

Injectronics

TECHNICAL BULLETIN

MERCEDES BENZ TRANSMISSION CONTROL

#T0150

Make: Mercedes Benz

Model: 7G TRONIC (722.9) Mechatronic conductor plate

Subject: Transmission faults

Mercedes Benz has been producing their own automatic transmissions since the 1950s. In 2003, Mercedes Benz introduced the world's first seven speed automatic transmission. The Mercedes 722.9 transmission was the result of over three years of development, where some of the world's brightest automotive engineers collaborating to create a Mercedes 7-speed automatic transmission that can provide exhilarating performance in high horsepower models.

The Mercedes 7G-Tronic 722.9 transmission is the fifth generation of their transmission line, and it is used in everything from the top of the line Mercedes S-Class, all the way down to the Mercedes C-Class produced between 2004 and 2010. It has seven forward gears and two reverse gears, which are created by two simple planetary gearsets, and 1 Ravigneaux gearset. The 722.9 transmission has four multi-disc brakes and three multi-disc clutches, which give it the ability to drop multiple gears in a single downshift. Naturally, some Mercedes 7G Tronic transmission problems occur, particularly with the 722.9 conductor plate and valve body.

Common faults include the transmission flaring or slipping between gear changes, transmission holding in gear and loss of all drive. The following diagnostic fault codes may be logged:

- 0717 The signal from component Y3/8n1 (Turbine speed sensor VGS) is not available
- 0718 Component Y3/8n1 (Turbine speed sensor VGS) is defective
- 0722 The signal from component Y3/8n3 (Output speed sensor VGS) is not available
- 0723 Component Y3/8n3 (Output speed sensor VGS) is defective
- 0748 The internal electrical check of component Y3/8y2 (K1 clutch control solenoid valve VGS) has failed
- 0778 The internal electrical check of component Y3/8y5 (B1 brake control solenoid valve VGS) has failed
- 0798 The internal electrical check of component Y3/8y7 (B3 brake control solenoid valve VGS) has failed
- 2216 Check component Y3/8s1 (Selection range sensor VGS) The adaptation sequence occurred outside the valid range
- 2716 The internal electrical check of component Y3/8y4 (K3 clutch control solenoid valve VGS) has failed
- 2725 The internal electrical check of component Y3/8y6 (B2 brake control solenoid valve VGS) has failed
- 2734 The internal electrical check of component Y3/8y3 (K2 clutch control solenoid valve VGS) has failed
- 2759 The internal electrical check of component Y3/8y8 (Torque converter lockup clutch control solenoid valve VGS) has failed
- 2766 Excessive rpms have occurred at component Y3/8n2 (Internal speed sensor VGS)
- 2767 The signal from component Y3/8n2 (Internal speed sensor VGS) is not available
- 2768 Component Y3/8n2 (Internal speed sensor VGS) is defective
- 2810 The internal electrical check of component Y3/8y1 (Working pressure control solenoid valve VGS) has failed

Replacing the valve body/conductor plate with a second-hand unit in a 722.9 requires the TCM to be virginised and then married to your car. Also, in many cases, wreckers are not willing to separate valve bodies from the transmissions. What this means is that the TCM cannot be from a used car. In the 722.9 transmissions, the TCM is on top of the conductor plate. This requires that you purchase the replacement parts from the dealer, which is costly. Injctronics can offer a test & repair service of customers own 722.9 Conductor plate, therefore eliminating the need for any programming/coding in the vehicle.

Part no: TCM7GREP

We can also offer replacement 722.9 conductor plates if the customer's original unit is physically damaged or unrepairable. (Key, EIS and ESL also required in this case to program a replacement unit).

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