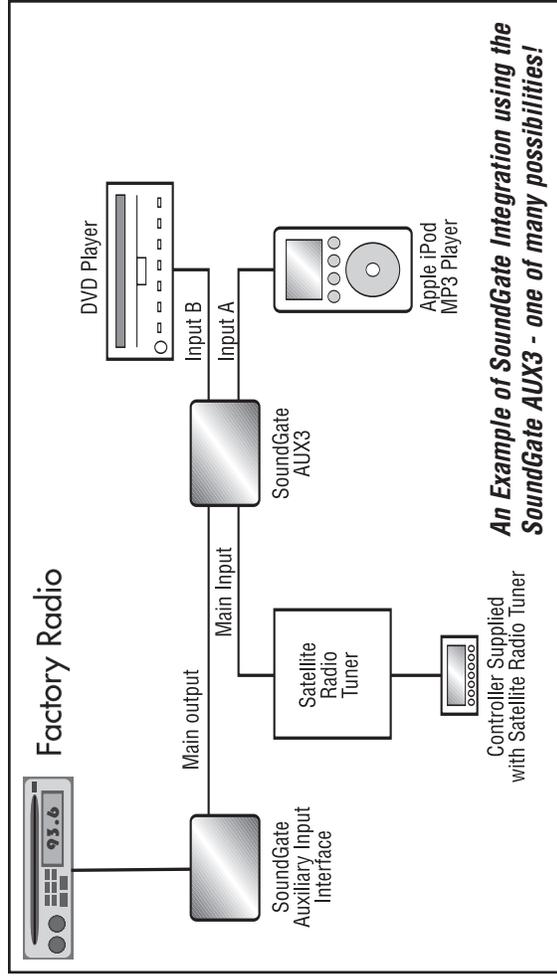


## Be Sure To Ask Your Autoseed Specialist About These Other Exciting SoundGate Products...

- Competition-Grade Interfaces for adding amplifiers
- Remote audio control interfaces that let you control aftermarket receivers and CD players from your factory rear seat, or steering-wheel-mounted audio controls.
- Compact Discs specifically engineered for testing your autoseed system.
- And many others!

### Why SoundGate Dealers have the edge...

The technologies used in today's vehicles are as sophisticated as any laptop computer. At SoundGate we believe these new technologies are full of opportunities for mobile electronic dealers across the nation. We make it a high priority to not only research these new systems, but to understand them and their impact on the aftermarket car audio industry. Armed with this knowledge, we are well equipped to help you integrate new components into these systems with our innovative, high-performance interfaces and unparalleled technical support.

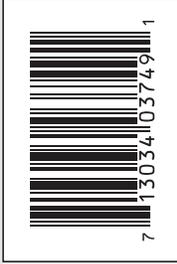


# ALMBAUX

# SoundGate®

### Purpose...

SoundGate is proud to present the ALMBAUX, the industry's first fiber optic CD



Note: AUX input cable included but not shown.

**Changer, and AUX input interface, for the 1999-2004 Mercedes vehicles (including Navigation equipped) listed below.** The ALMBAUX allows you to connect an Alpine CD changer directly to the D2B Fiber Optic audio systems in the Mercedes vehicles listed below (without factory CD changer), OR can function as an AUX input interface for these same vehicles.

**Features...** The ALMBAUX utilizes microprocessor control, ultra-reliable surface-mount construction and advanced software design, to seamlessly interface to the Mercedes D2B fiber optic audio system. The ALMBAUX includes all fiber optic cabling and power wiring required for installation. **PLEASE NOTE: ALMBAUX TAKES THE PLACE OF THE FACTORY CD CHANGER, IF PRESENT. ALMBAUX CANNOT PERFORM CD CHANGER INTERFACE AND AUX INPUT FUNCTIONS AT THE SAME TIME.**

### Compatible ALPINE CD Changers:

- 6-Disc M-Bus: CHM-S611, S620 or S630
- 6-Disc AI-Net: CHA-S634 or S614 with Alpine KCA-130B adapter

**The SoundGate ALMBAUX works in the following Mercedes vehicles (when not equipped with factory CD changer):**

- 1999-04 C Class, All (e.g. C230, C240, C320, CLK320, CLK430)
- 1999-02 E320, E430, E55
- 1999-05 G500
- 2001-05 ML320/350, ML420/500
- 2000-03 S430/500/600
- 2000-04 SL500/600
- 1999-04 SLK230/320

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[www.soundgate.com](http://www.soundgate.com)

