

## COMAND Online/ Audio 20: The central display intermittently displays the message "Anti-theft protection activated"

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Topic number	LI82.85-P-058185
Version	9
Design group	82.85 Navigation and Communication system (CNS, ICS, COMAND, FleetBoard)
Date	08-16-2016
Validity	NTG4.5 and NTG5*1: Model 204.0/2/3 with code 802, 803, 804, 805 Model 204.9 with code 803, 804, 805 Model 207, 212, 218 with code 088, 803, 804, 805, 806, 807 Model 463 with code XZ2, XZ3, XZ4, XZ5, XZ6 Model 117, 156, 166, 172, 176, 231, 246, 292
Reason for change	Remedy adapted.
Reason for block	

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### Complaint:

Intermittently after the COMAND Online (A40/3) control unit or Audio 20 control unit (A2) control unit has booted up, the Audio/COMAND display (A40/8) may show the fault message "Anti-theft protection activated. Please visit your Mercedes-Benz workshop" (see attachment for examples). The complaint is temporarily rectified after an ignition cycle, after a head unit reset (hold down the "ON button" for 10 seconds) or after bus idle.

The fault code 9561 or B156100 "The PIN for the anti-theft protection is incorrect or absent" is current and/or stored in the XENTRY Diagnostics quick test in the COMAND Online control unit (A40/3) or the Audio 20 control unit (A2). When the complaint is active, the COMAND Online control unit (A40/3) or Audio 20 control unit (A2) cannot be operated.

Attachments	
File	Description
display_message.jpg	Event message "Anti-theft protection activated".
Displaymeldung.jpg	Display message "Anti-theft protection activated".

### Cause:

CAN communication with motor electronics control unit (N3/9, N3/10).

### Remedy:

a) Perform the test procedure described in the attachment.

- If this activates the theft protection, perform remedy b) (only for vehicles with engine OM651) or remedy c).

- If the theft protection is not activated, but has occurred frequently, continue directly with remedy e).

- If the complaint has only occurred once up to now and has not been reproduced, please continue to monitor the situation and do not perform any more operations.

# XENTRY TIPS

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b) Check of glow time output stage (N14/3) by means of voltage test (only for vehicles with engine OM651):

Important: There are two different connector variants, 8-pin (without fuel-filter heater) and 10-pin (with fuel-filter heater); the pin assignments of the glow time output stages can be found in the attachment.

1. Remove glow time output stage (N14/3).
2. Apply 12 V to circuit 30 and circuit 31 of glow time output stage (N14/3) (e.g. from on-board electrical system battery).
3. Measure voltage between circuit 15 (without fuel-filter heater) or 87 (with fuel-filter heater) and circuit 31 of glow time output stage (N14/3) using a multimeter.

An issue with the glow time output stage is identified if the multimeter indicates a voltage greater than approx. 1 V.

If this test confirms an issue with the glow time output stage (N14/3), it must be replaced. If an issue in the glow time output stage is not confirmed, perform remedy c).

c) Please perform the following work:

- Check circuit 30 pin in connector "F" (2) of motor electronics control unit (N3/9, N3/10) for voltage, expansion of pin and corrosion.
- Check chassis CAN (high and low) pins in connector "F" (2) of motor electronics control unit (N3/9, N3/10) for expansion of pin and corrosion.

Possible causes identified to date include e.g.:

- Pin of circuit 30 in connector "F" (2) of motor electronics control unit (N3/9, N3/10) not clipped in at connector housing (cf. attachment "Circuit 30 pin.jpg").
- Pin of circuit 30 in connector "F" (2) of motor electronics control unit (N3/9, N3/10) or in control unit itself corroded.
- Connector in front SAM control unit (connector 4I), which supplies the motor electronics control unit (N3/9, N3/10) with circuit 30(z) and chassis CAN, was not clipped in correctly (refer to wiring diagram in WIS for pin assignment).
- Wiring harness was chafed under the wiper linkage (cf. attachment "Figure 2a.jpg" and "Figure 2b.jpg"). -> 12 V was measured in the voltage measurement at the pin of circuit 30 in connector "F" (2) of the motor electronics control unit (N3/9), but this voltage collapsed under load.

If no noticeable issues are identified here, perform remedy d) on vehicles with engine OM651 and remedy e) on all other vehicles.

d) Replacement of motor electronics control unit (N3/9) (only for vehicles with engine OM651).

If the complaint still exists after replacement of the engine control unit, perform remedy e).

e) If the complaint occurs several times: Create a PTSS case containing the following data: Current quick test and current control unit log for COMAND Online (A40/3) or Audio 50 (A2/56) or Audio 20 (A2), and the completed Anti-theft questionnaire (see attachment Anti-theft questionnaire)

Important: Always use the damage code of the part causing the damage!

Note: Replacement, software update or SCN coding of the COMAND Online control unit (A40/3) or Audio 20 control unit (A2) does not remedy the problem.

# XENTRY TIPS

Attachments	
File	Description
Abbildung 1.jpg	PIN circuit 30 not clipped in
Abbildung 2a.JPG	Chafed cable set
Abbildung 2b.JPG	Chafed cable set
Stecker_Connector 8 pins .pdf	Connector, 8-pin
Stecker_Connector 10 pins.pdf	Connector, 10-pin
Prüfablauf_Diebstahlschutz.pdf	Test procedure
test-procedure_antitheft.pdf	Test procedure
Customer Questionnaire Antitheft 2016-08-16.pdf	Anti-theft questionnaire

Symptoms
Communication/information / Entertainment / Display message / Enter security code
Communication/information / Entertainment / Display message / Service Required
Communication/information / Entertainment / Display message / Please enter activation code!
Communication/information / Entertainment / Display message / Antitheft protection active!

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
15-4422	REPLACE GLOW OUTPUT STAGE OF PREGLOW SYSTEM (AFTER CHECK)		54416 73	Use only if remedy b) rectified the complaint.
54-0650	MAINTAIN BATTERY VOLTAGE (FOR TESTING AND DIAGNOSIS WORK)		82546 52	Only use if remedy e) is used.
54-1011	PERFORM QUICK TEST		82546 52	Only use if remedy e) is used.
54-9824	REPLACE ENGINE CONTROL UNIT		54581 73	Use only if remedy d) rectified the complaint.