



MERCEDES 722.9 DELAYED REVERSE ENGAGEMENT

COMPLAINT: Some 2009 model Mercedes Benz vehicles equipped with the 722.9 transmission may exhibit a Delayed Reverse Engagement after overhaul.

CAUSE: The cause may be, that the engagement relearn sequence was not performed.

CORRECTION: To correct this condition, use a capable scan tool to reset adaptives and note, a sequence of engagements may need to be performed under specific temperatures as shown in Figure 1.

Note: There is a PC based software program that is reasonably priced “a capable scan tool” available from bluelinkdiag.com . Refer to screen captures shown on the following pages showing the adaptation process.

REVERSE ENGAGEMENT RELEARN PROCEDURE

Using a capable scan tool to monitor Transmission Fluid temperature:

- Start engine from cold
Shift 5 times N to Reverse (remain in gear for 5 seconds)

- Warm to 40°C 86°F
Shift 5 times N to Reverse (remain in gear for 5 seconds)
Then drive the vehicle forward and exceed a speed of 50kmh/32mph at least 1 time.
Stop the vehicle-Shift 5 times N to Reverse (remain in gear for 5 seconds)

- Warm to 70°C 158°F
Shift 5 times N to Drive (remain in gear for 5 seconds)
Then drive the vehicle forward and exceed a speed of 50kmh/32mph at least 1 time.
Stop the vehicle-Shift 5 times N to Reverse (remain in gear for 5 seconds)
Stop the vehicle-Shift 5 times N to Drive (remain in gear for 5 seconds)

Figure 1



Technical Service Information

BLUE LINK SCAN TOOL OPERATION SELECTION

The screenshot shows the 'Operation Selection' window in the BlueLink Diagnostics Client. The window title is 'BlueLink Diagnostics Client - Operation Selection'. The interface includes a top toolbar with function keys (F5-F12) and a 'Ready' status indicator. On the left, there are several information panels: 'Battery Voltage' (12.1), 'Connectivity Status' (Internet, PassThru Device, Vehicle Session), 'Vehicle Information' (Manufacturer: Mercedes, Model: VGSNAG_722.9, ECU: vgsnag2_CAN), and 'System Information' (Device Name: Mongoose ISO/CAN, DLL Version: 01.02.14 Mongoose ISO/CAN J2534 Windows DLL 2011.04.04, App Version: 1.1.7.0). The main area is a table with columns 'Select' and 'Description'. The table contains five rows of operations, with the third row selected.

Select	Description
<input type="checkbox"/>	Real Time Actual Values
<input type="checkbox"/>	Read and Clear Fault Codes
<input type="checkbox"/>	Complete List of Fault Codes
<input checked="" type="checkbox"/>	ECU Version Information
<input type="checkbox"/>	Read and Transfer Factory Flow Data

ECU VERSION INFORMATION

The screenshot shows the 'ECU Version' window in the BlueLink Diagnostics Client. The window title is 'BlueLink Diagnostics Client - ECU Version'. The interface is similar to the previous screenshot, with the same left-hand panels. The main area is a table with columns 'Name' and 'Value'. The table contains six rows of ECU version information.

Name	Value
MB number	0335457332
Hardware Status	09/04
Software Status	47/06
Date	15.12.06
Supplier	SIEMENS
Diagnosis Identifier	01/01



Technical Service Information

OPERATION SELECTION-RESETTING ADAPTIVES

BlueLink Diagnostics Client - Operation Selection

Info Help

Battery Voltage
12.2

Connectivity Status
Internet
PassThru Device
Vehicle Session

Vehicle Information
Manufacturer: Mercedes
Model: VGSNAG_722.9
ECU: vgsnag2_CAN

System Information
Device Name: Mongoose ISO/CAN
DLL Version: 01.02.14 Mongoose ISO/CAN J2534 Windows DLL 2011.04.04
App Version: 1.1.7.0

Select	Description
<input type="checkbox"/>	Real Time Actual Values
<input type="checkbox"/>	Read and Clear Fault Codes
<input type="checkbox"/>	Complete List of Fault Codes
<input type="checkbox"/>	ECU Version Information
<input type="checkbox"/>	Read and Transfer Factory Flow Data
<input checked="" type="checkbox"/>	Reset Adaptation Values

RESETTING ADAPTIVES SELECTION

BlueLink Diagnostics Client - Version Coding (Predefined)

Info Help

Battery Voltage
12.2

Connectivity Status
Internet
PassThru Device
Vehicle Session

Vehicle Information
Manufacturer: Mercedes
Model: VGSNAG_722.9
ECU: vgsnag2_CAN

System Information
Device Name: Mongoose ISO/CAN
DLL Version: 01.02.14 Mongoose ISO/CAN J2534 Windows DLL 2011.04.04
App Version: 1.1.7.0

Select	Result	Description
<input type="checkbox"/>		Reset Adaptation Data - Upshift
<input type="checkbox"/>		Reset Adaptation Data - Downshift
<input type="checkbox"/>		Reset Adaptation Data - Torque Converter Lockup Clutch



Technical Service Information

ADAPTIVE RESET

The screenshot displays the BlueLink Diagnostics Client software interface. The title bar reads "BlueLink Diagnostics Client - Version Coding (Predefined)". The interface includes a top toolbar with function keys F5 through F12 and a "Ready" status indicator. On the left side, there are several informational panels: "Info" and "Help" buttons, "Battery Voltage" showing 12.2V, "Connectivity Status" with indicators for Internet, PassThru Device, and Vehicle Session, "Vehicle Information" (Manufacturer: Mercedes, Model: VGSNAG_722.9, ECU: vgsnag2_CAN), and "System Information" (Device Name: Mongoose ISO/CAN, DLL Version: 01.02.14 Mongoose ISO/CAN J2534 Windows DLL 2011.04.04, App Version: 1.1.7.0). The main area is a table with columns "Select", "Result", and "Description".

Select	Result	Description
<input checked="" type="checkbox"/>		Reset Adaptation Data - Upshift
<input type="checkbox"/>		Reset Adaptation Data - Downshift
<input type="checkbox"/>		Reset Adaptation Data - Torque Converter Lockup Clutch

The bottom of the screenshot shows the Windows taskbar with the Start button, system tray icons, and the time 2:02 PM.

Visit Bluelinkdiag.com for more information