Rev 042007

## Warnings!

- 1. WE DO NOT RECOMMEND DISCONNECTING THE BATTERY on 1999 and later Mercedes vehicles.** In many of these vehicles, a special power retention unit must be connected to the vehicle to maintain memory power for various modules in the vehicle, before disconnecting the battery. Disconnecting the battery may require returning the vehicle to the Mercedes dealership for reprogramming. Be careful when connecting the power and ground for the ALMBAUX to prevent shorting out any factory wiring.
- 2. When working with the fiber optic cables please note that they are easily damaged.** Ensure that the cables are not crushed, kinked, cut, or nicked while working with them. The factory fiber optic cables can be identified by an orange/brown semi-rigid insulation.
- 3. The fiber optic cables must not be bent in a radius tighter than 1" (2" diameter) - doing so will permanently damage the cable.**
- 4. Lay a towel or other suitable padding over vehicle interior surfaces to prevent damage to trim.**

### Important Notes:

- The Mercedes fiber optic system is configured as a closed ring. The ring begins at the radio, continues through each component, and ends up back at the radio. All connections must be complete in order for the ring to operate properly. If one component is not present, the cables at the component location must be connected to one another.
- Light enters the factory cables in the ring through the clear lens, and exits each factory cable through the red lens. The ALMBAUX has clear lenses on the interface end of each cable, and colored lenses, identified as DX (red lens) and RX (white), on the vehicle end of the cables. Proper connection is shown in the connection diagrams later in these instructions.
- Vehicles delivered from the factory may have active fibers (as with Tele-Aid, factory phones or optic-type amplifiers), inactive fibers (no optional components installed), or no fibers. Each vehicle will, in most cases, be different from previous vehicles worked on.
- Make sure the car's factory radio is turned to the "Off" position.
- Turn the ignition key of the car to the "Off" position and remove the key from the ignition switch.

### Identify the type of audio system and optional components installed

## Step 1

- Before you begin installation, determine if the vehicle has the fiber optic Bose amplifier (most 2001 and later, and many 2000 Bose amplifiers are fiber optic). The quickest way to determine this is once you get the radio out of the dash, turn it on and then disconnect the fiber optic connector at the rear of the radio. If the audio ceases to be heard, the amplifier is fiber optic. The installation steps are different for fiber optic and non-fiber optic amplified systems.
- Determine if vehicle is equipped with Tele-Aid (similar to OnStar), OEM Mercedes phone system, or Voice Recognition (COMAND) system. These options will affect installation.

### Gain access to the proper interfacing location for the ALMBAUX

## Step 2

- The SoundGate ALMBAUX is designed for installation at the rear of the factory radio, **ONLY** if there are no other devices present on the fiber optic ring. If other components are present on the fiber optic ring (amplifier, Tele-Aid, or COMAND), ALMBAUX will have to be installed at the factory CD changer location only.
- Basic radio removal is outlined in these instructions. Compare the diagrams (and models listed on each) on the following pages to your radio to determine which instructions are appropriate for your vehicle. If you are unsure of the procedure, or if the radio style in your particular vehicle is not shown here, please consult a factory service manual for exact disassembly instructions. In particular pay strict attention to any warnings or instructions regarding working around airbags.
- Following the radio removal instructions, carefully remove all necessary trim panels and the factory radio.

### Install Alpine CD Changer or AUX audio component

## Step 3

- Install the Alpine CD Changer or AUX audio device at the desired location and per the manufacturer's instructions. Run the DIN connection cable from the Alpine CD Changer (or RCA cable from AUX device) to the ALMBAUX. This may involve removal of interior trim panels and door sills. After the cable is installed, re-install any trim panels removed during installation.

**IMPORTANT NOTE: Installation for the ALMBAUX has changed - a brown wire is now present on the harness. If using the ALMBAUX as an aux input interface, this brown wire must be connected to chassis ground.**

### Factory CD Changer Locations

Model	Year	Changer Mounting Location
C230, C240, C320, C32 AMG	2001-2004	Glovebox
C230 Kompressor	2002-2004	Glovebox
C230 Kompressor	2001	Passenger Side Rear Quarter
C280, C230K	1999-2000	Passenger Side Rear Quarter
CL500, CL600, CL55 AMG	1999-2004	Driver Side Rear Quarter
CLK320, CLK430, CLK500, CLK55 AMG	2003-2004	Glovebox
CLK320, CLK430, CLK55 AMG	1999-2002	Passenger Side Rear Quarter
E300	1999	Driver Side Rear Quarter
E320, E430, E55 AMG	1999-2002	Passenger Side Rear Quarter
G500, G55 AMG	2002-2004	Driver Side Rear Quarter
ML320, ML350, ML430, ML500, ML55 AMG	2003-2004	Passenger Side Rear Quarter
S420, S430, S500, S600, S55 AMG	2000-2003	Driver Side Rear Quarter
SL500, SL600, SL55 AMG	1999-2004	Driver Side Rear Quarter
SLK230, SLK320, SLK32 AMG	1999-2004	Passenger Side Rear Quarter

