Mercedes-Benz

Campaign No. 2022120013, January 2023

TO: ALL MERCEDES-BENZ SPRINTER CENTERS

SUBJECT: **Model 906 (Sprinter)**
Model Year 2010-2016
Check NOx Sensors

Mercedes-Benz AG ("MBAG"), the manufacturer of Mercedes-Benz Sprinters, has determined that on certain MY2010-2016 Sprinter vehicles, the installed NOx-Sensors might not correspond to specifications.

A service campaign is being conducted to check the NOx-sensors and if change if needed.

Prior to performing this Emissions Campaign:

- Please check VMI to determine if the vehicle is involved in the emissions modification campaign and if it has been previously repaired. Always Check VMI for any open campaigns, and perform accordingly.
- Please review the entire Emissions Campaign bulletin and follow the repair procedure exactly as described.

Approximately **54** vehicles are involved.

Order No. V-SC-2022120013

This bulletin has been created and maintained in accordance with MBUSA-SLP S423QH001, Document and Data Control, and MBUSA-SLP S424HH001, Control of Quality Records.

Emissions Campaign Bulletin Emissions Campaign Bulletin Emissions Campaign Bulletin Emissions Campaign Bulletin Emissions Campaign Bulletin Emissions Campaign Bulletin

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Work instructions

Van

Group 49
CODE: NC31016II

SM49.20-D-0034SG
18.11.2022

Check NOx sensors (code: NC31016II, acc. no.: 07 972 04)

Engine	**642, 651 in model 906.155 1N as of 548033 up to 654735 with code ZU8 (National version for USA)**
Engine	**642, 651 in model 906.6##/7## 1P as of 104705 up to 364641 with code ZU8 (National version for USA)**
Engine	**642, 651 in model 906.6##/73# 1S as of 469918 up to 979299 with code ZU8 (National version for USA)**

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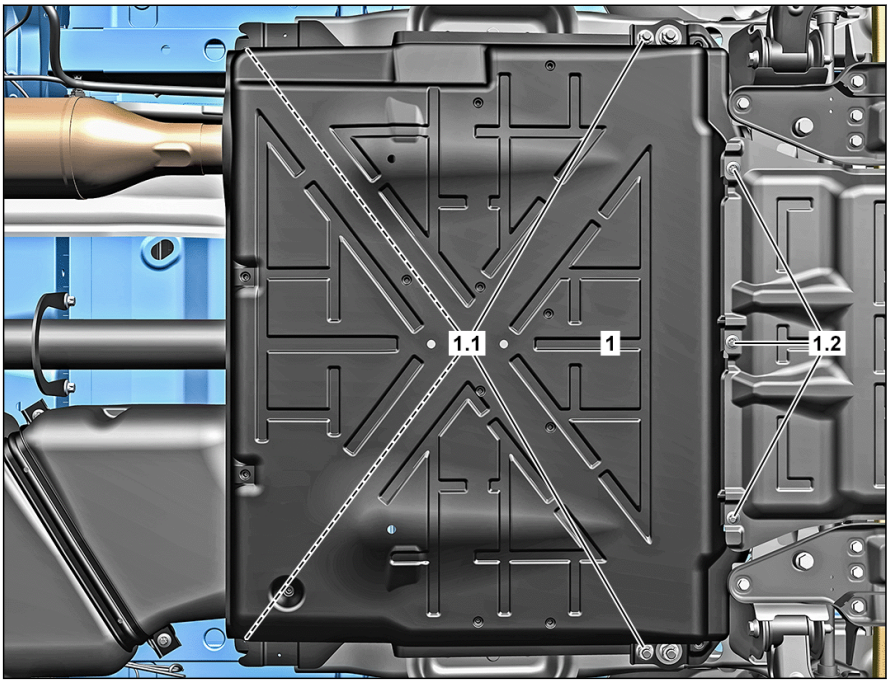
SM49.20-D-0034SG	Check NOx sensors (code: NC31016II, acc. no.: 07 972 04)	08.11.2022

