to repair instruction "33 73 002 – Checking Cardan shaft".
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Replace driveshaft according to the repair instruction "33 73 000 – Replacing Cardan shaft". It is essential to ensure sufficient and thorough **greasing of all gearing** (Klüber lubricant LFT 71-402). Also observe the current **specification for the Paralever bolting** to the differential and secure the bolt with Loctite.

NOTICE: If the drive shaft is new, the "Check" is not Necessary.

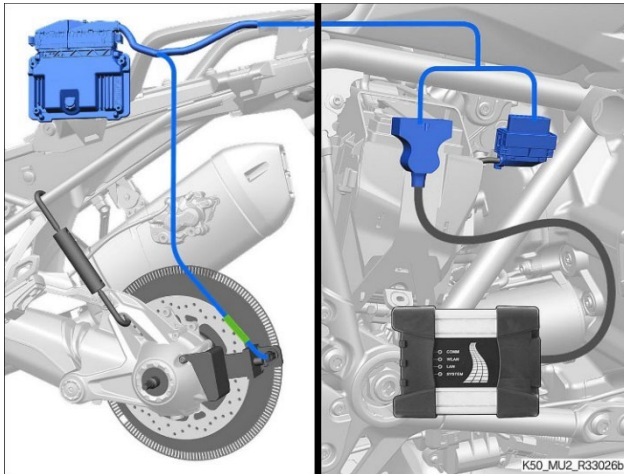
TESTING THE DRIVESHAFT: Only if directed in STEP 2 above.

This test method is used to check the functional health of the driveshaft while installed in the vehicle and measures the vibrations of the rear-wheel flange to detect damage in universal joints or gearing.

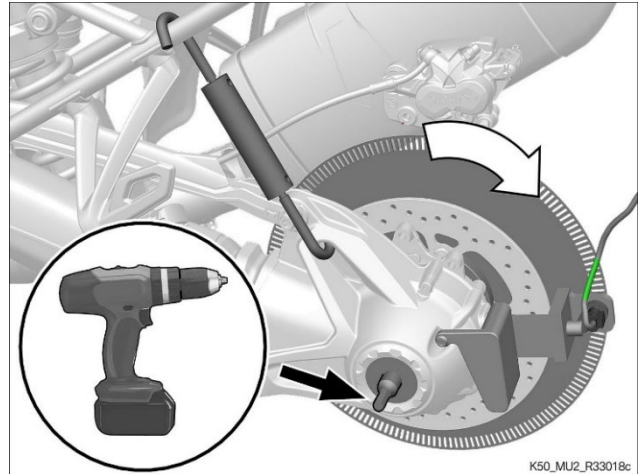
In the guided measurement procedure, the technician will drive the special speed sensor wheel with a cordless drill (see the list of approved models, below) across several speed ranges defined in the ISTA procedure.

The service function required for this test is available in ISTA versions 4.36.14 and newer.

A **video** of the test procedure is available in TIS.



Measuring setup



Test procedure

NOTICE: Before the first check the dealer performs, please make sure the software in the special tools “Measuring control unit” is up to date using ISTA version 4.36.14 and newer. This can be claimed only once per a dealer.

NOTE: The aluminum pannier rack does not need to be removed to perform this check.

NOTE: Repair instruction 33 73 002 in AIR will be updated in the 08/2022 AIR update. Rotate clockwise as shown above.

POST-TEST STEPS:

- A. If the test results in “Cardan shaft faulty”,** Replace the driveshaft according to repair instruction “33 73 507 – Replacing Cardan shaft with testing”. It is essential to ensure sufficient and thorough **greasing of all gearing** with Klüber lubricant LFT 71-402 – PN 83 23 8 847 417.

The changed specification for the Paralever bolting to the differential must also be observed and the bolting must be secured correctly with Loctite.

- B. If the test results in “Cardan shaft OK” and there was no water leakage** after drilling the bore hole for the drain valve (or only a few drops), no additional work is required.
- C. If the test results in “Cardan shaft OK” but there was water leakage** when drilling the rear wheel swinging arm for the one-way drain valve (water that has accumulated in the rear wheel swing arm leaked out from the bore hole), then **the splines at the front and rear must be checked**, even with the test result “Cardan shaft OK”.

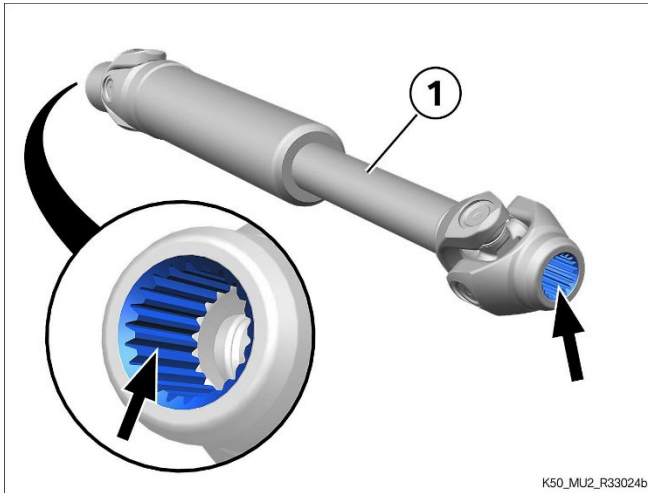
Replace the driveshaft if:

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 - Submit a TSARA case if this necessitates replacing additional parts.
- Splines are worn out or have play when cleaned up and test-fitted.