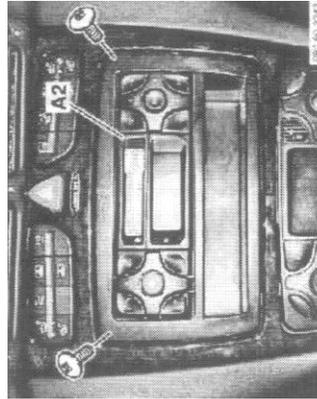
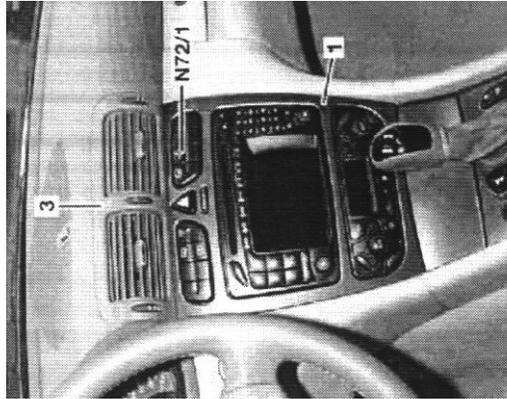
# INSTALLATION INSTRUCTIONS (vehicles listed on this page only)

## Typical single and double-DIN radio:

C230, C240, C320, and C32 AMG (2001-2003)  
C230K (2002-2003)

**Note:** The top photo shows the C Class vehicles with the COMAND radio. The lower photo shows C Class vehicles without COMAND.

1. Lift up and release wood grain around shifter assembly (panel lifts approximately 1") from front, then slides forward.
2. Remove entire ashtray assembly by releasing two plastic clips on front of assembly. Ashtray and shifter wood grain can now be removed and set aside.
3. Remove vent assembly from above radio:
  - a. Two clips are located on the left hand side of each of the two louvers. Push the louvers fully upward to expose the two lower retaining tabs. Pull the tabs inward - this allows the louver assembly to fully fold upward, exposing a gap.
  - b. Remove the T-20 Torx head screw from each exposed gap.
  - c. Next, fold the louvers downward to expose the two plastic tabs at each top corner. Pull each of these two tabs downward. Centered within the vents is a metal cinch clip. Using a 'pic-tool', pull the cinch clip towards the rear of the car. The vent assembly can now be removed from the dash. After vent assembly removal, push the two upper plastic tabs on the vent assembly back into place.



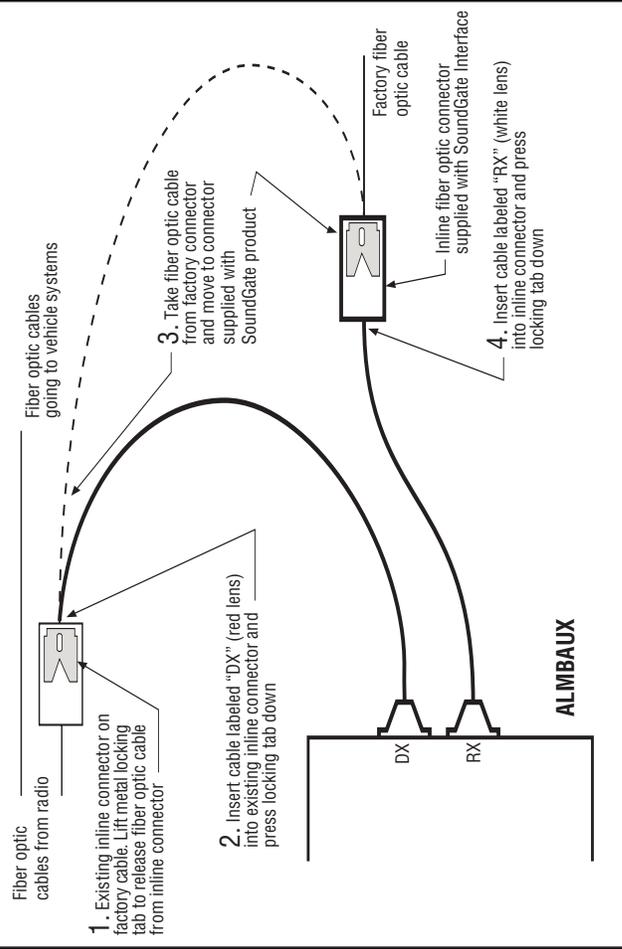
- d. The wood grain surrounding the radio is held in place by two silver clips on bottom - release these two clips to remove the panel. Unplug connectors and set panel aside.

- e. Remove screws securing radio and pull radio out of cavity. Do not unplug radio. Radio cable assembly is captured beneath padding to the right of the radio cavity. Release cable from beneath padding to allow slack for pulling radio away from cavity. Set radio to one side (set on padding to protect car).

4. Locate factory perforation on left side of glovebox. This is the entry/exit location for the changer cable.

- 5A. For vehicles WITH Bose, Mercedes phone system, COMAND (Voice Recognition), and/or Tele-Aid: If vehicle is equipped with one, or any combination of these options, you will have to insert the ALMBAUX into the factory fiber optic loop. On the fiber optic cable plugged into the rear of the factory radio, about a foot from the radio, locate the black rectangular inline connector. Following Figure 1 below, connect the DX and RX fiber optic cables from the ALMBAUX to the factory fiber optic system. See page 8 for instructions on connecting the red, black and blue wires on the ALMBAUX to the factory radio.