Engine **642, 651 in model 906.155 1N as of 548033 up to 654735 with code ZU8 (National version for USA)**
Engine **642, 651 in model 906.6##/7## 1P as of 104705 up to 364641 with code ZU8 (National version for USA)**
Engine **642, 651 in model 906.6##/73# 1S as of 469918 up to 979299 with code ZU8 (National version for USA)**

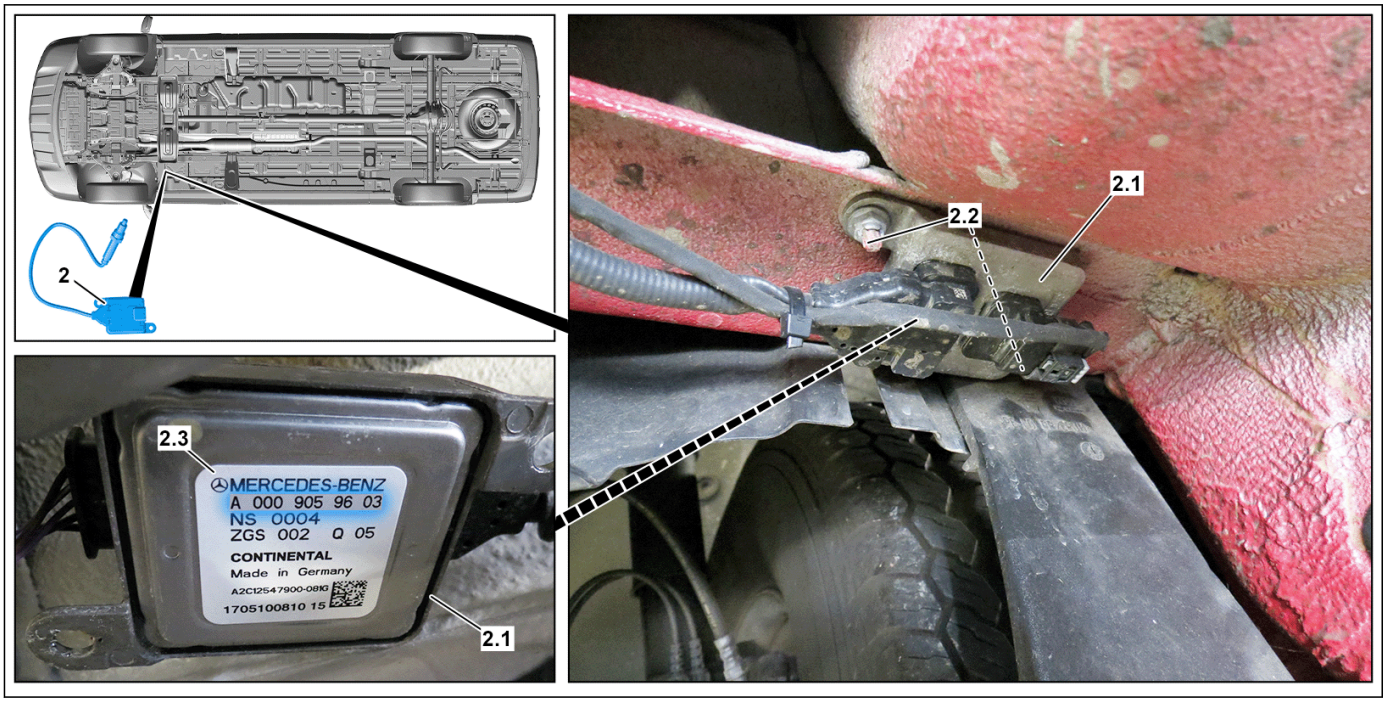
Operation no. of the operation texts or standard texts and flat rates

Category	Op. no.	Operation text	Time (hrs.)	Acc. no.	Code
L	02 3282	Operations: Remove underfloor paneling (when working on veh.)	0.1	07 972 04	NC31016II
L	02 0753	Operations: Check NO_X sensors	0.6	07 972 04	NC31016II
L	02 0756	Operations: Replace NOx sensor upstream of SCR catalytic converter (after check)	0.6	07 972 04	NC31016II
L	02 0757	Operations: Replace NOx sensor downstream of SCR catalytic converter (after check)	0.6	07 972 04	NC31016II
L	02 0754	Operations: Replace 2 NO_X sensors (after check)	0.9	07 972 04	NC31016II

