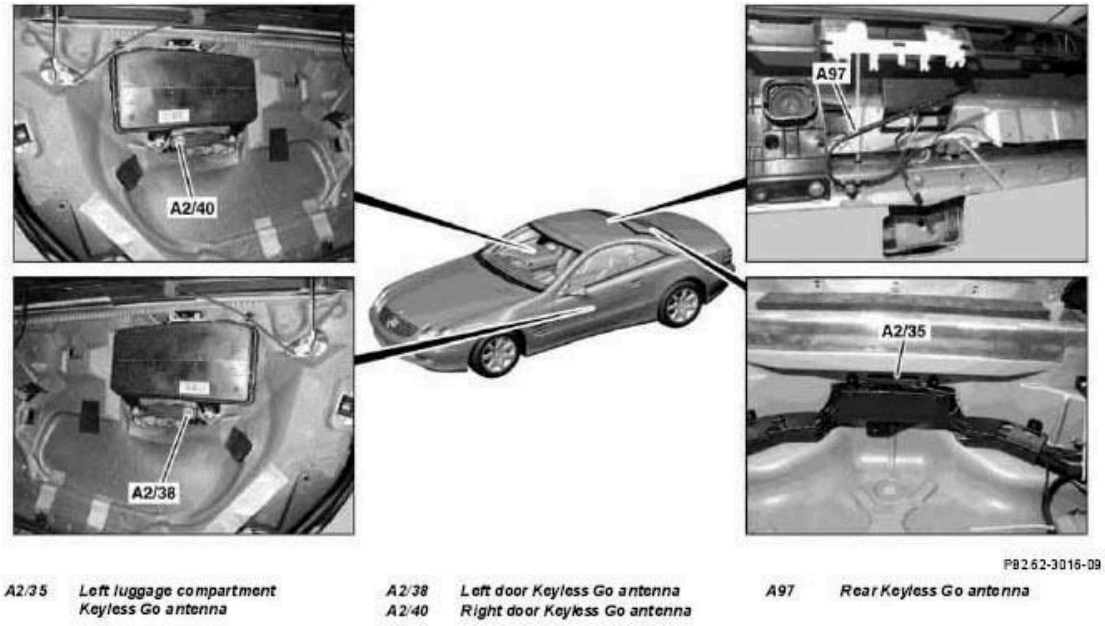

Fig. 4: Identifying Keyless Go Antenna Components

Location

The left luggage compartment Keyless Go antenna is located on the cable duct in the luggage compartment.

The left and right door Keyless Go antenna are located behind the door trim under the sidebags.

The rear Keyless Go antenna is located in the bracket in the roll bar.

Tasks

The left luggage compartment Keyless Go antenna and the left and right door Keyless Go antenna are used to transmit wake-up and localization signals for position finding and for drive authorization data exchange to the transmitter key (A8/1).

The rear Keyless Go antenna receives the wake-up and localization signals for position finding and for drive authorization data exchange and forwards them to the Keyless Go control unit (N69/5).

