Retrofit Guide for Mercedes-Benz Air Balance System [Code P21]

For vehicles: w213, w222, x253, x290

Table of Contents

Air Balance System Overview

- Fragrance System, Basic Function
- Ionizer, Basic Function

Required Parts

- Air Balance Parts
- <u>Receiving Electrical Plugs</u>

Wiring Instructions

- Fuse Box Locations
- Fragrance System
 - Yellow Wire (LIN)
 - Red Wire (Power)
 - Black Wire (Ground)
 - Blue Wire (Signal)
- lonizer
 - Pin 1 (Ground)
 - Pin 2 (LIN)
 - Pin 3 (Power)

Physical Installation

- Fragrance System
 - Remove Passenger Footwell Panel
 - Remove Display Module
 - Remove Passenger Trim Piece
 - Remove Glove Compartment
 - Install Fragrance Generator
- lonizer
 - Remove Driver Footwell Panel
 - Install Ionizer

Coding Instructions

- HVAC222 Module
 - Unlock access
 - Set Air Balance to Installed
 - Increase scent
 - Hard reset
- HU55 Module
 - Enable Air Balance Menus

Air Balance System Overview

Fragrance System, Basic Function

all (CAR) Model

with code P21 (Air quality package)

Overview

- General Location
- Function requirements

Location The flacon (1) with the liquid fragrance is located in a holder in the

 Image: The flacon (1) with the flacon regulation is blocked in a holder in the glove compartment.

 Image: The flacon (1) is held in the holder magnetically and is stored safely if physical shocks or accidents occur.

 1
 Vial

2 Perfume atomizer generator

Function General

Using the fragrance system can enrich the vehicle interior air with different fragrances. The fragrance system is controlled via the climate control.



P83.40-5585-82

Function requirements

- Circuit 15 ON
- Climate control switched on
- Flacon (1) inserted
- Glove compartment CLOSED

Perfume atomization activated

Function

A fan in the fragrance system generates its own air flow. This flows over the surface of the fragrance and becomes enriched with fragrance molecules. The air then flows through an opening in the vehicle interior and diffuses there.

The fragrance is timed. After approx. 5 min it switches off and on again. Due to the timing, the vehicle occupants do not get used to the fragrance and so the fragrance remains effective.

When the glove compartment is opened, the fragrance system switches off, the flacon lighting switches on and the flacon (1) changes from the operating position to the removal position.

Ionizer, Basic Function

all (CAR) Model

with code P21 (Air quality package)

Overview

- This document contains information on:
- General
- Location

Location

The ionizer (1) is located on the air duct leading to the driver's side air vent.

1 Driver side air vent ionizer

Function requirements

Functions

General

Air ionization makes it possible to refresh and clean the air in the vehicle interior. Interior air ionization is odorless, as such vehicle occupants cannot directly perceive it. Ionizers are controlled by control of the climate control.



P83.40-5586-82

Blower switched on

Function

The ionizer (1) binds dust. This effect is based on the fact that charged ions attach to dust particles in the air. As a result of their electrostatic interaction, they encourage integration with other particles to form a larger cluster. The ionizer (1) then filters this cluster more easily than individual particles.

- Function requirements
 Climate control switched on
 Ionization active

Required Parts

Listed below are parts you'll need to complete the retrofit, the electrical plugs are technically optional, but it's nice being able to remove things as intended if needed in the future.

Note: Most cars already have the air ducts which also already have the supported ionizer bracket, you just need to poke the missing holes for the ionizer probes to go in.

Air Balance Parts

- Mounting Plate Bolts: A001984572964
- Hose Assembly Bracket: A0029957277
- Air Duct: A2138303501 (your car should have this already)
- Air Duct: A2138313000 (your car should have this already)
- Fragrance System Mounting Plate: A2228900087
- Fragrance System Housing: 2228900100
- Fragrance System Ionization Control Module: A2238351600
 - Note: There is a cap on the ionizer probes, <u>remove before installing!</u>
- Fragrance System Hose Assembly: A2538000000

Receiving Electrical Plugs

•

- Fragrance System Receiving Plug: A0385457228
 - Ionizer Receiving Plug: A0395456628
 - Requires cutting off small protrusion

Wiring Instructions

This section will cover how to wire the Fragrance System and Ionizer.