Surface rust on the driveshaft or the universal joints has no functional effects and does not justify a part exchange.

If reusing the existing driveshaft, the splines must be cleaned thoroughly with a wire brush followed by a sufficient and thorough **greasing of all splines** using Klüber lubricant LFT 71-402 – PN 83 23 8 847 417.

NOTICE: The workshop specification for the lubrication of splines of the driveshaft has been revised. The relevant repair instructions in AIR have been updated.

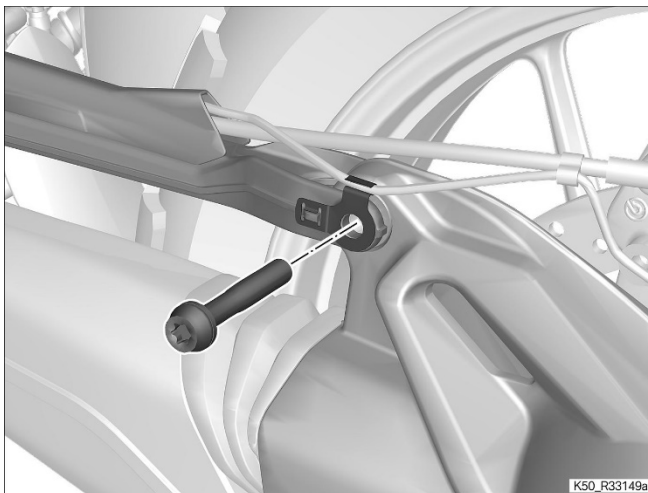


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- Brush on lubricant with brush in recesses of gearing all the way around.
- Apply lubricating material over full length of gearing.

NOTICE: The bolting specification for the Paralever link on the rear axle has been changed. The relevant repair instructions in AIR have been updated.



Since the existing screw is being re-used, it is essential to clean the screw as well as the thread in the differential, and use **Loctite 2701** - PN 33 17 2 331 095 when re-installing.

Summary of steps to consider the Service Action as completed.

- The one-way drain valve is inserted correctly in the rear wheel swinging arm and the front gaiter is punctured.
- The measure was carried out correctly based on the mileage of the vehicle.
- During a visual check or an exchange of the driveshaft, both splines were sufficiently and thoroughly greased (PN 83 23 8 847 417 – Klüber lubricant LFT 71-402).
- During a visual check or an exchange of the driveshaft, the Paralever bolting was secured correctly with Loctite (PN 33 17 2 331 095 – Loctite 2701).

TOOLS:

Special tool for retrofitting a one-way drain valve:

Overview tool set (33 9 510):

- Bow with threaded rod
- Bottom shell A
- Drill with bush B
- Universal deburring tool C
- Set of pliers D

Bottom shell of drilling template is model specific:

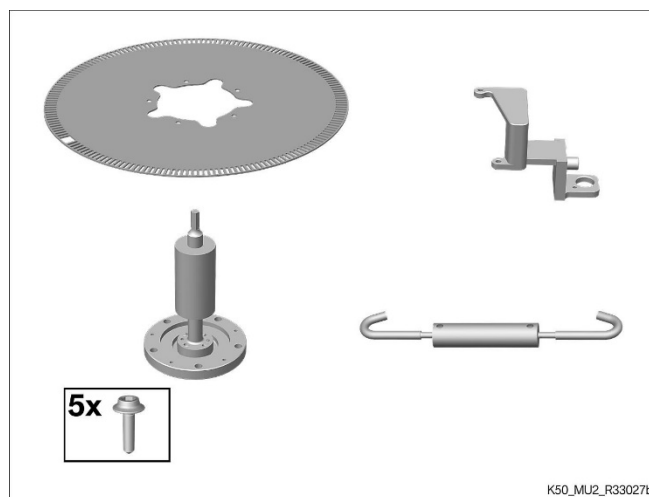
- 33 9 510 A: K50 / K51
- 33 9 511: K52



Special tool for checking the driveshaft:

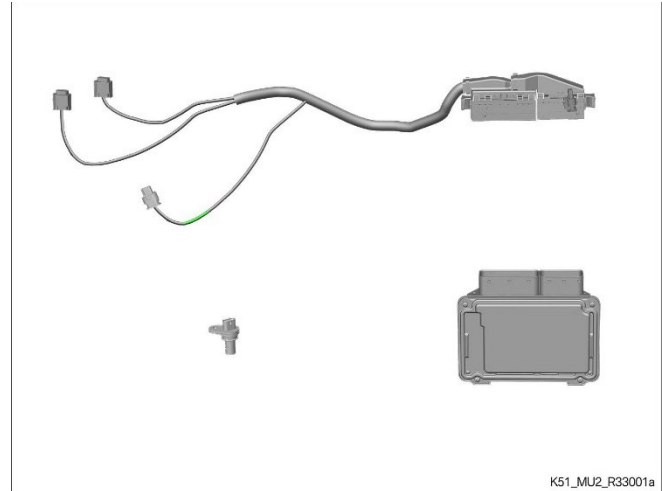
Overview mechanical tool set (33 1 920):

- Hook
- Sensor bracket
- Wheel flange adapter with screws
- Sensor wheel



Overview, scope of electrical tools:

- Measuring wiring harness
- Measuring control unit
- Speed sensor



Cordless screwdriver is not part of tool set:

For a valid test result, it is essential to use a BMW Motorrad **approved brushless cordless screwdriver** as a test device:

- Makita XFD14
- Milwaukee 2803

Other brands/models, especially corded models and those with an impact hammer-drill function can lead to an invalid test result.

NOTICE: The approved brushless screwdriver can be claimed once, on the first warranty claim under sublet.

PARTS INFORMATION

Part Number

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07 11 9 908 207	Cheese head screw (M12×75-10.9-MK)	Qty: 1
07 12 9 908 076	Cheese head screw (M6×20-8-8 MK)	Qty: 3 AS NEEDED
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33 73 8 531 102	Driveshaft (ONLY IF REQUIRED)	Qty: 1
83 23 8 847 417	Klüber lubricant LFT 71-402	Can be entered on the warranty claim under a Sublet 04
33 17 2 331 095 or source locally	Loctite 2701	

NOTICE: The preferred lubrication is Klüber lubricant LFT 71-402 (83 23 8 847 417) and should be used if available, If Klüber lubricant LFT 71-402 is not available please source Klüberplex BEM 34-132 as an alternative.

NOTE: If re-using the cheese head screws 07 12 9 908 076 for the mudguard, please clean the threads and apply Loctite 2701

Special tools

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83 30 5 A68 857	Kit Measuring tool (331920)

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83 30 5 A67 886	Measuring adapter module
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NOTICE: One special tool kit will be autoshipped to each dealer and can be claimed one time on the first warranty claim.

NOTE: Due to limited availability dealers requiring the K52 drilling template should submit an IDS ticket requesting the drilling template. The IDS ticket needs to include the affected VIN. The request will be examined to ensure requirements for the K52 drilling template are met before shipping.

CLAIM INFORMATION

Please submit claims via the normal claim process using the information below:

ALL CLAIMS:

Defect code

00 33 13 00 00	Retrofitting drain valve in swing arm and checking Driveshaft
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Labor Operation

00 60 406	Retrofitting drainage in rear wheel swinging arm	3 FRU
+00 60 906	Retrofitting drainage in rear wheel swinging arm	2 FRU
46 52 510	Mounting and dismounting the rear-wheel stand with special tools (for motorbikes without a center-stand)	1 FRU

ADDITIONALL: ONE TIME CLAIM FOR SOFTWARE CHECK/UPDATE OF THE MEASURING ADAPTER MODULE, CAN ONLY BE CLAIMED ONCE PER A DEALER

Labor Operation

61 00 502	Checking the software	2 FRU
61 00 510	Performing software update	2 FRU

ADDITIONALL: FOR VEHICLES THAT QUALIFY FOR A DRIVESHAFT REPLACEMENT WITHOUT A TEST

Labor Operation

+33 73 500	Removing/installing or replacing the Cardan shaft	6 FRU (K50, K51) 7 FRU (K52)
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ADDITIONALL: FOR VEHICLES REQUIRING A DRIVESHAFT TEST:

Labor Operation

+33 73 502	Checking Cardan shaft	6 FRU (K50, K51) 10 FRU (K52)
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ADDITIONALL: FOR VEHICLES THAT NEED DRIVESHAFT REMOVAL OR REPLACEMENT AFTER THE TEST:

Labor Operation

33 73 507	Replacing Cardan shaft on inspection *OR* cleaning/re-greasing existing driveshaft.	3 FRU (K50, K51) 4 FRU (K52)
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FRUs includes all repair procedures to complete the task with allowance for necessary ancillary tasks (e.g., visual inspection, lubrication, cleaning parts etc.) and administrative tasks.

QUESTIONS REGARDING THIS BULLETIN

Technical inquiries	Contact the BMW Technical Support Group via TSARA
Warranty inquiries	Submit an IDS ticket to the Warranty Department
Parts inquiries	Submit an IDS ticket to the Motorrad Parts Department