KEYLESS GO ANTENNA, LOCATION/PURPOSE/DESIGN/FUNCTION - GF82.62-P-4100R

MODEL 230 up to 28.2.06 with CODE (889) Keyless Go

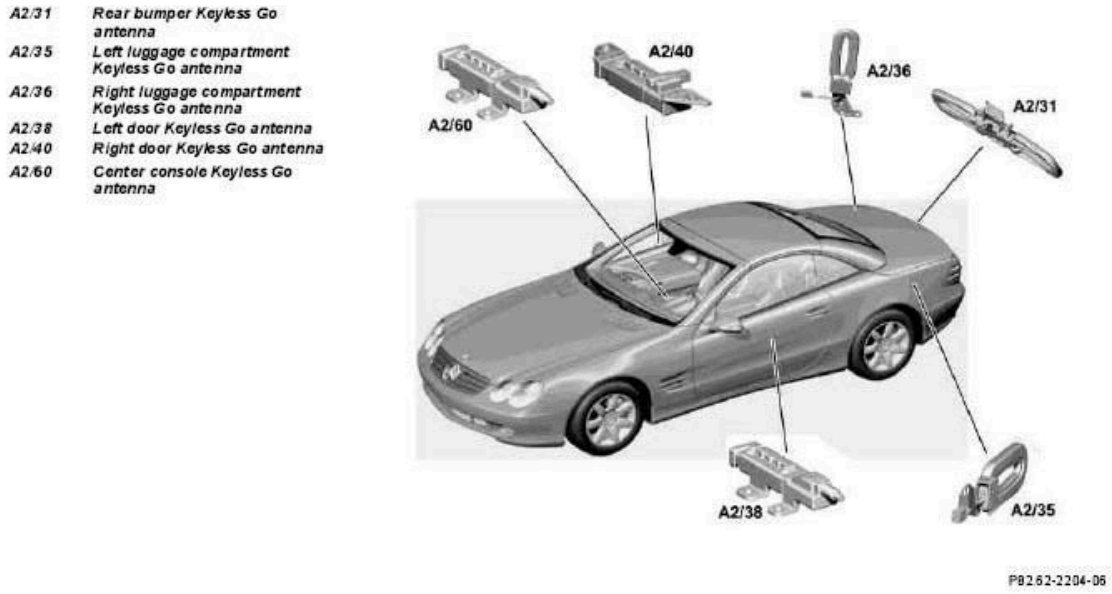

Fig. 5: Identifying Keyless Go Antenna Location

	Keyless Go antenna, location	The Keyless-Go antennas (A2/31, A2/35, A2/36, A2/38, A2/40 and A2/60) are located in the vehicle as shown.	
	Keyless Go antenna, task	To transmit wake-up and positioning signals for position finding and for driver authorization data exchange to the Keyless Go transmitter card (up to 31.12.02) or to the transmitter key (as from 1.01.03).	
	Keyless Go antenna, design	The Keyless-Go antennas (A2/31, A2/35, A2/36, A2/38, A2/40 and A2/60) consist of inductive conducting loops, which are connected to the Keyless Go control unit.	
	Keyless Go antenna, function	up to 31.12.02 as of 1.1.03	**GF82.62-P-4100-04R** **GF82.62-P-4100-04RS**

Keyless Go antenna, function - GF82.62-P-4100-04R

The inductive antennas in the doors, the rear, the trunk and the rear bumper are actuated by the Keyless-Go control module (N69/5). Their electromagnetic fields cause the Keyless-Go transmitter card (A8/2) to transmit its authorization code via radio to the right antenna amplifier module (A2/65).

The transmitter card last used is checked first.

Moreover, it is determined by means of these inductive antennas, whether a Keyless-Go transmitter card (A8/2) is located inside or outside the vehicle.

The body sheet metal attenuates the antenna fields in the outer area limiting the range in a defined manner. The

antenna range outside the vehicle is approx. 1 - 1.5 m, so that when outside the vehicle, the Keyless-Go transmitter card (A8/2) is reached only by the antennas on one side of the vehicle. On the other hand, these range sectors overlap in the interior.

This defined range limitation allows the Keyless Go control module (N69/5) to decide whether the Keyless-Go transmitter card (A8/2) is located inside or outside the vehicle.

Examples:

- If the Keyless-Go transmitter card (A8/2) is inside the vehicle, this is detected by the antennas at both sides of the vehicle. The Keyless-Go control module (N69/5) therefore "knows" that the Keyless-Go transmitter card (A8/2) is in the vehicle.
- If the Keyless-Go transmitter card (A8/2) is outside the vehicle, this is only detected by an antenna at one side of the vehicle. The Keyless-Go control module (N69/5) therefore "knows" that the transmitter card is outside the vehicle.

Keyless Go antenna, function - GF82.62-P-4100-04RS

The Keyless-Go antennas (A2/31, A2/35, A2/36, A2/38, A2/40 and A2/60) are actuated by the Keyless Go control unit (N69/5). Their electromagnetic fields induce the transmitter key (A8/1) to send its authorization code over two-way radio to the right antenna amplifier module (A2/65).

Keyless-Go antennas (A2/35, A2/36 and A2/60) are used to determine whether the transmitter key (A8/1) is located in the interior compartment.

Keyless-Go antennas (A2/31, A2/38 and A2/40) are used to determine whether the transmitter key (A8/1) is located outside the interior compartment.

The body panel attenuates the fields of the Keyless-Go antennas (A2/31, A2/35, A2/36, A2/38, A2/40 and A2/60), this in turn defines the range. The range outside the vehicle is approx.

1 to 1.5 m.

This defined range limitation enables the Keyless Go control unit (N69/5) to decide, whether the transmitter key (A8/1) is within or outside the vehicle.

TELEPHONE ANTENNA, LOCATION/TASK - GF82.62-P-4105

Telephone antenna, location/task - GF82.62-P-4105R

MODEL 230 with CODE (498) Japan version with CODE (349) E-Call emergency call system

MODEL 230 up to 31.5.04 with CODE (852) CTEL preinstallation assembly on upper center console with CODE (853) MB standard cellular telephone with CODE (854) MB portable cellular telephone with CODE (855) TELE AID

MODEL 230 up to 30.6.04 with CODE (494) USA version with CODE (349) E-Call emergency call

system with CODE (388) "Portable CTEL" UPCI telephone system

MODEL 230 as of 1.6.04 with CODE (386) Preinstallation for "portable CTEL" UPCI telephone system with CODE (388) "Portable CTEL" UPCI telephone system

MODEL 230 as of 1.7.04 with CODE (494) USA version with CODE (387) Preinstallation for telephone "portable CTEL" UPCI system, USA/Canada with CODE (359) TELE AID emergency call system

AH A 100 kohms test resistor is integrated into the radiator of the telephone antenna (A2/22).