Note: Once the glove compartment is out, it's a good idea to wire both the Fragrance System and Ionizer at the same time before continuing to install either. This way, everything is ready to be plugged in and nothing needs to be taken apart again.

Fuse Box Locations

Opening WARNING Risk of injury from using the windscreen wipers while the engine bonnet is open When the engine bonnet is open, and the windscreen wipers are set in motion, you can be trapped by the wiper linkage. Always switch off the windscreen wipers and ignition before opening the engine bonnet.

the left.

arrow.

Turn clip 👩 on cover 🕕 a quarter-turn to Remove any existing moisture from the fuse box using a dry cloth. Pull cover () upwards in the direction of the

Loosen screws (0), remove fuse box lid (0) from the top.

Closing

Check whether the seal is positioned correctly in lid (3).

434 Breakdown assistance

- Insert lid (3) into the bracket at the rear of the fuse box.
- Fold down lid (3) of the fuse box and tighten screws (0).
- Insert cover (1) on both sides.
- Turn clip (2) on cover (1) one quarter-turn to the right.
- Close the bonnet.

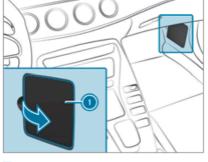
Opening and closing the fuse box in the cockpit

The fuse box is on the side of the dashboard under a cover.

Contact a Mercedes-Benz Service Centre for further information.

Opening and closing the fuse box in the front passenger footwell

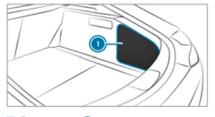
Observe the notes on electrical fuses (→ page 431).



Open cover (1) in the direction of the arrow Þ and remove it.

Opening and closing the fuse box in the load compartment

- Observe the notes on electrical fuses
- (→ page 431).
- Open the load compartment floor .



Remove cover ① The fuse allocation chart is on the side of the fuse box.

Breakdown assistance 433

3

Fragrance System

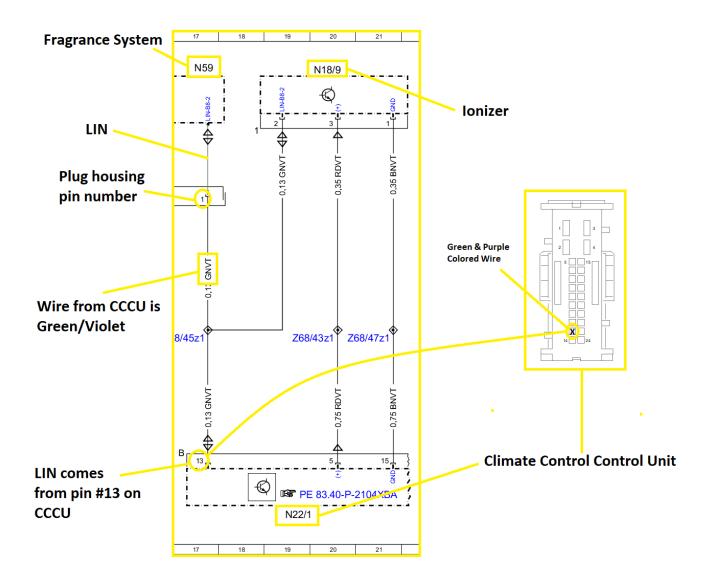
Note: Wire colors mentioned in the headers of these sections correspond with the plug wires coming from the Fragrance System itself *(see image directly below this text)*, *not* the climate control control unit's (CCCU) wires.



Yellow Wire (LIN)

The yellow wire on the plug of the fragrance generator corresponds with the CCCU LIN wire, which is located at pin 13 on the CCCU's connection plug behind the glove compartment.

