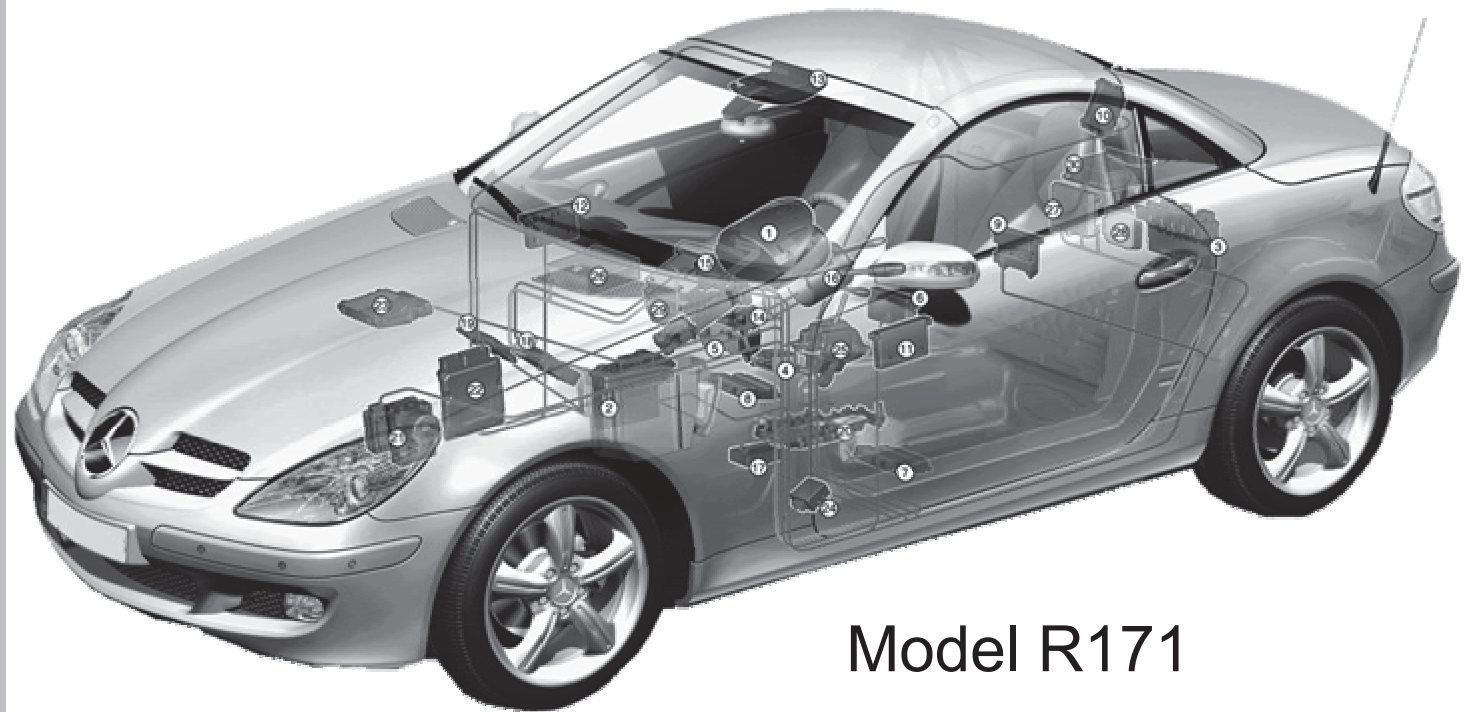




Mercedes-Benz

# Audio & Communications



Model R171

# Objectives

At the end of this session, you will be able to:

1. Properly connect the microphones to Tele Aid and Cell Phone
2. Configure MOST for vehicles with Audio 20 or COMAND equipment
3. Explain the basic operation of Navigation, Audio Gateway, CD changer and Satellite radio
4. Describe components necessary for Cell Phone installation
5. Locate Antennas and describe the flow paths for their signals

These technical training materials are current as of the date noted on the materials, and may be revised or updated without notice.

Always check for revised or updated information.

To help avoid personal injury to you or others, and to avoid damage to the vehicle on which you are working, you must always refer to the latest Mercedes-Benz Technical Publication and follow all pertinent instructions when testing, diagnosing or making repair.

Illustrations and descriptions in this training reference are based on preliminary information and may or may not correspond to the final US version vehicles. Refer to the official introduction manual and WIS when available.