A2/22 Telephone antenna

Fig. 6: Identifying Telephone Antenna

Telephone antenna, location		**GF82.62-P-4105-01R**
Telephone antenna, purpose	MODEL 230 with CODE (498) Japan version with CODE (349) E-Call emergency call system MODEL 230 up to 31.5.04 with CODE (852) Portable CTEL preinstallation on upper center console with CODE (853) MB standard telephone with CODE (854) MB standard CTEL with CODE (855) TELE AID MODEL 230 up to 30.6.04 with CODE (494a) USA version with CODE (349) E-Call emergency call system	**GF82.62-P-4105-02R**
	MODEL 230 as of 1.6.04 with CODE (386) Preinstallation for "portable CTEL" for UPCI system with CODE (388) "Portable CTEL" for UPCI system MODEL 230 as of 1.7.04 with CODE (494a) USA version with CODE (387) Preinstallation for "portable CTEL" for UPCI system USA/Canada with CODE (359) TELE AID emergency call system	**GF82.62-P-4105-02RA**

Telephone antenna, location - GF82.62-P-4105-01R

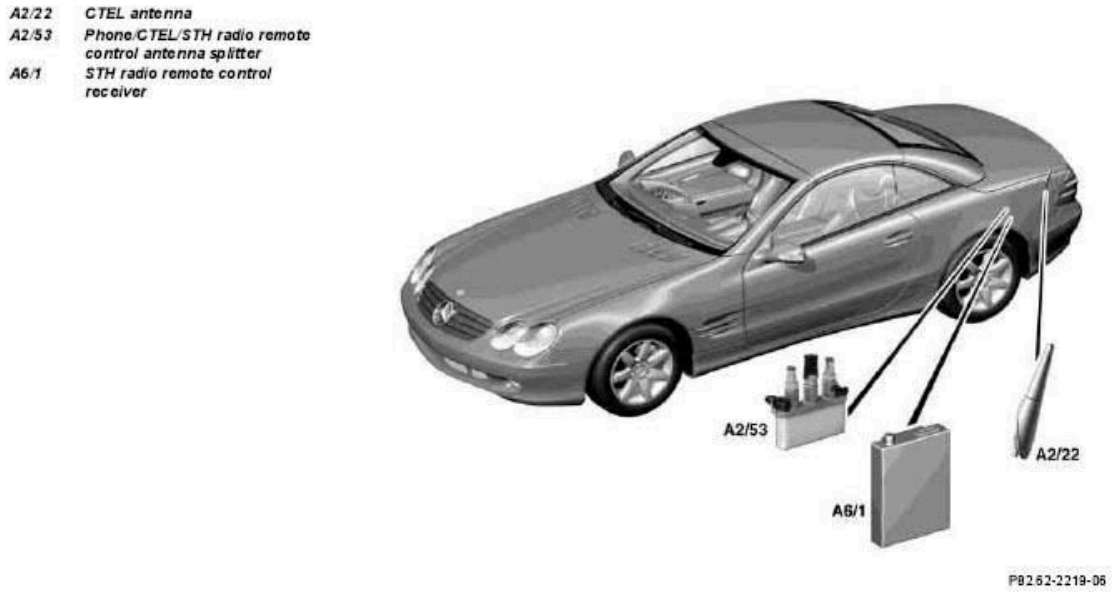

Fig. 7: Identifying Telephone Antenna Components Location

Telephone antenna, purpose - GF82.62-P-4105-02R

The **telephone antenna (A2/22)** transmits and receives telephone signals (data and voice information). In addition to this the telephone antenna (A2/22) receives the signal of the STH radio remote control sender (A8/3) for the radio remote control transmitter unit (A6/1) of the stationary heater (code 228).

The received signals are transmitted to the telephone/portable CTEL/ STH radio remote control antenna splitter (A2/53) via the antenna cable.

From there the edited signals are relayed to the corresponding receiver:

- STH remote control receiver unit (A6/1),
- Via the telephone interface (A34/4) to the portable CTEL (A34/6),
- Telephone transmitter/receiver, D2B (A35/13).

Telephone antenna, purpose - GF82.62-P-4105-02RA

The **telephone antenna (A2/22)** transmits and receives telephone signals (data and voice information). In addition to this the telephone antenna (A2/22) receives the signal of the STH radio remote control sender (A8/3) for the radio remote control transmitter unit (A6/1) of the stationary heater (code 228).

The received signals are transmitted to the telephone/portable CTEL/ STH radio remote control antenna splitter (A2/53) via the antenna cable. From there the edited signals are relayed to the corresponding receiver:

- STH remote control receiver unit (A6/1),
- Via the E-net compensator (A28/3) to the Universal Portable CTEL Interface (UPCI) control unit (N123/1),