Note: The Ionizer LIN will connect to the same wire (covered in Ionizer section).



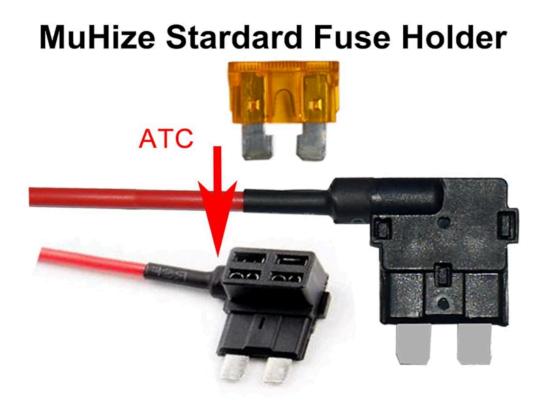
Red Wire (Power)

The original connection for the fragrance system power, which eventually links up with an MBR2 (labeled on fuse box) shared fuse, provided related packages which use the fuse are installed, may or may not exist if your car didn't originally come with the Air Balance package.

For this reason, among others, using a <u>fuse tap adapter</u> which plugs into the passenger side footwell area <u>fuse</u> <u>box</u> on the red wire coming from the fragrance system plug is an alternative and preferred approach. Based on wiring diagrams of the fragrance system in vehicles which come with the system, a 5amp fuse is required. <u>This</u> <u>will be shared with the lonizer power wire</u>.

Replace an existing 5 amp standard fuse with the wiretap, plugging the removed fuse and a new one for the Air Balance equipment (e.g., it has both 5 amp fuses plugged into it when you're done) and reconnect it to the fuse box. Do not plug into a previously empty slot as it may not have power running to it.

Note: The fuses in the fusebox mentioned above are all running to t30 power, so you should be able to use any fuse. Using an existing 5 amp is recommended because it removes guess work on which fuse to plug into which hole or if there may be extra/less power going to something by mistake.



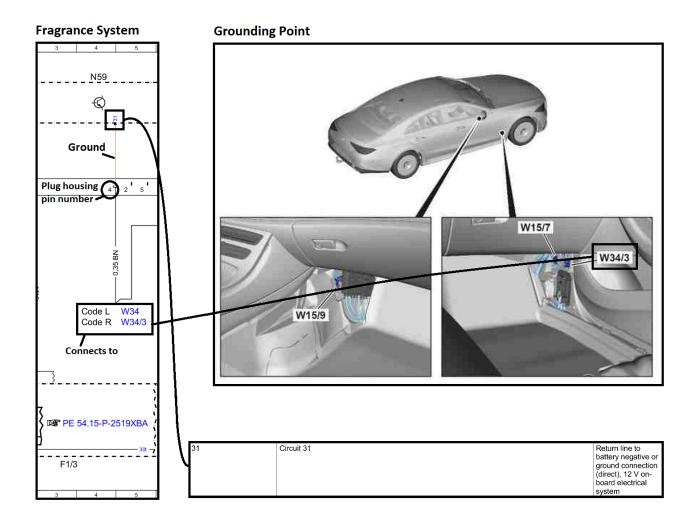
DUAL-SLOT FUSE HOLDER:

Provides one fuse holder to protect existing circuit and a second fuse holder to protect new circuit

Black Wire (Ground)

The black wire coming from the fragrance system plug corresponds with the ground wire, you can run it to an existing ground.

Note: You may end up running the lonizer ground to the same location (covered in *lonizer section*).