**FIGURE 1**



1. Existing inline connector on factory cable. Lift metal locking tab to release fiber optic cable from inline connector
  2. Insert cable labeled "DX" (red lens) into existing inline connector and press locking tab down
  3. Take fiber optic cable from factory connector and move to connector supplied with SoundGate product
  4. Insert cable labeled "RX" (white lens) into in-line connector and press locking tab down
- 5B. For vehicles WITHOUT Bose, Mercedes phone system, COMAND (Voice Recognition), and/or Tele-Aid:** If vehicle is not equipped with any of these options, simply unplug the existing fiber optic connector from the rear of the radio (if it is plugged in) and plug the fiber optic cable supplied with the ALMBAUX directly into the rear of the factory radio. Note: ensure that there is adequate clearance for the fiber optic cables behind the radio. If clearance is an issue, replace the straight connector on the end of the ALMBAUX fiber optic cables with the 90° factory connector by following Figure 4 on page 7. See page 8 for instructions on connecting the red, black and blue wires on the ALMBAUX to the factory radio. **IMPORTANT NOTE: Installation for the ALMBAUX has changed - a brown wire is now present on the harness. If using the ALMBAUX as an aux input interface, this brown wire must be connected to chassis ground.**

# RADIO REMOVAL INSTRUCTIONS

## Typical single-DIN non-Navigation radio found in:

- C Class (1999-2000)
- CLK (1999-2002)
- E Class (1999-2002)
- SL (1999-2002)
- SLK (1999-2003)
- ML (2000-2003)
- G500 (2002-2003)

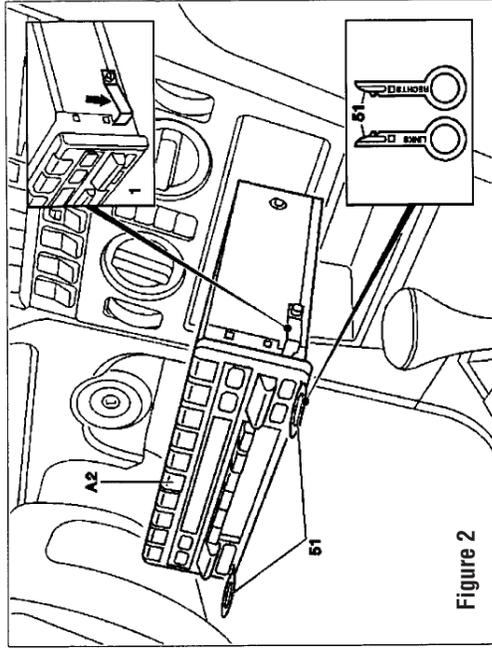


Figure 2

## Typical single-DIN APS radio and Navigation operating units:

- C Class (1999-2000)
- CLK (1999-2002)
- E Class (1999-2002)
- SL (1999-2002)
- SLK (1999-2003)
- ML (2000-2003)
- G500 (2002-2003)

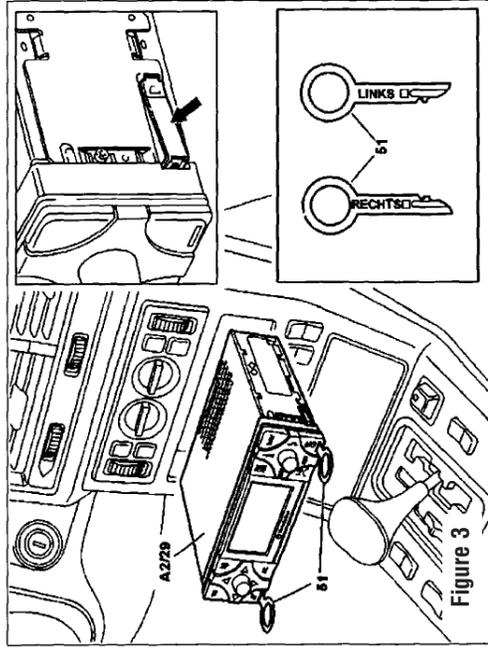


Figure 3

## Radio removal instructions for radios shown in Figure 2 and 3.

1. Insert Mercedes radio removal tools in slots at lower corners of radio and gently pull radio out of cavity.
2. To ready radio for reinsertion into dash, insert removal tools and press back the retaining springs on the sides of the radio, indicated by the arrow on the above figure, and then pull out the removal tools.
3. See pages 7 and 8 for instructions on connecting the ALMBAX to the factory radio.