1 Underfloor paneling
1.1 Nut
1.2 Bolts



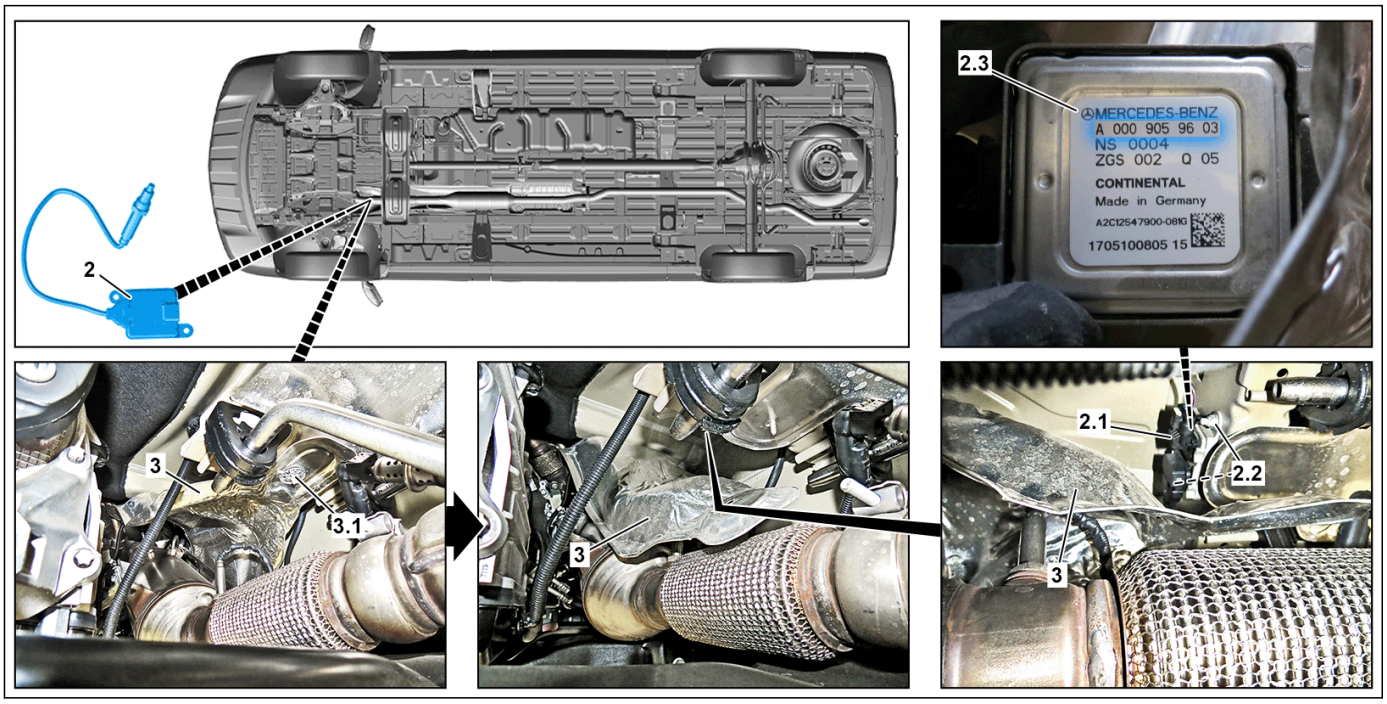
D00.00-A001-76



D49.20-A078-79

Shown on veh. with engine 642, NO_Xsensor (2.1) control unit upstream of SCR catalytic converter at wheel well crossmember, right side of vehicle