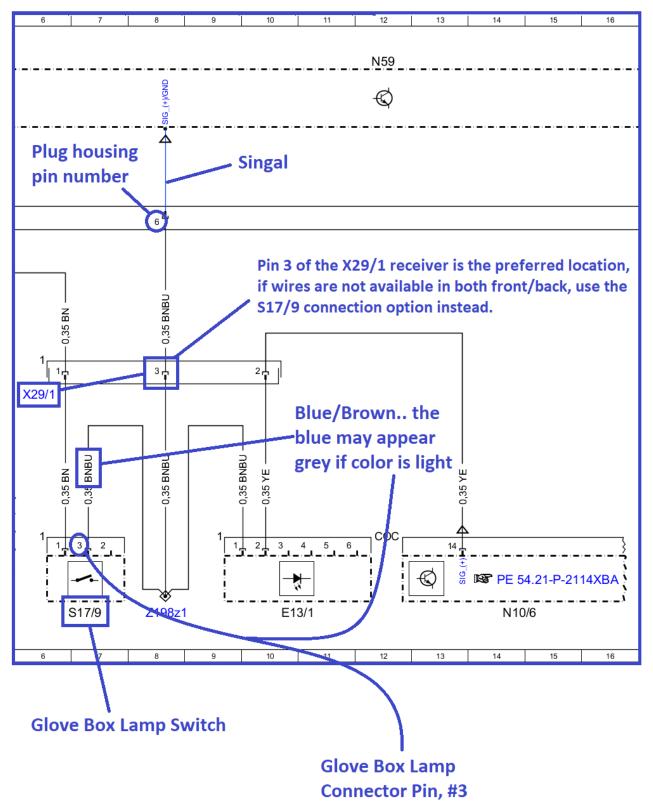


Blue Wire (Signal)

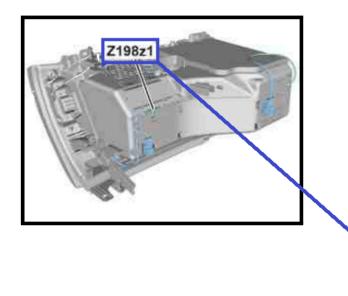
The blue wire coming from the fragrance system plug corresponds with the signal wire, which connects to the signal wire of the glove compartment light. The wire will likely be blue, gray or yellow. The other wire is a ground which is brown or black by Mercedes standards, and there are only two wires.

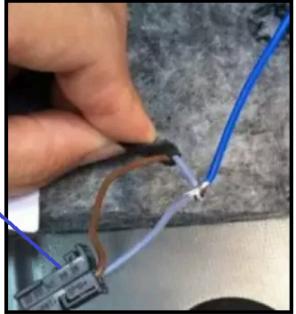
When in doubt, choose the glove box light wire that is not brown or black.

Fragrance System



Reference Images





In this image set, the blue signal wire from the fragrance system plug is being spliced into the gray signal wire of the glove compartment light plug (*which connects to Z198z1 from the image*). The color of the signal wire on the plug, in this case gray, may vary. On the x290 it is yellow. One thing is certain, the other wire is a ground, which will always be either brown or black with Mercedes vehicles. When in doubt, choose the wire that is not brown or black.

<u>lonizer</u>

Pin 1 (Ground)

You may connect the ground pin to the most convenient grounding location, it's recommended to use the same <u>grounding location</u> used for the Fragrance System. However, any grounding location will work as long as the connection is secure.

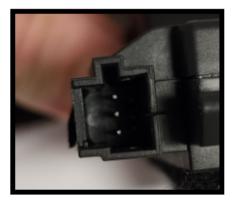
Pin 2 (LIN)

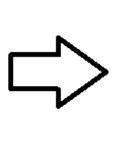
The LIN pin will connect into the same LIN wire as the Fragrance System.

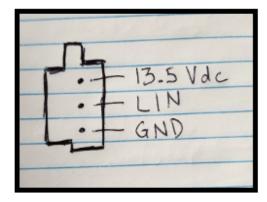
Pin 3 (Power)

The power pin will connect with the same <u>power source</u> as the Fragrance System. You can splice the power cables of both the Fragrance System and Ionizer together and connect them into the same fuse tap adapter. Realistically, the Ionizer and Fragrance System should not use more than 1 or 2 amps, so the 5 amp fuse is still perfect.