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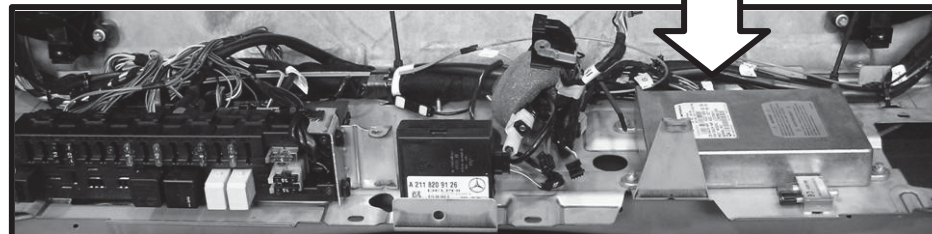
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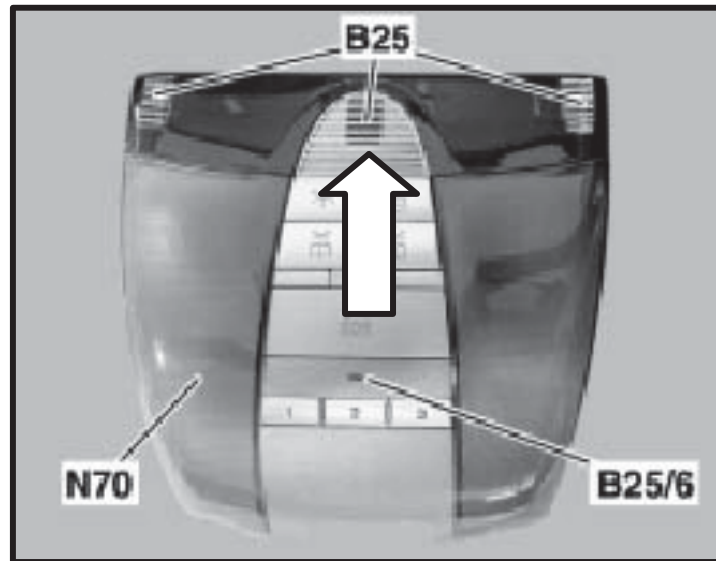
# Digital Tele Aid



*Located on Module Bridge in trunk – Right side*

*(Basic Tele Aid info can be found in other training courses)*

# Tele Aid Microphone (B25b1)



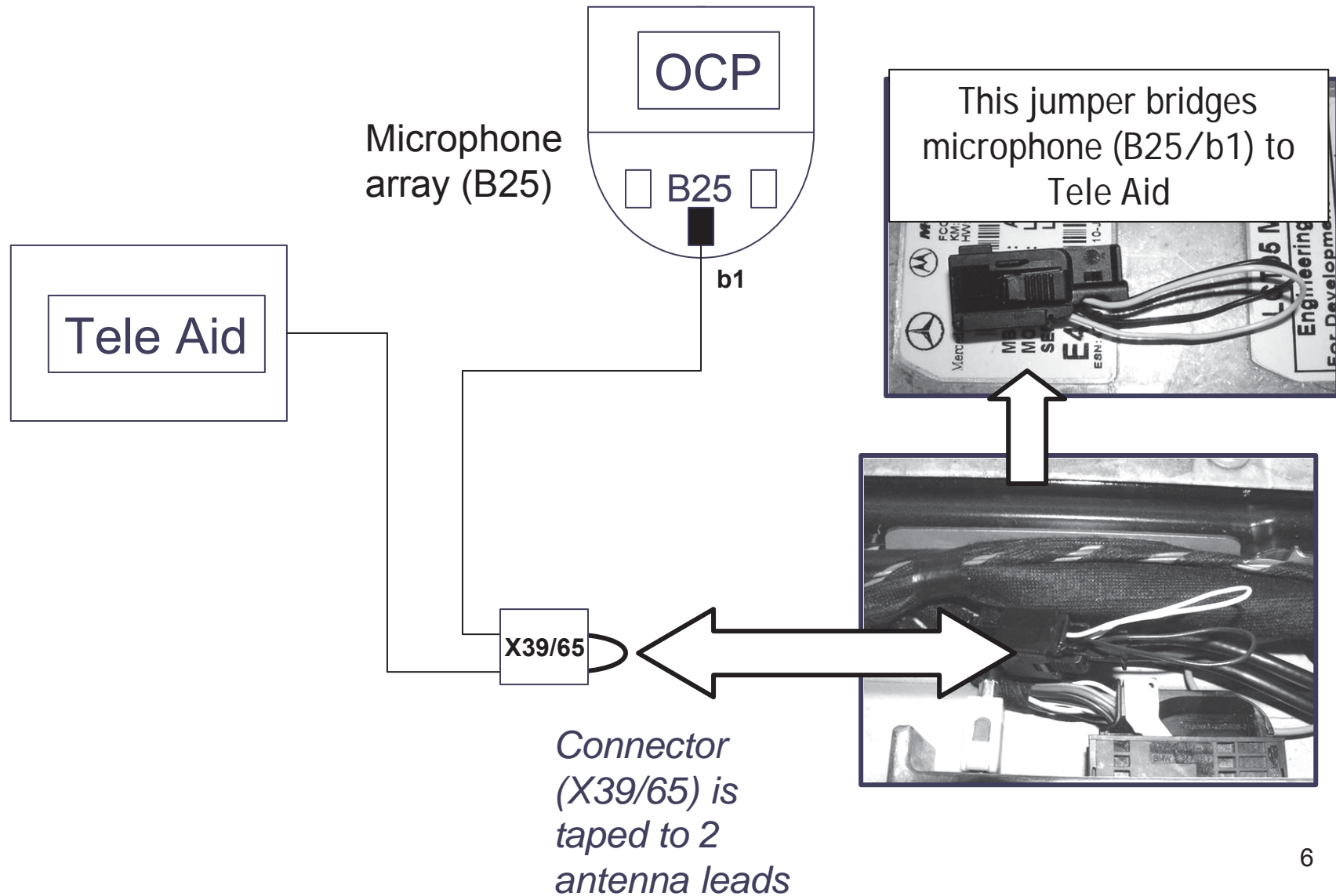
Overhead Control Panel (N70)