## Typical single-DIN radio:

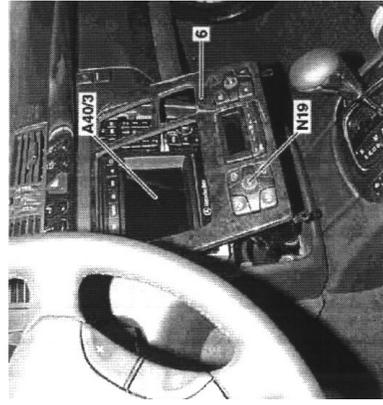
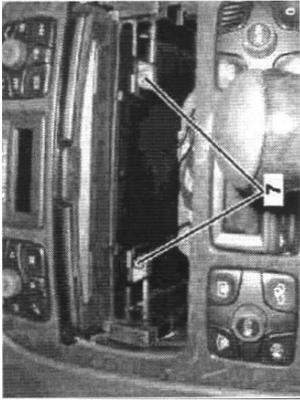
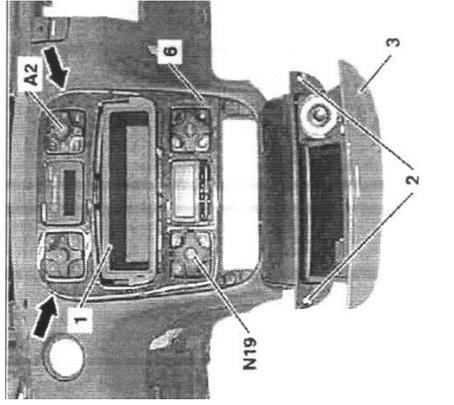
S430, S500, S55 AMG, S600 (2000-2003)

1. Move gear selector lever to position "D".
2. Pull stowage compartment (1) and cover (6) out using removal tools.
3. Remove screws (7).
4. Remove ashtray housing retaining screws (2) and ashtray housing (3).
- 5a. On vehicles without COMAND, pull cover (6) out with air conditioning pushbutton control module (N19) and radio (A2).

Note: Cover (6) is clipped into upper area (arrows) of center console.

- 5b. On vehicles with COMAND (A40/3), pull cover (6) out with air conditioning pushbutton control module (N19). Remove radio retaining screws and gently pull radio from cavity.

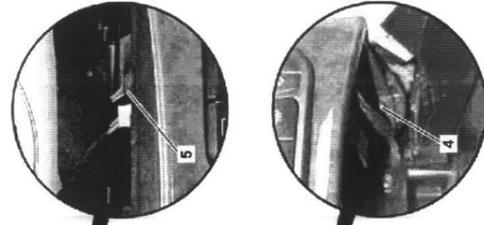
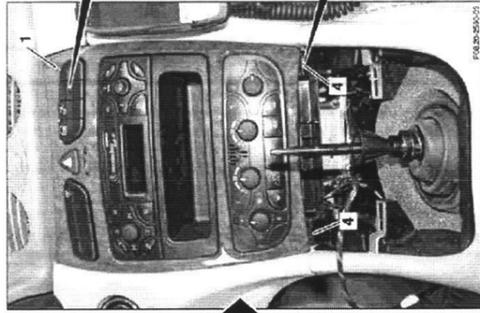
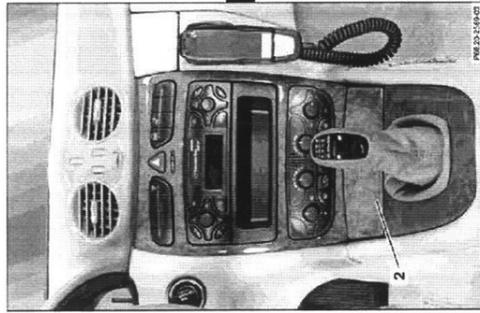
6. See pages 7 and 8 for instructions on connecting the ALMBAX to the factory radio.



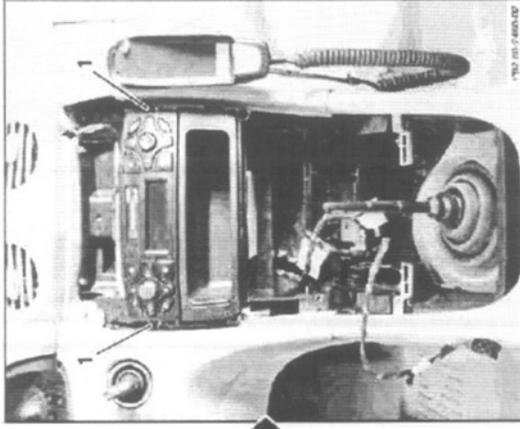
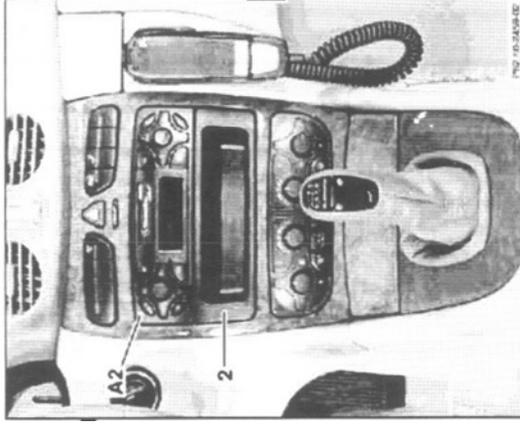
# RADIO REMOVAL INSTRUCTIONS

Typical single-DIN radio with storage compartment below:

CLK320 CLK430, CLK55 AMG, and CLK500 (2003)



1. Remove ashtray housing (2) below heater controls.
2. Remove screws (4) below bottom edge of center console cover.
3. Remove cover (1) from center console.
4. Disconnect connectors (5) at upper control panel control module.
5. Disconnect connectors at automatic heater and air conditioning module.
6. See pages 7 and 8 for instructions on connecting the ALMBAUX to the factory radio.



