

MODEL 164.1 as of model year 2009

/YoM 08 model refinement package

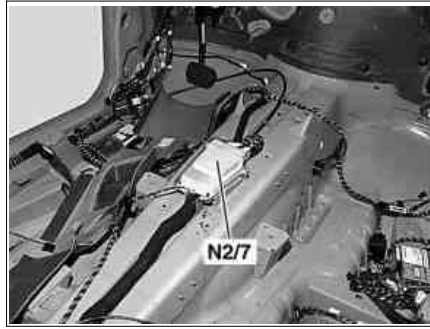
MODEL 164.8, 251.0 /1 as of model year 2009

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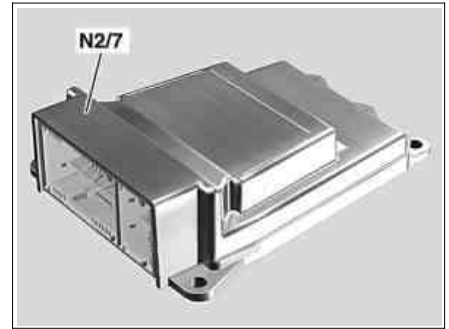
N2/7 Restraint systems control unit

Location

The restraint systems control unit is located on the center tunnel between the front seats.



P91.60-2959-01



P91.60-2964-01

Task

The restraint systems control unit has the following tasks:

- Reading in signals and sensors
- Evaluation of input factors
- Actuation of components

Reading in signals and sensors

The input factors are read in via the following connections:

- Direct line
- Engine compartment CAN

Direct line

The following signals and sensors are read via a direct line:

- Circuit 15R
- Circuit 30
- Circuit 31
- Drive sidebag sensor (A53)
- Front passenger sidebag sensor (A54)
- Front passenger seat occupied and child seat recognition sensor (B48) (with code (U18) Automatic child seat recognition (ACSR [AKSE]))
- Driver-side frontal acceleration sensor (B48/1)
- Passenger-side frontal acceleration sensor (B48/2)
- Driver door pressure sensor (B48/7)
- Front passenger door pressure sensor (B48/8)
- Rear door pressure sensor, driver-side (B48/9) (with code (293) Left and right rear sidebag)
- Rear door pressure sensor, passenger-side (B48/10) (with code (293) Left and right rear sidebag)
- Driver seat belt buckle and seat belt warning switch (S68/1)
- Front passenger seat belt buckle and seat belt warning switch (S68/2)

Engine compartment CAN

The following signals are read in over the engine compartment CAN:
From the central gateway control unit (N93):

- Status of seat occupied recognition from Weight Sensing System (WSS) control unit (N2/13) (with code (494) USA version)

Evaluation of input factors

The input factors that have been read in are evaluated by the integrated microprocessor and the affected components are then actuated.

Actuation of components

Components are actuated via the following lines:

- Direct line
- Engine compartment CAN

Direct line

The following components are actuated via a direct line:

- Pyrotechnical separating element (K88) (with model 164.195 or model 164.1 with engine 272 as of 1.7.09 or model 164.8 with engine 642 or model 164.8 with engine 273 as of 1.7.09)
- Driver emergency tensioning retractor squib (R12/1) (model 251 as of 1.8.10)
- Front passenger emergency tensioning retractor squib (R12/2) (model 251 as of 1.8.10)
- Passenger airbag squib 1 (R12/4)
- Passenger airbag squib 2 (R12/5)
- Left 2nd row emergency tensioning retractor squib (R12/6)
- Right 2nd row emergency tensioning retractor squib (R12/7)
- Driver sidebag squib (R12/9)
- Front passenger sidebag squib (R12/10)
- Left sidebag squib for 2nd seat row (R12/11) (with code (293) Left and right rear sidebag)
- Right sidebag squib for 2nd seat row (R12/12) (with code (293) Left and right rear sidebag)

- Driver airbag squib 1 (R12/13)
- Driver airbag squib 2 (R12/14)
- Left windowbag squib (R12/16)
- Right windowbag squib (R12/17)
- Driver kneebag squib (R12/25) (with code (294) Kneebag)
- Left 3rd seat row emergency tensioning retractor squib (R12/35) (for model 251 and for model 164.8 with code (845) 3rd seat row folding down electrically)

- Analog crash output to rear SAM control unit (N10/8) (with engine 642)
- Digital crash output to emergency call system control unit (N123/4) (with code (359) TELE AID emergency call system)

Engine compartment CAN

The signals are sent by the restraint system control unit over the engine compartment CAN.


The functions resulting therefrom are described in the corresponding

- Right 3rd seat row emergency tensioning retractor squib (R12/36) (for model 251 and for model 164.8 with code (845) 3rd seat row folding down electrically)
- Driver buckle emergency tensioning retractor squib (R46) (model 164; model 251 up to 30.6.10)
- Front passenger buckle emergency tensioning retractor squib (R46/1) (model 164; model 251 to 30.6.10)
- Driver NECK-PRO head restraint solenoid (Y24/12)
- Front passenger NECK-PRO head restraint solenoid (Y24/13)
- Analog crash output to the CDI control unit (N3/9) (for diesel engine) or to the ME-SFI [ME] control unit (N3/10) (for gasoline engine)

function descriptions (see block diagram or function schematic).

i The restraint system control unit has integrated sensors. For this reason, do not remove the restraint equipment control unit when the power supply is activated, as otherwise airbags and emergency tensioning retractors trigger.

All work performed on or with the restraint systems control unit may only be conducted when the battery (G1) has been disconnected and after a waiting time of approx. ≥ 60 s.

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|  | Wiring diagram for airbag control unit | Model 164 Sheet 1 | PE91.60-P-2105-97MAA |
| | | Model 164 Sheet 2 | PE91.60-P-2105-97MAB |
| | | Model 251 Sheet 1 | PE91.60-P-2105-97RAA |
| | | Model 251 Sheet 2 | PE91.60-P-2105-97RAB |