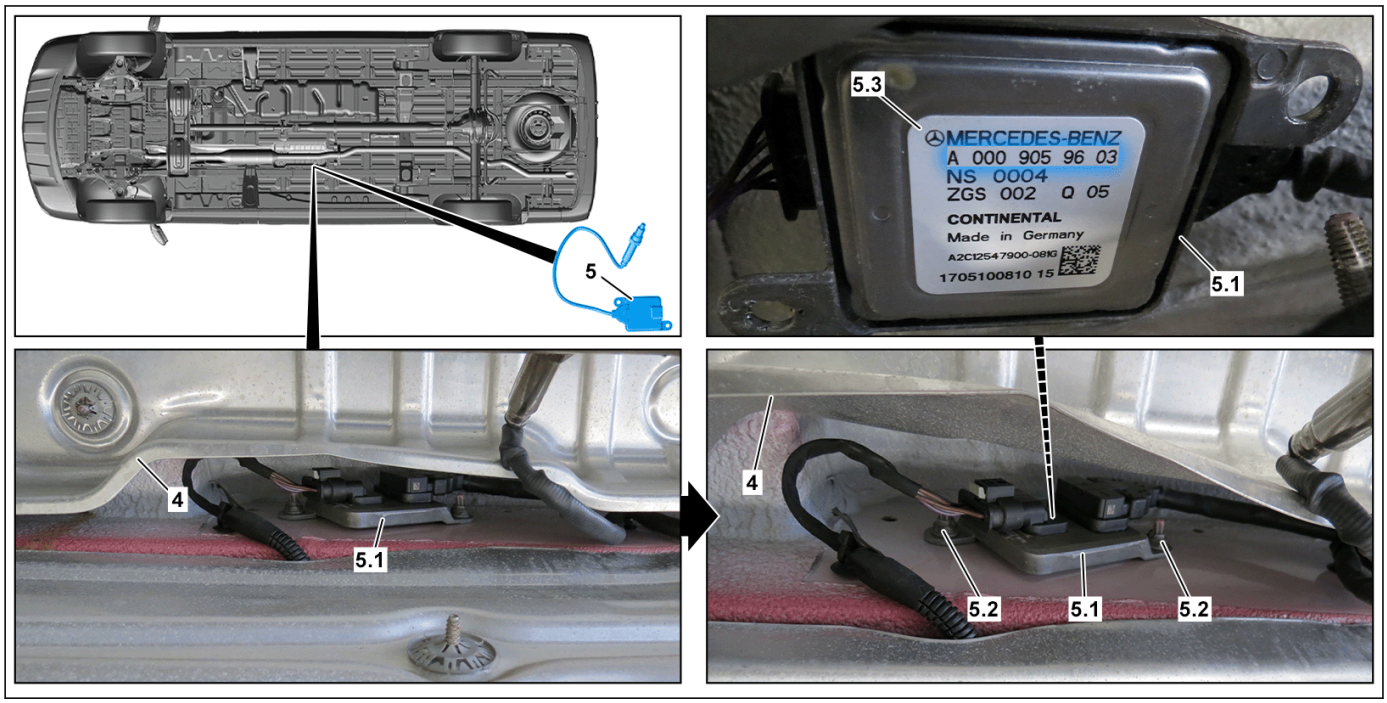
2	NO_Xsensor upstream of SCR catalytic converter	2.2	Nuts	2.3	Information label
2.1	NO_Xsensor control unit				



D49.20-A079-79

Shown on veh. with engine 642, NO_Xsensor (2.1) control unit upstream of SCR catalytic converter at crossmember via exhaust system

2	NO_Xsensor upstream of SCR catalytic converter	2.2	Nuts	3	Heat shield
2.1	NO_Xsensor control unit	2.3	Information label	3.1	Spring nut



D49.20-A080-79

NO_Xsensor control unit (5.1) downstream of SCR catalytic converter at longitudinal member

4	Heat shield	5.1	NO_Xsensor control unit	5.3	Information label
5	NO_Xsensor downstream of SCR catalytic converter	5.2	Nuts		

