Work Instructions 322A Page 1 of 10

Work Instructions

Group: 82

Number: 322A

Date: August 1994 SUBJECT: MODEL 129 MODEL YEAR 1995

INSTALLATION OF CELLULAR TELEPHONE (CTEL) SYSTEM

Installing in-dash controller (IDC)

1. Unpack contents of installation kit and compare to parts list at end of Work Instructions. Read through entire procedure to familiarize yourself with sequence of instructions and parts. Remove Operating Guide from kit and place in Owner's Literature pouch.

- 2. Disconnect and cover negative battery terminal.
- **3.** Remove two screws securing false back to eyeglass compartment. Remove false back to expose two 12-pole connectors and one microphone connector. Remove cables from false back. False back and original mounting screws may be discarded.
- **4.** Install IDC mounting bracket. Position mounting bracket so that mounting holes align with two false back mounting holes. Secure bracket with four M4x10 mm self tapping screws (the two additional holes have pre-punched bosses).
- 5. Connect two 12-pole connectors to in-dash controller. Connect microphone connector to connection on top center of controller (Figure 2).

© 2007 Mercedes-Benz USA, LLC

Work Instructions 322A Page 2 of 10

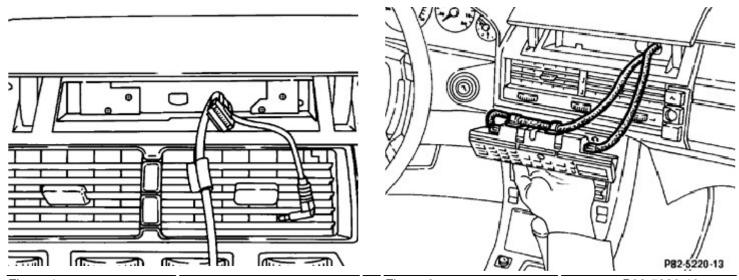


Figure 1 P82-5220-13 Figure 2

6. Secure left cable and microphone cable to clips on back of IDC.

Slide in-dash controller into bracket and snap into place - DO NOT PRESS ON THE LCD DISPLAY.

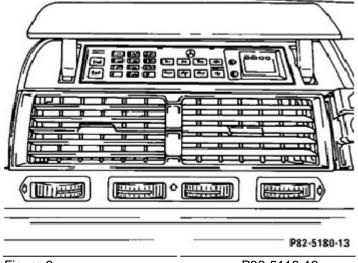


Figure 3 P82-5118-13

Installing handset (HS)

A. Mobile

B. Portable

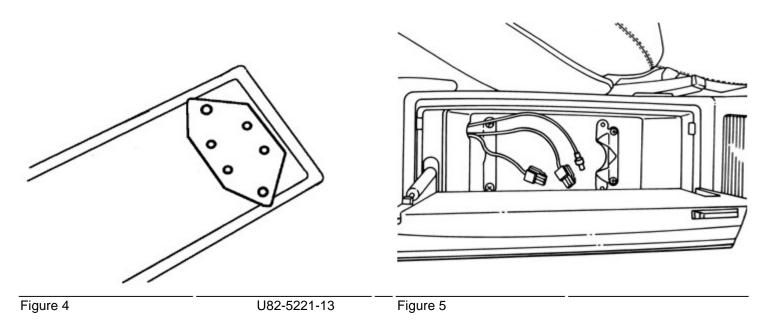
Work Instructions 322A Page 3 of 10

A. Mobile handset

Model 129

- 1. Remove carpeting from center console.
- 2. Cut and remove all styrofoam from underside of carpeting. Remove material from lip around the underside of carpeting so reinforcing plate can lie flat.
- 3. Place reinforcing plate on back of carpeting (Figure 4).
- **4.** Locate, punch and drill four inner holes to 5 mm.
- **5.** Insert four screws through reinforcing plate and carpeting. Mount cradle on carpeting and tighten screws.
- **6.** Drill outer holes through carpeting to match the diameter of the mounting plate holes.
- **7.** Remove two forward screws in center console compartment.
- 8. Place angular bracket in console with raised edge of bracket pointing towards the rear of the compartment (Figure 5). Secure bracket using the two removed screws.
- **9.** Locate two harnesses at rear of compartment. A coaxial antenna connector is taped to a 12-pole data cable labeled PORTABLE PHONE. The other 12-pole data cable is not labelled.
- 10. Connect unlabelled harness to back of cradle. The other harness is not used.
- 11. Replace carpeting and cradle into center console compartment, routing the harness along the right side of the compartment. Secure carpeting with two screws to angle bracket in compartment.
- 12. Connect HS coil cord to cradle. Place handset in cradle.