B25b1 Connected to Tele Aid directly  
*(Unless cell phone installed. See p.26)*

*B25/6: Dynamic Range Optimization (DRO) microphone for Audio Gateway  
(COMAND system only)*

# Tele Aid Microphone Connection

Hook-up in trunk: without cell phone



# Tele Aid Speakers

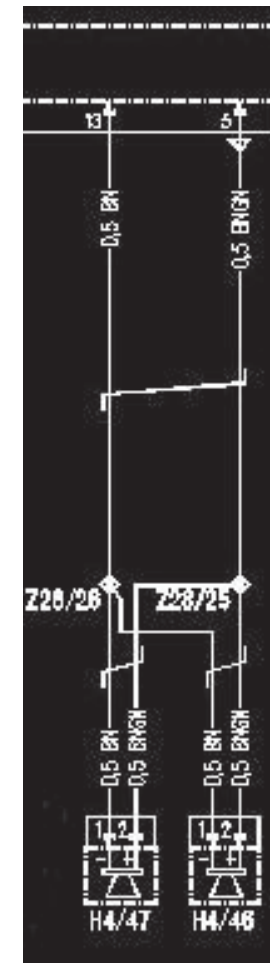
- Left and right A-pillar speakers wired in parallel from Tele Aid unit
- Volume is not adjustable



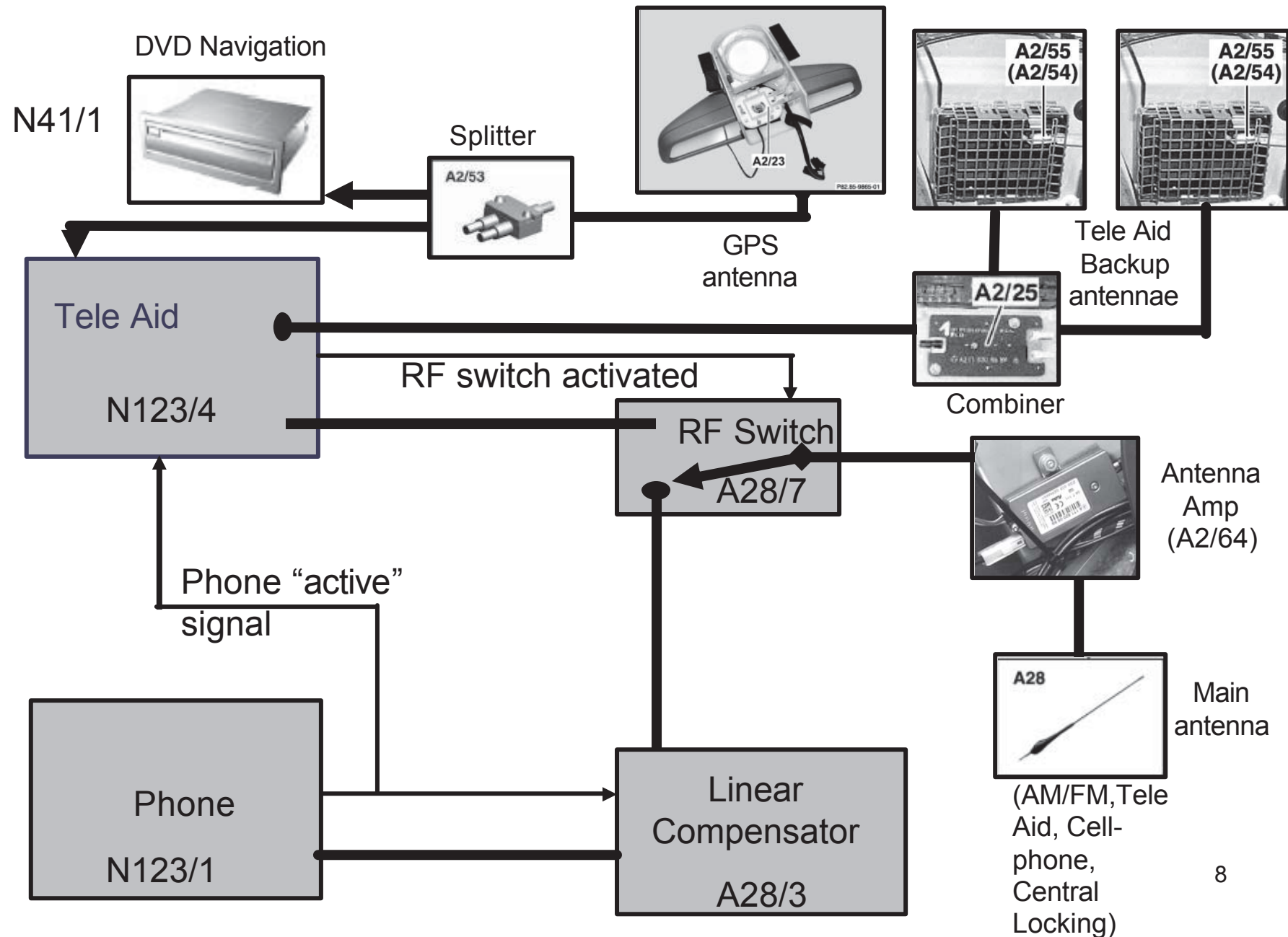
Location:

H4/46: Left front emergency call speaker

H4/47: Right front emergency call speaker



# Tele Aid Antennas





# Review #1

1. How many microphones are used for Tele Aid?
2. How many antennas are used by Digital Tele Aid?

# Two Head Units Possible



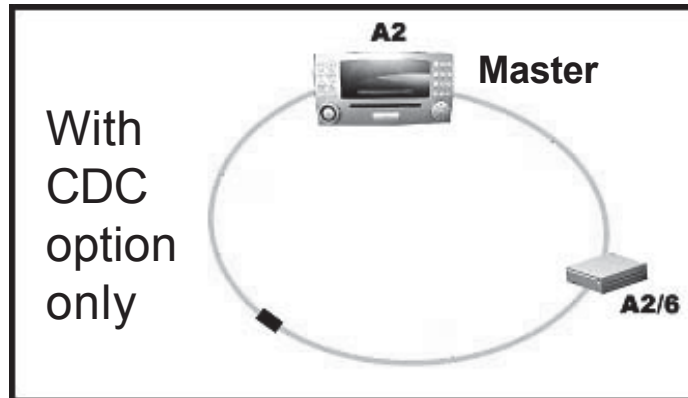
Audio 20	COMAND
Designation: A2	Designation: A40/3
Standard equipment	w/Entertainment package option
Head Unit/amp/tuner in one piece	Head unit separate from Audio Gateway
CD slot <i>below</i> screen	CD & MP3 disc slot <i>above</i> screen
Not MP3-capable	MP3-capable
Navigation not available	DVD-based Navigation optional

# Audio 20 (A2)



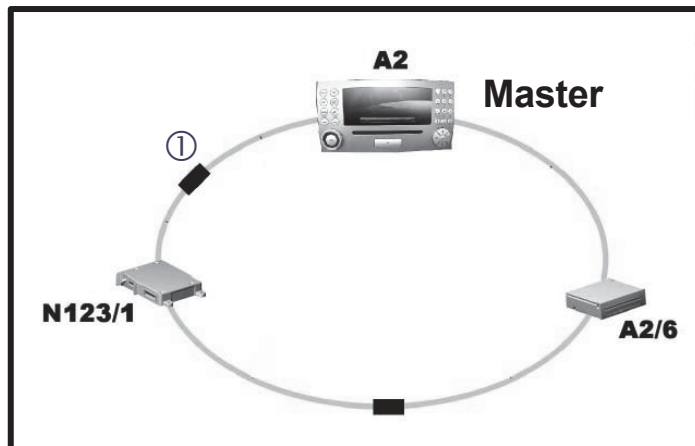
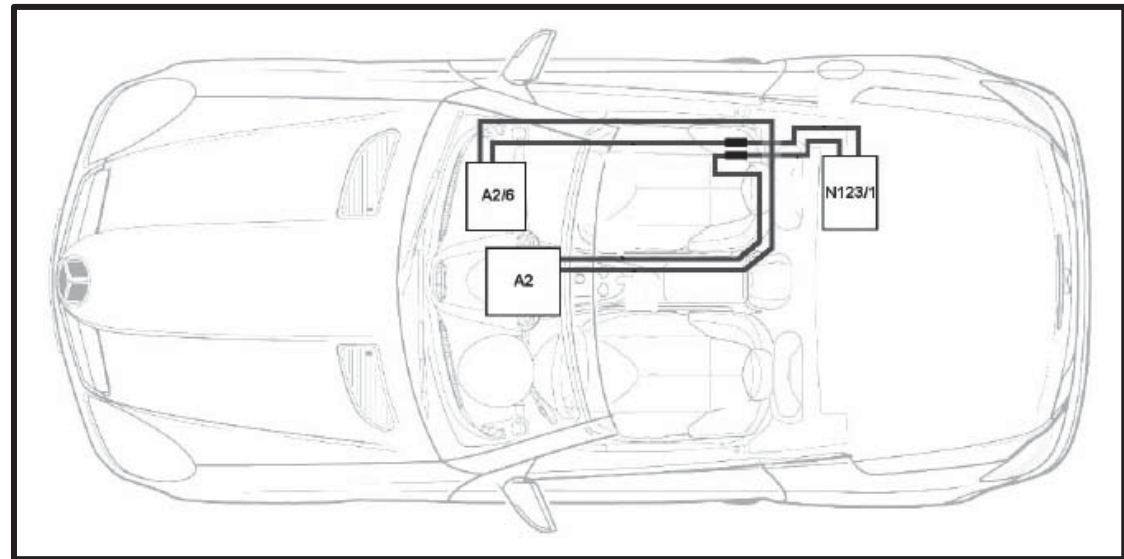
- The Head Unit and Audio Gateway/sound amplifier in one component, and are hard-wired to the 9 speakers
- Vehicle speed –related volume adjustment
- Single-disc CD player (Not for MP3 discs)
- When no additional components are installed, there is no need for a connection to the MOST ring
- If optional components (phone or CDC) are retrofitted, then the MOST ring must be connected and configured!
- When connected to the MOST ring, Audio 20 is the gateway

# Audio 20 – MOST Configuration



Optical cables connected under passenger seat – none used in trunk. Shown with optional CDC installed.