Reference Images







In this image set, you can see which pins correspond with which wire type.

Physical Installation

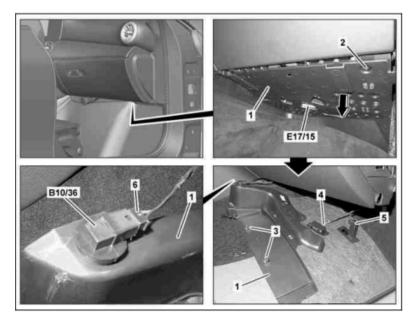
Fragrance System

Installing (or removing) the Fragrance System requires removing the passenger footwell (for wiring), display module, instrument panel trim, and glove compartment. From there you will pop out the reserve pieces for the Fragrance System, install the part, and once wiring and hose installation are done, put everything back and plug it all in..

Remove Passenger Footwell Panel

Shown on model 257.### 1#

1 2 3 4 5 6 E17/15 B10/36	Cover Screw Retaining clips Electrical connector Hook Electrical connector Right front footwell lamp Right footwell air outlet
B10/36	Right footwell air outlet temperature sensor



P68.10-5586-06

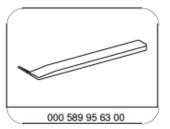
	Information on preventing damage to electronic components due to electrostatic discharge		AH54.00-P-0001-01A
XX	Remove/install		
1	Adjust front passenger seat to the rear.		
2	Remove front door sill.		
3	Switch off ignition and store transmitter key outside of transmission range (min. 2 m).		
4	Remove screw/bolt (2).		
5	Unclip trim (1) from retaining clamps (3).	S Long wedge	*115589035900
6	Push trim (1) on bracket (5) to the outside, unhook, and lower (arrow) until electrical connectors (4, 6) are accessible.		
7	Disconnect electrical connectors (4, 6).		
8	Remove trim (1).		
9	Remove right footwell vent air outlet temperature sensor (B10/36) or left footwell vent air outlet temperature sensor.	When replacing trim (1).	
10	Remove right front footwell lamp (E17/15) or left front footwell lamp.	When replacing trim (1).	
11	Install in the reverse order.		

115 589 03 59 00 Long wedge

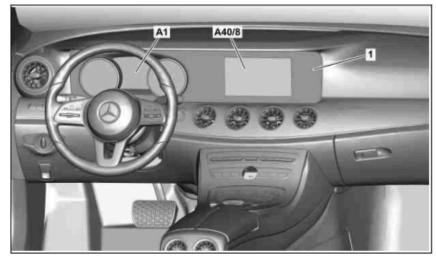
Remove Display Module

Shown on model 257 except code 464 (Digital instrument cluster, full display)

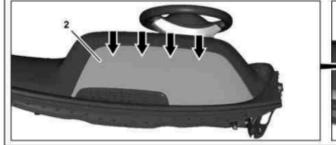
1	Display module
A1	Instrument cluster
A40/8	Audio/COMAND display