Work Instructions 322A Page 4 of 10



B. Portable handset

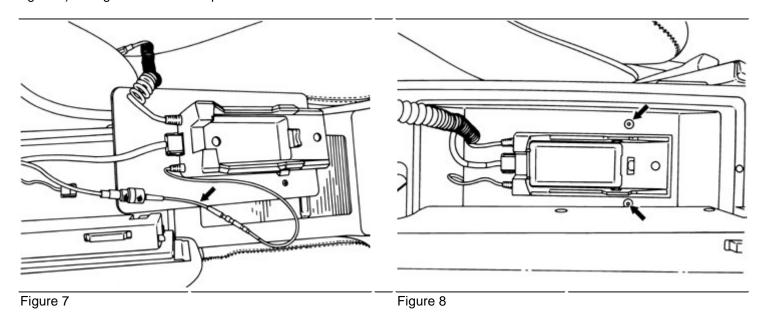
Model 129

- 1. Remove carpeting from center console.
- 2. Cut and remove all styrofoam from underside of carpeting. Remove material from lip around the underside of carpeting so reinforcing plate can lie flat.
- **3.** Place reinforcing plate on back of carpeting (Figure 4).
- 4. Locate, punch and drill four inner holes to 5 mm.
- **5.** Insert four screws through reinforcing plate and carpeting. Mount charger-holder on carpeting and tighten screws.
- **6.** Drill outer holes through carpeting to match the diameter of the mounting plate holes.
- **7.** Remove two forward screws in center console compartment.
- 8. Place angular bracket in console with raised edge of bracket pointing towards the rear of the compartment (Figure 5). Secure bracket using the two removed screws.
- 9. Locate two harnesses at rear of compartment. A coaxial antenna connector is taped to a 12-pole data cable labeled PORTABLE PHONE. The other 12-pole data cable is not labelled.
- 10. Connect antenna adapter cable (arrow, Figure 7) between antenna harness and pigtail on back of charger-holder. Connect harness labeled PORTABLE PHONE to

Work Instructions 322A Page 5 of 10

charger-holder.

11. Replace carpeting and charger-holder into center console compartment, routing the harness along right side of compartment. Secure carpeting with two screws (arrows, Figure 8) to angle bracket in compartment.



Installing hands-free microphone

Model 129

- 1. Place template on headliner panel, so that it touches the left edge of the dome lamp assembly. Mark location of mounting hole.
- 2. Remove dome lamp assembly.
- **3.** Punch and drill a 5/8" hole in headliner panel. A forstner bit is highly recommended to avoid damaging the headliner panel. *Use caution so as not to damage any harnesses behind the panel.*
- 4. Clip microphone onto mounting plate.
- **5.** Install microphone pigtail through hole in headliner.
- **6.** Place microphone and mounting plate against headliner and fasten by pressing retaining clip onto post.
- 7. Connect microphone pigtail to 3-pole pre-wire connector. Slide connector into channel closest to windshield, to left of dome lamp opening.

Work Instructions 322A Page 6 of 10

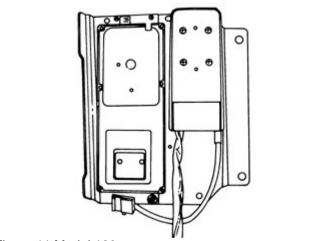
- **8.** Reinstall dome lamp assembly.
- A. Installing transmitter/receiver (TR) for mobile CTEL
- B. Installing 3 watt booster for portable CTEL

A. Installing transmitter/receiver (TR) for mobile CTEL

1. Remove left trunk panel.

Model 129 only (steps 2 - 4)

- **2.** Assemble TR to mounting plate using end brackets (ensure that the antenna connector is on top).
- **3.** Attach voice recognition module (VRM) to mounting plate with four short screws.
- 4. Remove protective caps from studs in bottom of wheel well. Partially remove carpeting from left trunk area. Install clips to longitudinal rail over existing holes. Replace carpeting. Position TR mounting plate over studs in wheel well. Insert sheet metal screws through holes in TR plate into clips, do not tighten. Place nuts on studs and tighten. Tighten sheet metal screws.



- Figure 11 Model 129
- **5.** Disconnect 4-pole connector from antenna. Open connector locking strap. Insert bare connector from VRM into location "2" of the 4-pole connector. Insert from rear of connector. Observe proper pin orientation. Close locking strap. Reconnect 4-pole connector to antenna.
- 6. Connect 4-pole connector (power supply) to top of TR.
- 7. Connect VRM harness to 12-pole connector on bottom of TR.
- 8. Connect 12-pole vehicle harness connector to 12-pole connector on bottom of VRM.
- 9. Connect antenna cable to TR.
- **10.** Connect VRM speaker connector to vehicle harness.

- 11. Secure loose wires/cables with cable tie.
- **12.** Reinstall left wheel well liner.
- 13. Install fuse (8A for model 129) in auxiliary fuse box (located in trunk).
- **14.** Reconnect negative battery terminal.
- **15.** Program telephone.
- **16.** Recode radio.
- 17. Resynchronize window settings (Model 140 only).
- **18.** Test function.
- B. Installing 3 watt booster for portable CTEL
- 1. Remove left trunk panel.