- A2 - Audio 20 HU (Master)
- A2/6 - CD Changer
- N123/1 - Multiple Handset Interface (MHI)



Configuration if CD Changer and phone (MHI) are added.

① Optional Satellite Radio (N87/5) position

# COMAND (A40/3)

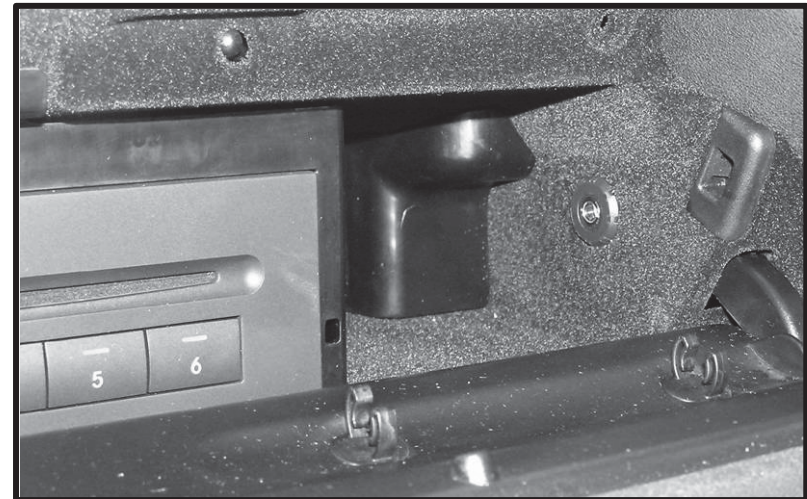


- The COMAND head unit is installed as part of the Entertainment Package option
- Audio CD and MP3-capable (Not DVD-capable!)
- Aux input socket – right side of glove box
- Audio slot may be used for downloading Head Unit update software

# COMAND Details



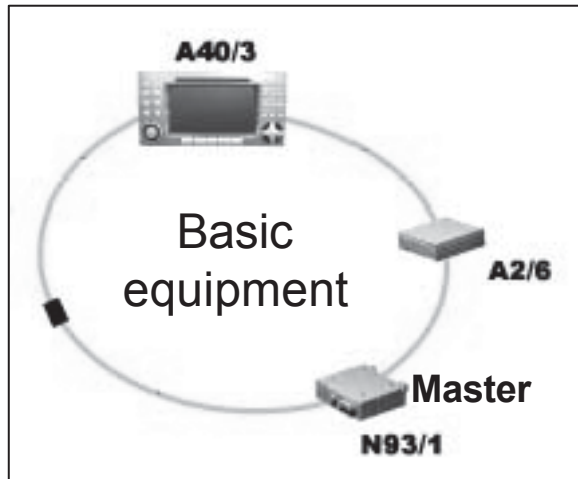
Display when MP3 disc is inserted in COMAND slot



Auxiliary input jack

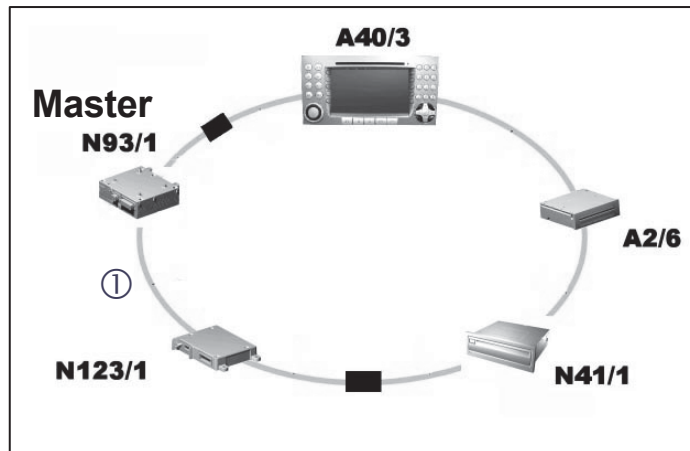
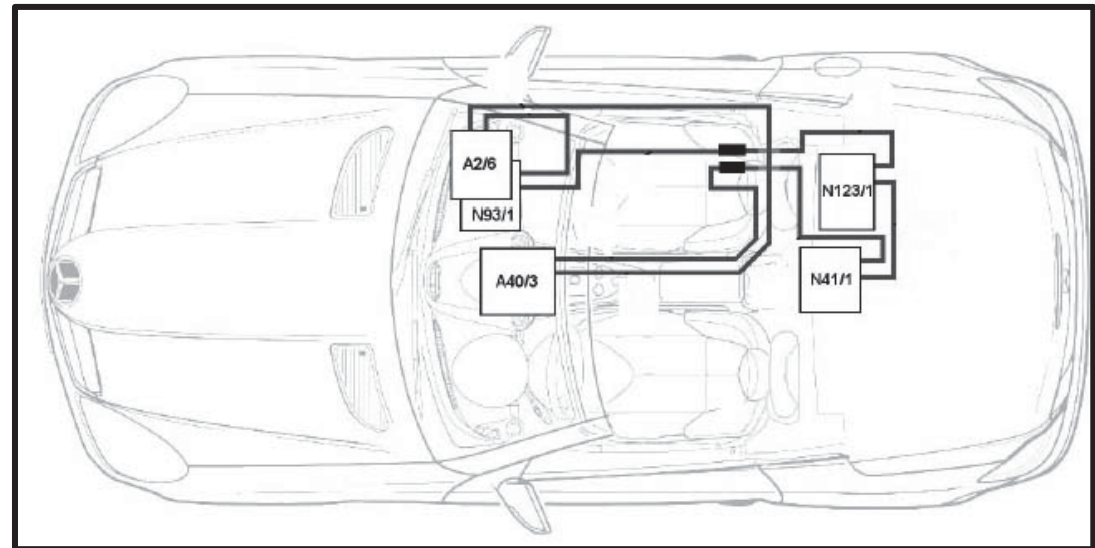


