

223 with 725.1 with ISA2 and M176 Harsh 3to4 Upshift

Topic number	LI27.60-P-080169
Version	1
Function group	27.60 - Gearshift, control
Date	2/11/26
Validity	BR223 with M176 engine and 725.1 (NAG3 Mopf) transmission with ISA2
Reason for change	

Complaint

Complaints of a harsh 3to4 upshift

Cause

Lost torque adaptation values and negative fill times of clutch K27.

Remedy

Short-term measure:

Note:

All steps—including resetting the learned values and performing the stationary adaptation—must be completed to resolve the concern.

1. Perform IPR and follow the provided instructions.
2. Perform Special Function "Resetting of learned values 'Deceleration Mode'"
(VGS > Special Procedures > Special procedure > Resetting learned values Deceleration mode)
3. Complete the standstill adaptation

Long-term measure:

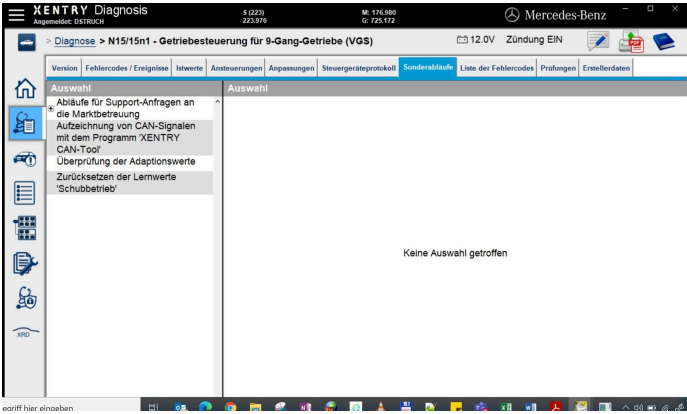
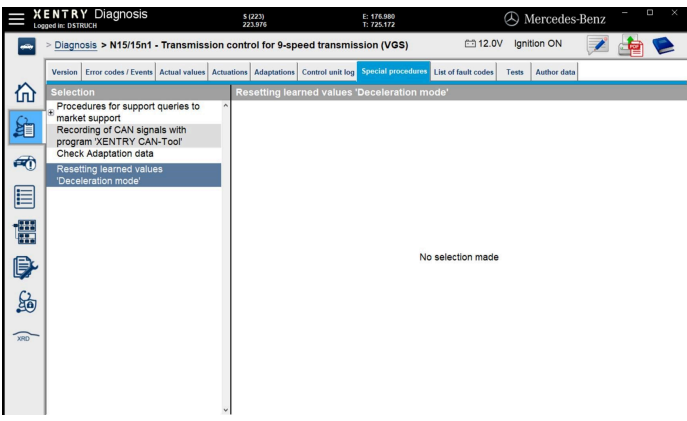
A software resolution for software levels 22A.3 (n3g222aa03ub) and 22A.4 (n3g222aa04ub) is in development.

- Check VGS control unit log or eeprom .txt file for "Program Status"

If the vehicle software level is not 22A.3 or 22A.4:

A software resolution will not be created for these vehicles, please follow the short term solution to alleviate the concern.

Once the software is released, an update on availability will be added in IPR and in this LI document.