Model 129 only (steps 2 - 5)

2. Assemble booster to mounting plate using end brackets (ensure that the 16-pole DIN connector is on top).

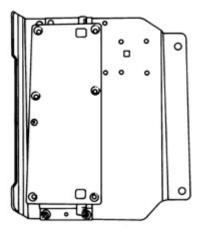


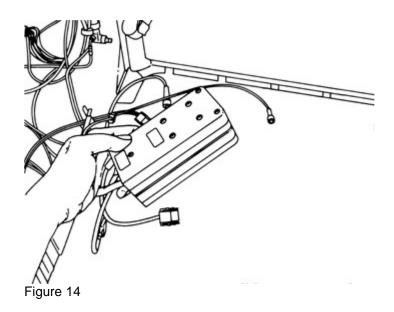
Figure 13 Model 129

^{3.} Assemble voice recognition module (VRM) and portable adapter module (PAM) with PAM

Work Instructions 322A Page 8 of 10

on top (Figure 14). Connect 12-pole harness connector from VRM to connector on top of PAM (next to power connection).

4. Slide four long screws through holes in VRM and PAM and secure to mounting plate, ensuring that PAM is on top.



- **5.** Remove protective caps from studs in bottom of wheel well. Partially remove carpeting from left trunk area. Install clips to longitudinal rail over existing holes. Replace carpeting. Position TR mounting plate over studs in wheel well. Insert sheet metal screws through holes in TR plate into clips, do not tighten. Place nuts on studs and tighten. Tighten sheet metal screws.
- **6.** Connect 16-pole data harness connector from PAM to connector on booster.
- 7. Disconnect 4-pole connector from antenna. Open connector locking strap. Insert bare connector from VRM into location "2" of the 4-pole connector. Insert from rear of connector. Observe proper pin orientation. Close locking strap. Reconnect 4-pole connector to antenna.
- 8. Connect 4-pole connector (power supply) to top of PAM.
- **9.** Connect 12-pole connector (taped to coax connector, labeled Portable Phone) to connector on bottom of PAM. Connect coax connector to upper antenna connector on booster. Connect other 12-pole connector to connection on top of VRM.
- **10.** Connect antenna cable from bottom of booster to antenna.

NOTE: Do not reverse antenna connections in steps 9 and 10.

- 11. Secure loose wires/cables with cable tie. Reinstall left wheel well liner.
- 12. Install fuse (7.5A for model 140, 8A for model 129) in auxiliary fuse box (located in trunk). Reconnect negative battery terminal.
- 13. Program telephone.

Work Instructions 322A Page 9 of 10

14. Recode radio.

15. Resynchronize window settings (Model 140 only).

16. Test function.
Parts Information – Model 129

Part Name	Application	Part Number / Exchange	
Mobile CTEL core kit (MBNA Core Pack IV)	Model 129	Q 6 82 0180	
each kit contains: Transmitter – receiver (VAD capable) In-dash controller (IDC) Hands-free microphone with integrated		Q 6 82 0206 / Q 6 82 0213 Q 6 82 0221 / Q 6 82 0223	
windscreen Owner's Guide		Q 6 82 0205 S-2620-094	
Mobile CTEL installation kit	Model 129	Q 6 82 0184	
each kit contains: Handsetwith cord Cradle Handset mounmting plate Voice recognition module IDC mounting bracket Hardware kit Antenna coax cable Card & holder kit Cradle bracket TR mounting bracket		Q 6 82 0073 / Q 6 82 0095 Q 6 82 0074 Q 6 82 0081 Q 6 82 0199 / Q 6 82 0210 Q 6 82 0149 Q 6 82 0204 Q 6 82 0091 Q 6 82 0087 Q 6 82 0080 Q 6 82 0202	
Portable CTEL core kit (MBNA Core Pack IV)	Model 129	Q 6 82 0182	
each kit contains: Slim battery Portable unit Owner's Guide		Q 6 82 0196 Q 6 82 0201 / Q 6 82 0212 S-2618-094	
Portable CTEL installation kit	Model 129	Q 6 82 0186	
each kit contains: Hands-free microphone with integrated windscreen In-dash controller (IDC) Charger-holder Cradle bracket Voice recognition module		Q 6 82 0205 Q 6 82 0200 / Q 6 82 0211 Q 6 82 0197 Q 6 82 0080 Q 6 82 0222 / Q 6 82 0224	

Work Instructions 322A Page 10 of 10

Portable adapter module	Q 6 82 0198 / Q 6 82 0209
IDC mounting bracket	Q 6 82 0149
Hardware kit	Q 6 82 0203
Antenna coax cable	Q 6 82 0091
Booster	Q 6 82 0194
Cradle mounting plate	Q 6 82 0081
TR mounting bracket	Q 6 82 0202

Recommended Labor Time

Description	Time	Models	
Cellular telephone, install (incl. NAM Programming)	1.5 hr.	129, 140	

Special Tools

Cellular Telephone Installation & Service Kit			Test Microphone	MY 94 Cellular Telephone Installation & Service Kit Upgrade
900 589 02 82 00	900 589 02 82 01	900 589 02 82 02	900 589 02 82 03	900 589 03 82 00

IMPORTANT!

The Cellular Telephone Installation/Warranty Registration postcard (S-2488-94C) MUST BE FILLED OUT and mailed to:

Mercedes-Benz of North America, Inc.

One Mercedes Drive Montvale NJ 07645

Attn: Warranty Department

If the card is not filled out and mailed in, future warranty claims for the telephone will be denied.