# COMAND – MOST Configuration



Optical cables connected under passenger seat – none used in trunk

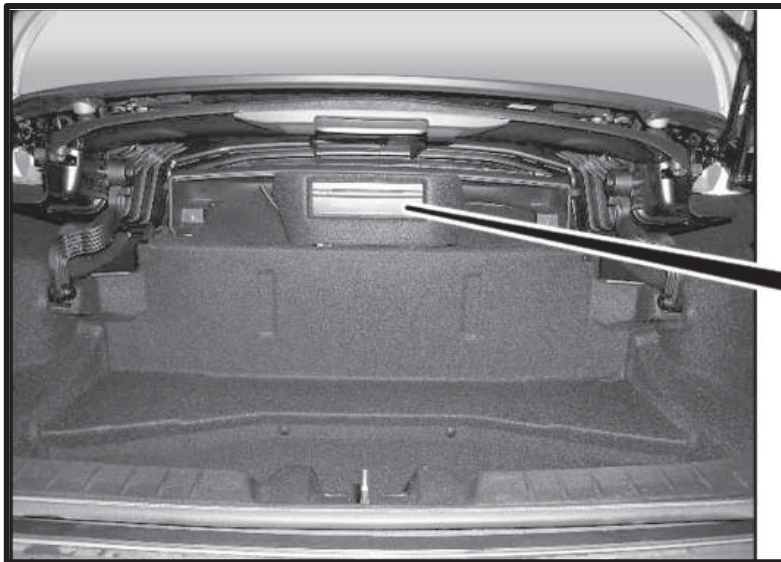
- A2/6 - CD Changer
- A40/3 - COMAND HU
- N41/1 - NAV processor
- N93/1 - Audio gateway (Master)
- N123/1 - Multiple Handset Interface (MHI)



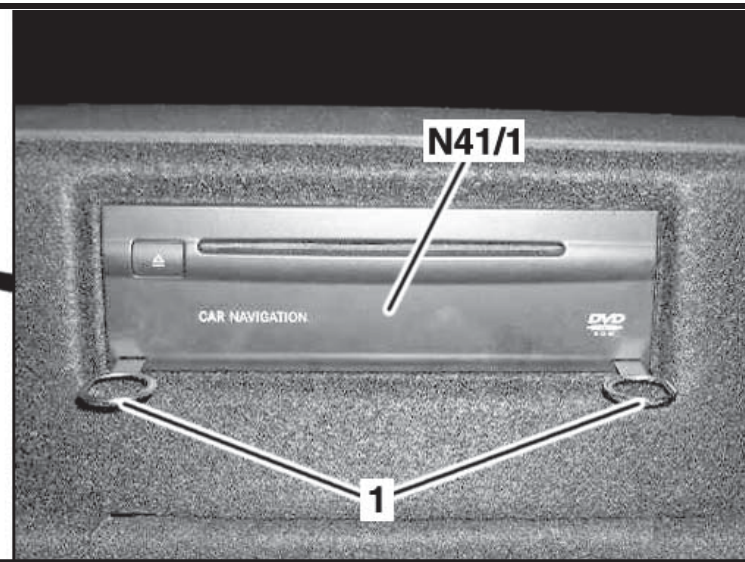
Configuration if NAV processor & phone (MHI) are added.