Attachments																																	
File	Description																																
<p>Sonderoutine Zurücksetzen der Lernwerte Schubetrieb.jpg</p> 	<p>Special Routine 'Reset Overrun Mode Learned Values'</p>																																
<p>Special procedure-Resetting learned values Deceleration mode.jpg</p> 	<p>Special Procedure 'Reset Overrun Mode Learned Values'</p>																																
<p>Verify SW Number.png</p> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Control unit-specific data</p> <p>VGS Control Unit Log</p> <table border="0"> <tr><td>MB object number for hardware</td><td>0009011705</td></tr> <tr><td>MB object number for software (code)</td><td>0009021188</td></tr> <tr><td>Hardware version</td><td>1942 001</td></tr> <tr><td>Software version</td><td>2242 000</td></tr> <tr><td>Boot software version</td><td>1942 000</td></tr> <tr><td>Fingerprint for software</td><td>1</td></tr> <tr><td>Diagnosis identifier</td><td>00/09/1B</td></tr> <tr><td>Control unit variant</td><td>VGS2NAG3M_VGS2NAG3M_App1_22B_0_000b1b</td></tr> <tr><td>Name of communication data</td><td>VGS2NAG3M</td></tr> <tr><td>Version of communication data</td><td>5.1.2</td></tr> <tr><td>EHS part number</td><td>7252709917</td></tr> <tr><td>Transmission variant</td><td>Default</td></tr> <tr><td>Model of clutch</td><td>Torque converter</td></tr> <tr><td>Adaptation values</td><td>PRESENT</td></tr> <tr><td>Resettable mode</td><td>MC</td></tr> <tr><td>Program status</td><td>n3g222ba02ub</td></tr> </table> <p>EEPROM Txt file</p> <pre> 0x03 0x00 0x01 0x00 0x00 0x00 0x00 0x04 0x00 0x00 0x00 0x01 0x00 0x00 0x17 0x00 0x00 0xf5 0x11 0x00 0x06 0xE8 0x 0x00 0x00 0x00 0x00 Variantcoding_hybrid : 0x75 0x00 0x00 0x00 0x04 0x07 0x00 0x02 0x02 0x00 0x00 0x01 0x01 0x00 0x01 0x04 0x00 0x00 0x03 0x00 0x01 0x00 0x00 0x00 0x00 0x0B 0x04 0x00 0x00 0x00 0x01 0x00 0x00 0x17 0x00 0x00 0xf5 0x11 0x00 0x06 0xE8 0x 0x00 0x00 0x00 0x00 Transmission_ID (IC1) : VGS2NAG3M_VGS2NAG3M_App1_22B_0_000b1b Programstand : n3g222ba02ub Variantcoding : _Z05X00001 Softwareversion : AT24 VariantenSteuIng : 0x75 0x00 0x00 0x00 0x04 0x07 0x00 0x02 0x02 0x00 0x00 0x01 0x01 0x00 0x01 0x04 0x00 0x00 </pre> </div>	MB object number for hardware	0009011705	MB object number for software (code)	0009021188	Hardware version	1942 001	Software version	2242 000	Boot software version	1942 000	Fingerprint for software	1	Diagnosis identifier	00/09/1B	Control unit variant	VGS2NAG3M_VGS2NAG3M_App1_22B_0_000b1b	Name of communication data	VGS2NAG3M	Version of communication data	5.1.2	EHS part number	7252709917	Transmission variant	Default	Model of clutch	Torque converter	Adaptation values	PRESENT	Resettable mode	MC	Program status	n3g222ba02ub	<p>Checking software level</p>
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Disclaimer

NOTE: The information contained in this document is intended for use by trained, professional technicians with the knowledge to properly and safely perform diagnosis and repairs on Mercedes-Benz vehicles, using Mercedes-Benz approved tools and equipment. It informs service technicians about conditions that could occur in certain vehicles and provides information that could assist in proper vehicle diagnosis, service, or repair. It does not indicate that a defect is present in any vehicle referenced in this document nor does it imply warranty coverage. DO NOT assume that a symptom or condition, or a described cause of a symptom or condition, affects any particular vehicle or groups of vehicles, or that a described repair applies to any particular vehicle or groups of vehicles. There can be multiple causes resulting in the same or similar symptoms or conditions described in this document, and trained professional service technicians must use their diagnostic skills to make evaluations on a case-by-case basis. The information contained in this document does not guarantee warranty coverage nor does it extend the vehicle's warranty in any way.

Symptoms
Power transmission > Automatic transmission > Function > Shifts
Power transmission > Automatic transmission > Function > Poor shift quality

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A0009022699			22A.3 for AEJ 23/1 - old SW: A0009024595	1	CURRENTLY IN DEVELOPMENT and pending approval / Shift quality improvement	X
A0019029621			22A.4 for MY26; AEJ 25/1 - old SW: A0019022521	1	CURRENTLY IN DEVELOPMENT and pending approval - Shift quality 3-4 Robustness improvement	X
A0019029721			22A.3 for MY24 + MY25; AEJ 24/1 - old SW: A0009022699	1	CURRENTLY IN DEVELOPMENT and pending approval - Shift quality 3-4 Robustness improvement	X

Control unit/fault code	
Control unit	Fault text
N15/15 - Transmission control for 9-speed transmission (VGS) (VGS2NAG3M)	-

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
		H	27014	Transmission adaptation