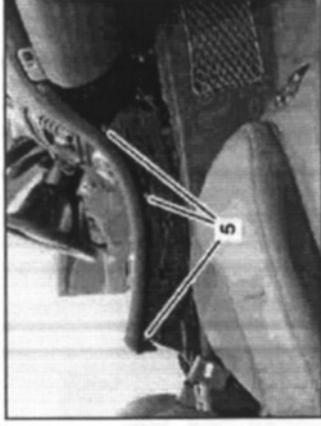
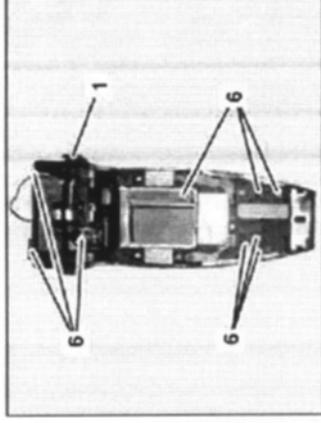
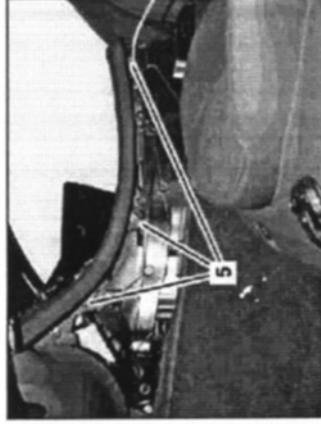
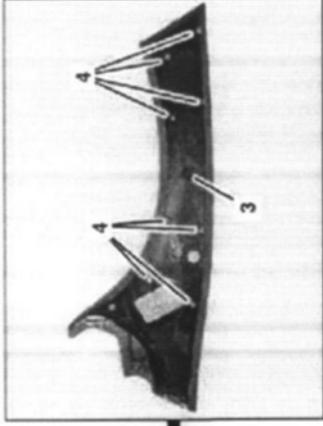
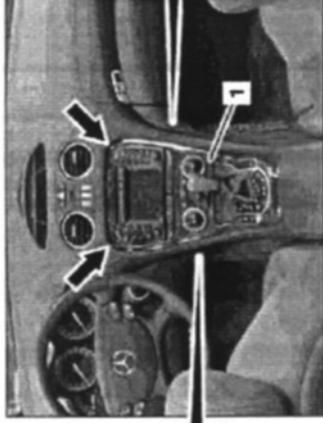
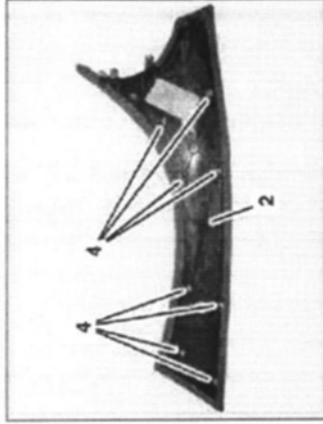
1. Remove screws (1).
2. Pull out radio (A2) and storage compartment (2).
3. Remove cover (1) from center console.
4. Disconnect fiber optic cable connector from rear of radio.
5. See pages 7 and 8 for instructions on connecting the ALMBAUX to the factory radio.

# RADIO REMOVAL INSTRUCTIONS

## Typical double-DIN radio:

SL500, SL55 AMG (2003)

1. Move driver and passenger seats down and to the rear.
2. Unclip left and right console side panels (2 and 3) from retaining clips (4) with wedge and remove.
3. Remove screws (5) on left and right sides of console.
4. Position assembly wedge on upper edge of center console cover (1) at arrows and unclip center console cover from instrument panel.
5. Lift center console cover until electrical connectors are accessible and disconnect connectors.
6. See pages 7 and 8 for instructions on connecting the ALMBAUX to the factory radio.



# ALMBAUX FIBER OPTIC CONNECTIONS

**Step 1a**  
On Vehicles **WITHOUT** fiber optic Bose amplifier, Voice Recognition (COMMAND), Mercedes phone system, or Tele-Aid.