# DVD-Based Navigation Unit (N41/1)

- Similar to V220
- Includes:
  - GPS receiver
  - Central processor
  - DVD drive circuitry
  - Integrated gyro sensor
  - MOST interface



Trunk



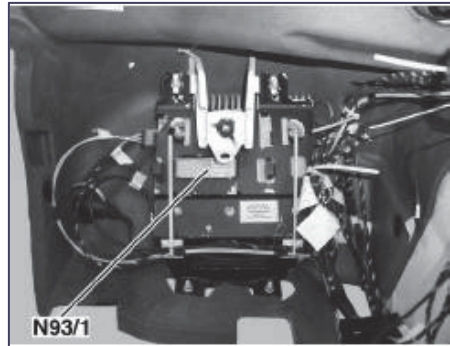
1= Removal keys



# Audio Gateway (N93/1)

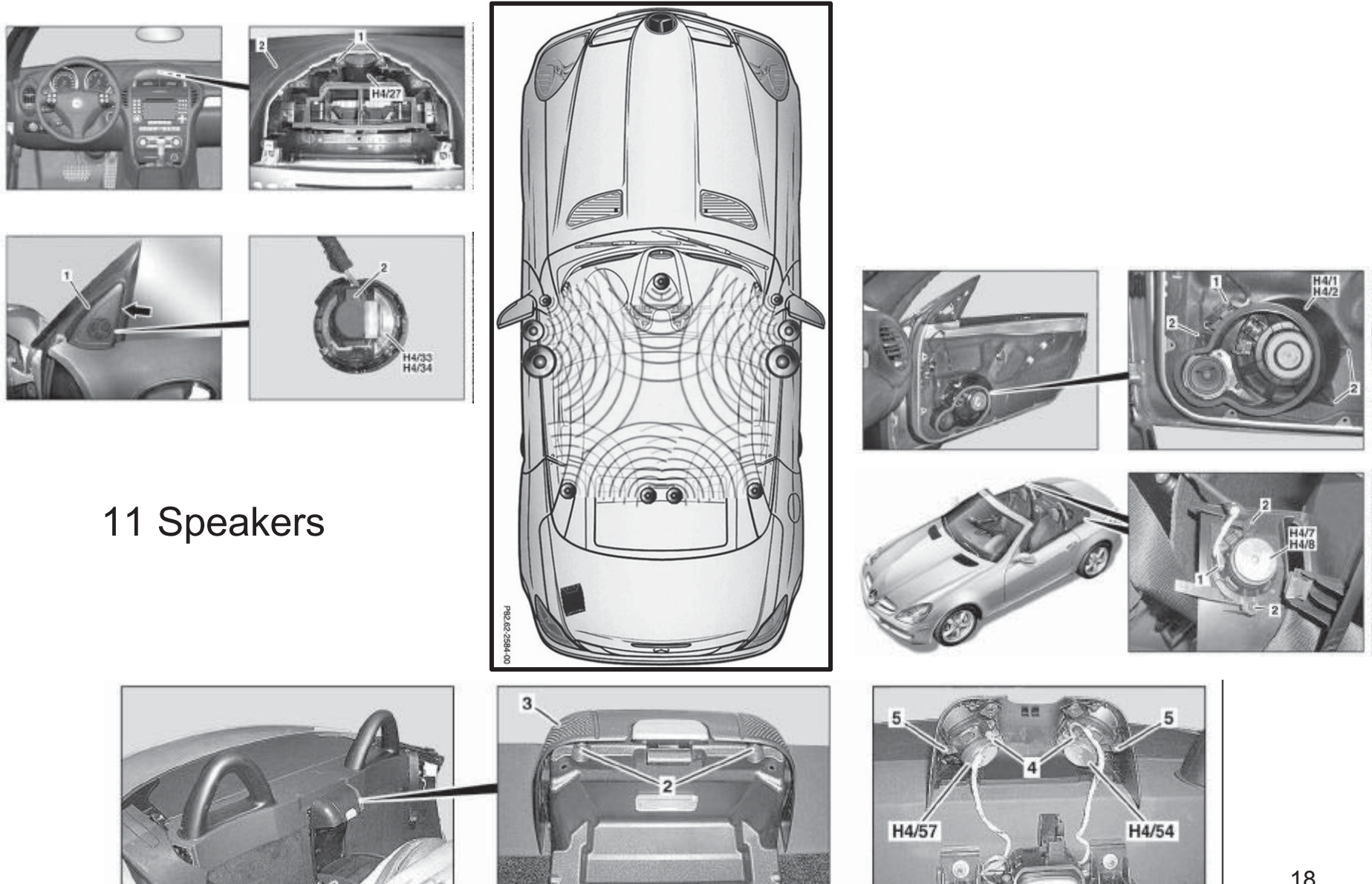
- ① MOST connection plug
- ② Connection plug IF connection
- ③ antenna connection plug
- ④ Loudspeaker outputs connection plug
- ⑤ Antenna power supply /+ connection plug
- ⑥ DRO microphone connection plug

*Located under  
passenger foot  
rest*



- AGW is included in the optional “Entertainment” package (with COMAND)
- Master of the MOST fiber optic ring and gateway from MOST to CAN B
- harmon/kardon Logic 7 Surround Sound System with output directly to speakers
- Dynamic Range optimization (DRO) microphone input
- Hard-wired radio mute signal received from Tele Aid