⚠ Danger	**Risk of death** caused by vehicle slipping or toppling off of the lifting platform.	Align vehicle between vehicle lift columns and position the four support plates at the vehicle lift support points specified by the vehicle manufacturer.	AS00.00-Z-0010-01A
⚠ Warning	**Risk of injury**. Skin or eye injuries may result when handling hot or glowing objects.	Wear protective gloves, protective clothing and safety glasses, if necessary.	AS00.00-Z-0002-01A
⚠ Caution	**Risk of injury** caused by scraping or cutting body parts on sharp vehicle parts	Always wear protective gloves when working on or near sharp and non-deburred vehicle parts. Deburr repair panels.	AS00.00-Z-0017-01A

	Check		
1	Check whether vehicle is affected by measure.	Affected vehicles: Check NOx sensors (code: NC31016II, acc. no.: 07 972 04) i For authorized Mercedes-Benz service partners, only the entry in the Extended VEGA Application (EVA) system, in the "Current" tab, is decisive. There is no need to also check the affected vehicles in the workshop information system (WIS) or vehicle list.	SM49.20-D-0034-01AAA
	Remove		
2 AR	Lift vehicle, jack up.		AR00.60-D-1000H
3	Remove underfloor paneling (1).	MODEL 906 with CODE XM1 (Noise abatement measures) i For this, remove nuts (1.1) and unscrew screws (1.2).	
4	Release heat shield (3) and carefully bend downward.	If NO_X sensor control unit (2.1) upstream of SCR catalytic converter is installed at crossmember above exhaust system. i For this, remove spring lock nut (3.1). i Bend heat shield (3) downward until NO_X sensor control unit (2.1) is accessible.	
5	Remove NO_X sensor control unit (2.1) upstream of SCR catalytic converter at crossmember.	i For this, remove nuts (2.2).	

	Check		
6	Check part number of NO_X sensor upstream of SCR catalytic converter (2).	For this, compare the part number on the information label (2.3) of the NO_X sensor control unit (2.1) with the part number shown in XENTRY Parts Information ("Main groups" 49). To compare the NO_X sensors installed upstream of the SCR catalytic converter (2), the vehicle **must** be selected using the FIN/VIN in XENTRY Parts Information. If the part number of the installed NO_X sensor upstream of the SCR catalytic converter (2) is the same as the part number according to XENTRY Parts Information, ↓ Attach NO_X sensor control unit (2.1) and proceed with operation step 7.	
		Nm M6	BA00.10-Z-1002-01KOA
		If the part number of the installed NO_X sensor upstream of the SCR catalytic converter (2) is not the same as the part number according to XENTRY Parts Information, ↓ Replace NO_X sensor upstream of SCR catalytic converter (2) and proceed with operation step 7.	
☞AR		Remove/install NOx sensor upstream of SCR catalytic converter Model 906 with engine 642.896, 651 with code XM0 (Facelift), model 906 with engine 642.898 Ensure that electric line of NO_X sensor upstream of SCR catalytic converter (2) is routed correctly. Otherwise, malfunction or damage can occur. Do not yet perform commissioning of the NO_X sensor upstream of the SCR catalytic converter (2).	AR14.40-D-2059M

7	Carefully bend heat shield (3) back and attach at crossmember.	If NO_X sensor control unit (2.1) upstream of SCR catalytic converter is installed at crossmember above exhaust system. i For this, attach spring lock nut (3.1).	
8	Carefully bend heat shield (4) to one side in area of NO_X sensor control unit (5.1) downstream of SCR catalytic converter.		
9	Remove NO_X sensor control unit (5.1) from longitudinal member.	i For this, remove nuts (5.2).	