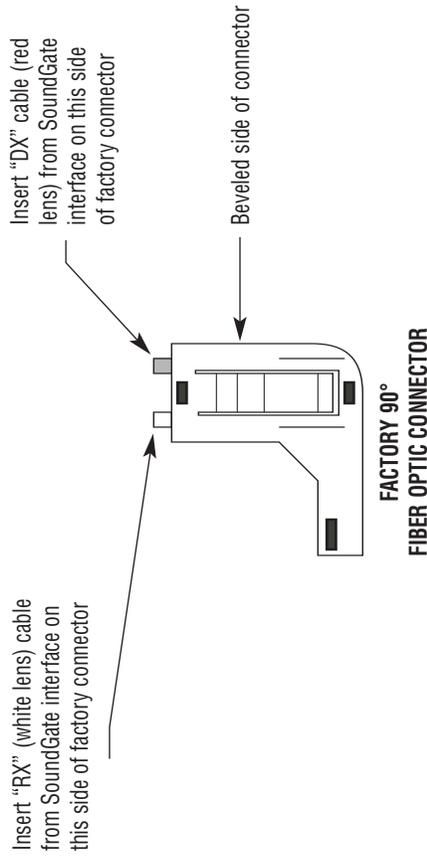
**A.** On vehicles without **ANY** of the above listed options, **and as long as there is adequate clearance behind the radio for the fiber optic cables (minimum bending radius 1")**, you can **disconnect the factory fiber optic cable, and plug the black twin-cable fiber optic connector on the ALMBAUX directly into the fiber optic connector on the rear of the factory radio**. If **there is not adequate clearance**, you will need to remove the two fiber optic cables from the ALMBAUX connector and place them in the factory 90° connector as shown in Figure 4 below.

**TIP:** An easy way to tell if the vehicle has the fiber optic Bose amplifier is to disconnect the factory fiber optic cable plugged into the factory radio while the radio is turned on. If the audio continues to play, the system is either non-amplified, or the amplifier is not fiber optic.

**B.** See Figure 6 and 7 on page 8 for connection of the power, ground, and databus wake-up wires (red, black and blue).

**Figure 4**

1. Disconnect the 90° fiber optic connector from the back of the radio. Disassemble the straight fiber optic connector on the ALMBAUX, and the 90° factory connector and remove the fiber optic cables from each.
2. Insert the "RX" (white lens) and "DX" (red lens) fiber optic cables into the factory 90° connector in the locations shown below.



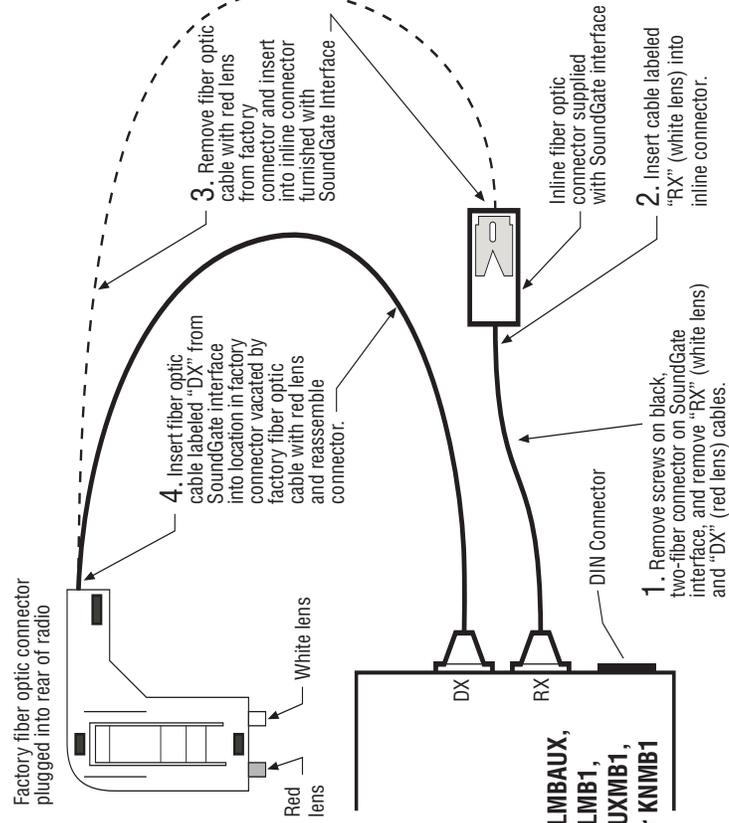
**Step 1b**  
On Vehicles **WITH** fiber optic Bose amplifier, Voice Recognition (COMMAND), Mercedes phone system, or Tele-Aid.

**A.** On vehicles without **ANY** one, or combination of the above listed options, you will have to reconfigure the fiber optic bus as shown in Figure 5 below.

**TIP:** An easy way to tell if the vehicle has the fiber optic Bose amplifier is to disconnect the factory fiber optic cable plugged into the factory radio while the radio is turned on. If the audio continues to play, the system is either non-amplified, or the amplifier is not fiber optic.

**B.** See Figure 6 and 7 on page 8 for connection of the power, ground, and databus wake-up wires (red, black and blue).

