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

Drive sidebag sensor (A53)

Front passenger sidebag sensor (A54)

Driver door pressure sensor (B48/7)

Driver-side frontal acceleration sensor (B48/1) Passenger-side frontal acceleration sensor (B48/2)

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

Circuit 15R

Circuit 30

Circuit 31

(B48)

Direct line

P91.60-2964-01

5.5.08

## 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 with the following connections:

- Direct line
- Engine compartment CAN

### **Engine compartment CAN**

The following signals are read in over the engine compartment CAN: by 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 with the following lines:

- Direct line
- Engine compartment CAN
- 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)
- 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)

#### **Direct line**

(S68/2)

The following components are actuated via a direct line:

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

Front passenger seat occupied and child seat recognition sensor

(with code (U18) Automatic child seat recognition (ACSR [AKSE]))

- Pyrotechnical separator (K88) (for model 164.8 with engine 642)
- 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)
- 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 resulting functions are described in each function description (refer to 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

- Drive buckle ETR squib (R46)
- Front passenger ETR squib (R46/1)
- 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)

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. $\geq$ 60 s.

PE	Wiring diagram for airbag control unit	Model 164	PE91.60-P-2105-99MAA
		Sheet 1	
		Sheet 2	PE91.60-P-2105-99MAB
		Model 251	PE91.60-P-2105-99RAA
		Sheet 1	
		Sheet 2	PE91.60-P-2105-99RAB