	Check		
10	Check part number of NO_X sensor downstream of SCR catalytic converter (5).	For this, compare the part number on the information label (5.3) of the NO_X sensor control unit (5.1) with the part number shown in XENTRY Parts Information ("Main groups" 49). To compare the NO_X sensor installed downstream of the SCR catalytic converter (5), the vehicle **must** be selected using the FIN/VIN in XENTRY Parts Information. If the part number of the installed NO_X sensor downstream of the SCR catalytic converter (5) is the same as the part number according to XENTRY Parts Information, ↓ Attach NO_X sensor control unit (5.1) and proceed with operation step 11. Nm M6 If the part number of the installed NO_X sensor downstream of the SCR catalytic converter (5) is not the same as the part number according to XENTRY Parts Information, ↓ Replace NO_X sensor downstream of SCR catalytic converter (5) and proceed with operation step 11.	BA00.10-Z-1002-01KOA
AR		Remove/install NOx sensor downstream of SCR catalytic converter Engine 642 in model 906 with code XM0 (Facelift), engine 642.898 in model 906 except code XM0 (Facelift), engine 651 in model 906 with code XM0 (Facelift) Do not yet perform commissioning of the NO_X sensor downstream of the SCR catalytic converter (5).	AR14.40-D-2060M
	Install		
11	Carefully bend back heat shield (4).		

12	Lower vehicle.	If NO_X sensors upstream or downstream of SCR catalytic converter (2, 5) were replaced.	
	Commissioning of NO_X sensors		
13 ☞AD	Connect diagnostic system.	If NO_X sensors upstream or downstream of SCR catalytic converter (2, 5) were replaced. i Always use the latest XENTRY Diagnosis software release, with all available add-ons. i It is absolutely essential to precisely follow the operation steps as described in the vehicle diagnosis system.	AD00.00-D-2000-04SD
14 ☞WS	Connect charging equipment. 000 588 00 81 00 Charger	If NO_X sensors upstream or downstream of SCR catalytic converter (2, 5) were replaced. (!) During the entire work procedure a sufficient and stable voltage supply must be provided for the vehicle's on-board electrical system. Otherwise any undervoltage that occurs may damage the control units. i Follow the operating instructions for the charger. i Use the charger to ensure that an adequate power supply (min. 12.5 V) is provided for the on-board electrical system battery.	WS54.00-P-0037B
15 ☞AD	Perform commissioning of replaced NO_X sensor upstream or downstream of SCR catalytic converter (2, 5).	If NO_X sensor upstream or downstream of SCR catalytic converter (2, 5) was replaced. i It is absolutely essential to precisely follow the operation steps as described in the vehicle diagnosis system. i Do not yet remove vehicle diagnosis system.	AD00.00-D-2000-04SD

16 WS	Remove charger from vehicle. 000 588 00 81 00 Charger	If NO_X sensors upstream or downstream of SCR catalytic converter (2, 5) were replaced.	WS54.00-P-0037B
	Check		
Warning 17	**Risk of accident** from vehicle starting off by itself when engine running. **Risk of injury** (bruises and burns) resulting from working on the engine while it is being started or when it is running. Check for leak tightness when engine is running.	Secure vehicle to prevent it from starting off by itself. Wear closed and snug-fitting work clothes. Do not touch hot or rotating parts. If NO_X sensors upstream or downstream of SCR catalytic converter (2, 5) were replaced. i Visual inspection only.	AS00.00-Z-0005-01A
	Install		
18	Raise vehicle.	If NO_X sensors upstream or downstream of SCR catalytic converter (2, 5) were replaced.	
19	Install underfloor paneling (1).	MODEL 906 with CODE XM1 (Noise abatement measures) i For this, attach nuts (1.1) and screw in screws (1.2).	
20	Lower vehicle.		

Nm Headless screws/bolts: screws/bolts and nuts, coarse-pitch thread

Number	Designation			8.8	10.9
BA00.10-Z-1002-01KOA	M6	Galvanized	Nm	9	13
		Phosphated	Nm	9	12

Nm Headless screws/bolts: screws/bolts and nuts, coarse-pitch thread

Number	Designation			12.9
BA00.10-Z-1002-01KOA	M6	Galvanized	Nm	16
		Phosphated	Nm	14

Parts ordering note

Part no.	Designation	Quantity
KG 49	NO_X sensor upstream of SCR catalytic converter (Determine replacement parts to match the vehicle identification number (FIN/VIN) using XENTRY Parts Information system!)	n. B
KG 49	NO_X sensor downstream of SCR catalytic converter (Determine replacement parts to match the vehicle identification number (FIN/VIN) using XENTRY Parts Information system!)	n. B