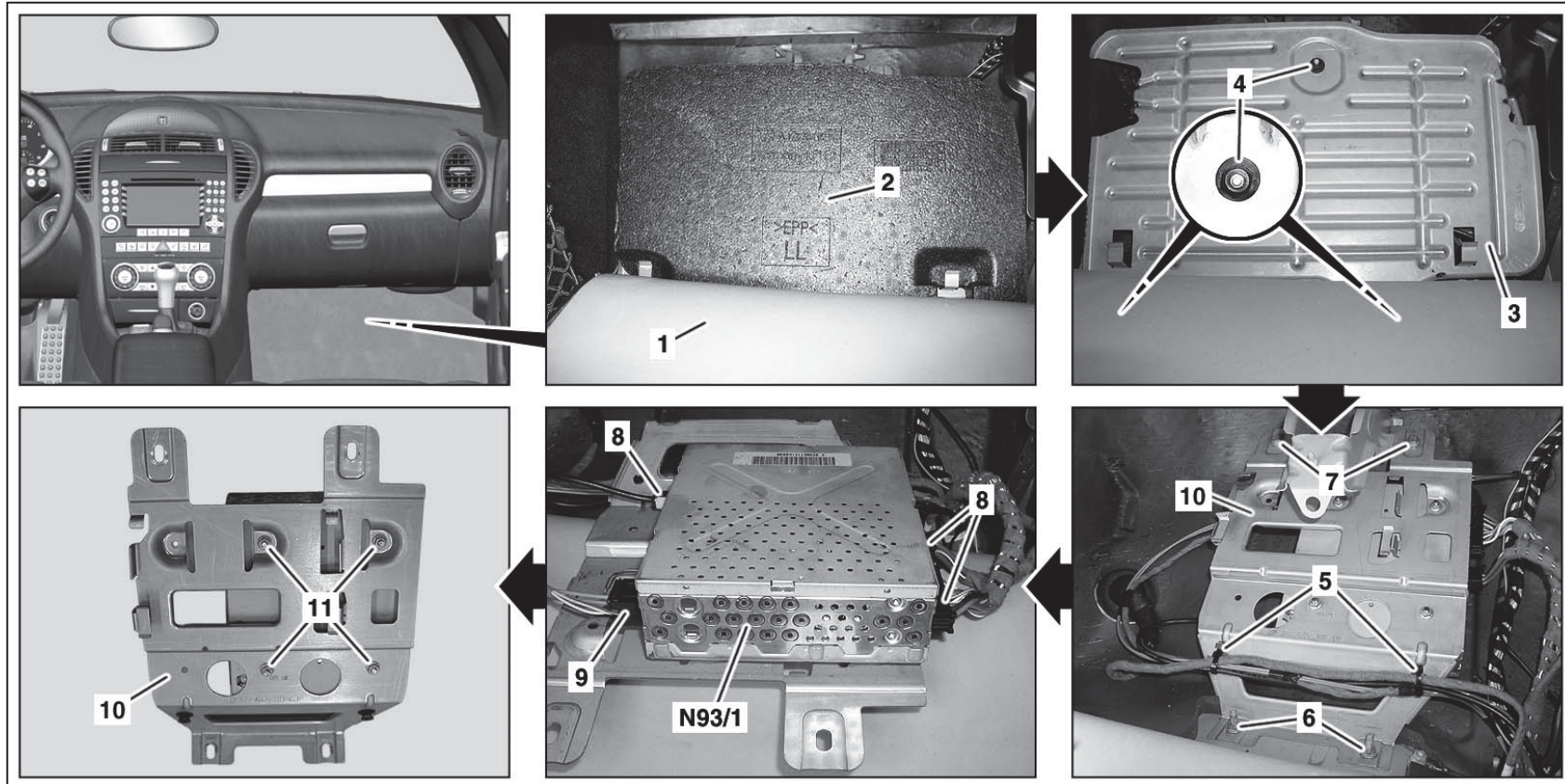
# harmon/kardon Logic 7



11 Speakers

These 2 speakers are only included with the “Entertainment Package”

# Access to the Audio Gateway



1 Floor mat  
2 Impact damper  
3 Step plate

4 Nuts (3)  
5 Tie strap  
6 Nuts  
7 Bolts

8 Electrical connectors  
9 Fiber optic cable connection  
10 Equipment carrier  
11 Nuts



# CD Changer (A2/6)

- Optional with Audio 20
- Standard with “Entertainment” package
- Will not play MP3 discs
- Similar to unit for W211
  - Single-slot 6-disc CD changer (A2/6) fitted in the glove box
  - Automatic CD pull-in
  - Operated via the Head Unit



*N10/2f19 supplies power*

# Optional Satellite Radio (N87/5)

- Digital Audio Broadcasting receiver (service provider: Sirius)
- Antenna (A2/82) mounted on trunk lid
  - Receives signals from satellite or terrestrial repeater
- Controlled through Head Unit buttons
- Category/Channel list updated via signal from Sirius
- Update currently takes about 2 minutes
  - Update may change/erase presets



Location: Trunk, left side

# Optional Cell Phone

- Phone functions divided into 2 controllers
  - Multiple Handset Interface (MHI) (N123/1) in trunk
  - Cradle in console without coiled cord (private mode not available)
- MHI is in the MOST ring
- Not flashable
- Diagnostics over CAN D / MOST
- Phone Support from MB Motorola only



V60i/x (CDMA/TDMA)



V600 (GSM)\*



V710 (CDMA)\*

*\* With digital camera feature. Expected last half of 2004.*