MODEL 216, 221

except CODE (810) Sound system as of model year 2009 /YoM 08

**MODEL 221** 

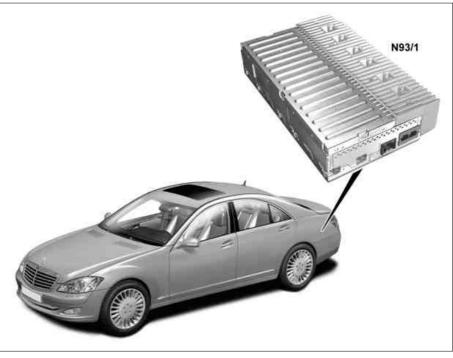
except CODE (810) Sound system except CODE (811) Advanced sound system as of model year 2011 /YoM 10

#### Shown on model 221

N93/1 Audio tuner control unit

### Location

The audio tuner control unit is located on the left of the trunk.



P82.62-3277-06

#### Task

The audio tuner control unit administers all audio sources integrated in the vehicle (e.g. radio tuner) and processes their audio signals. The audio tuner control unit does the following:

- Reading in of signals
- **Processing signals**
- **Transmit signals**
- **Actuation of components**

### MOST

Audio signals are read in over the MOST by the following control units:

- COMAND controller unit (A40/3)
- UPCI [UHI] (Universal Portable Cell Phone Interface) control unit (N123/1) (up to 31.5.09 with code (386) Preinstallation for telephone "Cell phone", UPCI [UHI] system)
- Voice control system (VCS [SBS]) control unit (N41/3) (up to 31.5.09 with code (813) Voice control system (VCS [SBS]))
- Digital Audio Broadcasting control unit (N87/3) (with code (537) Digital radio)
- SDAR control unit (N87/5) (up to 31.5.09 with code (536) SIRIUS satellite radio)
- High definition tuner control unit (N87/8) (with code (517) HD radio)

# **Actuation of components**

Components are actuated with the following connection:

Direct line

# **Direct line**

The following components are actuated via direct lines:

- Model 216:
  - Left door speaker group (H4/1)

### Reading in of signals

Signals are read in via the following connections:

- Direct line
- Media Oriented System Transport (MOST)

### **Direct line**

The following signals are read in via direct lines:

- **MUTE**
- Wake-Up
- Antenna signals from the rear window antenna amplifier module (A2/12)

## Processing signals

The audio tuner control unit processes the following signals:

- Copy-protected audio signals
- DVD audio signals
- Radio signals
- Vehicle speed signal for speed-dependent volume control (SDV [GAL])

# **Transmit signals**

The signals are transmitted via the following connections:

MOST

## MOST

The following signals are transmitted via MOST:

- Traffic messages to COMAND controller unit
- Model 221:
  - Left front door speaker group (H4/1)
  - Right front door speaker group (H4/2)
  - Left rear door speaker group (H4/3)
  - Right rear door speaker group (H4/4)
  - Bass box speaker
  - Center cockpit speaker (centerfill)

- Right door speaker group (H4/2)
- Left door rear speaker (H4/3)
- Right door rear speaker (H4/4)
- Bass box speaker (H4/17)
- Center cockpit speaker (centerfill) (H4/27)

### **Design**

The following components are integrated in the audio tuner control unit:

- 2 radio receivers for reception of radio signals
- MOST interface
- Decoder for processing audio signals in DVD mode (audio or video DVD)
- Basic amplifier (audio signal output)

### **Diagnosis**

The audio tuner control unit has its own fault memory. All faults that occur during operation are stored there.

On request, all the diagnostic data are forwarded to the COMAND controller unit via MOST.

The diagnostic data are forwarded via the central CAN (CAN F) to the central gateway control unit (N93) where they can be read out via the data link connector (X11/4).

The audio tuner control unit can be configured through diagnosis.

The following can be selected:

- Frequency bands
- Volume increase for incoming traffic messages
- Switch-off time for circuit 15 OFF

₽PE	Wiring diagram for radio (RD) control unit	Model 216	PE82.60-P-2101-97CAA
		Model 221	PE82.60-P-2101-97SAA