**Figure 5**



# ALMBAUX POWER, GROUND AND D2B WAKE-UP CONNECTIONS

**Figure 6**

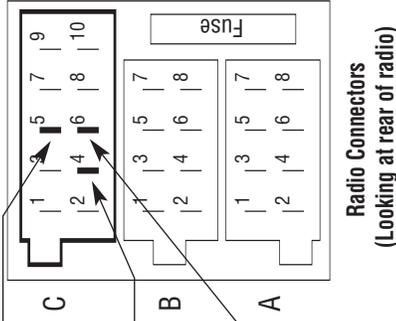
Splice Red wire from ALMBAUX into Red/Black wire at pin location 5 in 10-pin connector "C" at rear of radio

Cut terminal off of Blue wire on ALMBAUX and splice into Blue/White wire at pin location 4 in 10-pin connector "C" at rear of radio

Splice Black wire from ALMBAUX into Brown wire at pin location 6 in 10-pin connector "C" at rear of radio

Fiber Optic Connector (Location may vary)

Note: Wire colors shown may vary. Pin locations always take precedence. Factory wires must remain connected to factory harness - they feed other components.



**Radio Connectors**  
(Looking at rear of radio)

**Figure 8 (COMAND 2.0)**

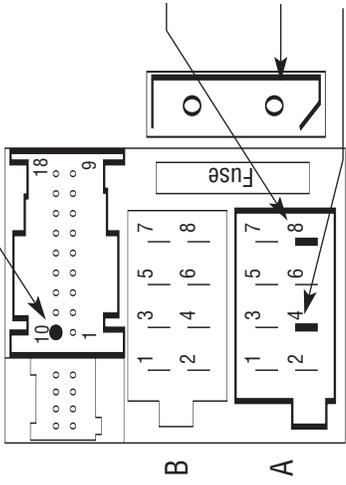
Cut terminal off of Blue wire on ALMBAUX and splice into Blue/Black wire at pin location 10 in 18-pin connector at rear of radio

Note: Factory Red/Black, Black and Blue/Black wires must remain connected to factory harness - they supply other components.

Splice Black wire from ALMBAUX into Brown ground wire at pin location 8 in 8-pin connector "A" at rear of radio

Fiber Optic Connector (location may vary)

Splice Red wire from ALMBAUX into Red/Black +12 Volt constant wire at pin location 4 in 8-pin connector "A" at rear of radio



**Radio Connectors**  
(Looking at rear of radio)

**Figure 7 (COMAND 2.5)**

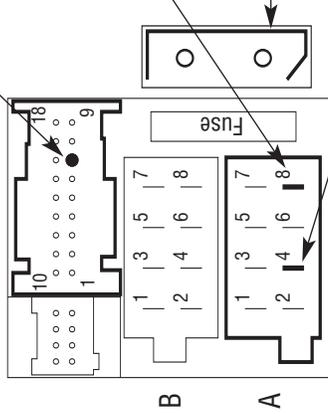
Cut terminal off of Blue wire on ALMBAUX and splice into Blue/Black wire at pin location 7 in 18-pin connector at rear of radio

Note: Factory Red/Black, Black and Blue/Black wires must remain connected to factory harness - they supply other components.

Splice Black wire from ALMBAUX into Brown ground wire at pin location 8 in 8-pin connector "A" at rear of radio

Fiber Optic Connector (location may vary)

Splice Red wire from ALMBAUX into Red/Black +12 Volt constant wire at pin location 4 in 8-pin connector "A" at rear of radio



**Radio Connectors**  
(Looking at rear of radio)

**IMPORTANT NOTE: Installation for the ALMBAUX has changed - a brown wire is now present on the harness. If using the ALMBAUX as an aux input interface, this brown wire must be connected to chassis ground.**

**IMPORTANT NOTE: Installation for the ALMBAUX has changed - a brown wire is now present on the harness. If using the ALMBAUX as an aux input interface, this brown wire must be connected to chassis ground.**

## Step 2

### Testing Operation of the ALMBAUX

- Turn on the ignition and turn on the radio. Do not immediately press the CD button. Allow the radio to play for approximately 15 seconds.
- Press the CD button to select the ALMBAUX. The display on the radio will change and appear as if a factory CD changer were selected.
- If the radio does not recognize the ALMBAUX, turn off the radio, turn off the key, remove it from the ignition and wait approximately 10 to 15 seconds. Repeat "B" above. In rare instances, you may have to perform this step a couple of times, but it is only necessary during initial installation.
- After you have verified operation, re-install the factory radio and any trim panels removed during installation. Installation is complete!

### Operational Notes:

- To access the ALMBAUX, you will press the CD button. If the vehicle has an in-dash CD player, and there is a CD present, you will have to press the CD button twice.

If you experience any problems, call SoundGate Technical Support at 800-256-0808 or e-mail us at [sgtech@soundgate.com](mailto:sgtech@soundgate.com)