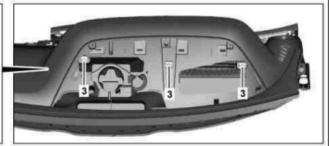


Dismantling tool







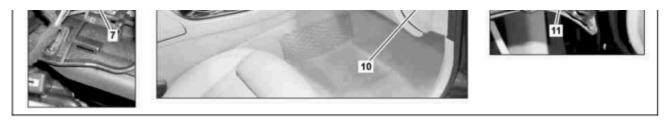


2 Cover

3 Screw

	Information on preventing damage to electronic components due to electrostatic discharge		AH54.00-P-0001-01A
XX	Remove/install		
1	Switch off ignition and store transmitter key outside of transmission range (min. 2 m).		
2	Move steering wheel all the way to the rear and down.		
3	Slide disassembly tool between instrument panel and cover (2) (arrows); unclip cover (2) and remove.	S Dismantling tool	*000589956300
4	Unscrew bolts (3).	i Installation: Push display module (1) forwards and tighten bolts (3).	
5	Slightly lift retaining tabs under the screws (3) using a suitable tool and tilt the display module (1) out of the instrument panel.	Do not apply too much force when lifting up the retaining tabs of the bolts (3). Otherwise, the display module (1) may be damaged.	
6	Remove display module (1) until the electrical connectors are accessible.		
7	Separate electrical connectors.	1 The number of electrical connectors may vary depending on the equipment.	
8	Remove display module (1).	The instrument cluster (A1) and audio/ COMAND display (A40/8) are integrated into the display module (1).	
9	Install in the reverse order.		

Remove Passenger Trim Piece



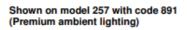
Shown on model 257.### 1# with code 891 (Premium ambient lighting)

8

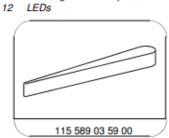
9

- Light-emitting diode Electrical connector 6
- 7

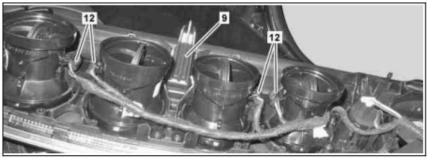
- Display module Passenger side trim pieces
- 10 Cover 11 Light-emitting diode



9 Passenger side trim pieces



Long wedge

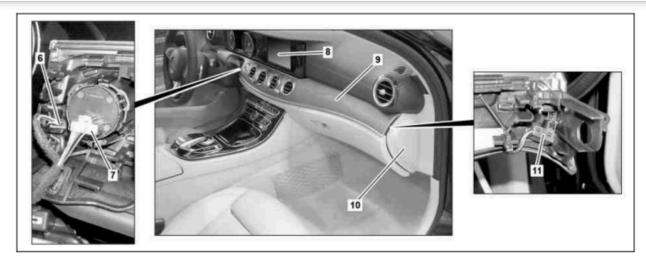


P68.10-5648-04

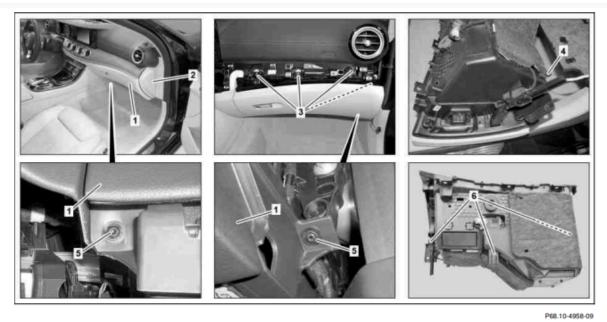
	Information on preventing damage to electronic components due to electrostatic discharge		AH54.00-P-0001-01A
XX	Remove/install		
1	Move steering wheel all the way to the rear and to the bottom.		
2	Disconnect ground line from battery.		AR54.10-P-0003FR
3	Release edge guard in the area of the cover (10).	i Installation: Ensure that edge guard is seated correctly.	
4	Remove cover (10).	S Long wedge	*115589035900
5	Remove display module (8) and place to one side with connected electric lines.	Ť Ť	AR54.30-P-6023FR
6	Unclip front passenger side trim piece (9) along the entire length at the bottom.	 Start unclipping in the area of the previously removed cover (10). Long wedge 	*115589035900
7	Tilt front passenger side trim piece (9) slightly toward the top and guide out of the instrument panel.	1 Installation: Pay attention for correct sea on center nozzles and separation point to driver side trim piece.	ıt
8	Detach electrical connector (7).		
9	Disconnect light-emitting diodes (6, 11, 12) from the fiber-optic cables.	Model 257, 290 with code 891 (Premium ambiance illumination)	
10	Remove front passenger side trim piece (9).		
11	Remove KEYLESS-GO start/stop button.	When replacing front passenger side trim element (9).	
			AR54.25-P-4000FR
12	Remove center air vent.	When replacing front passenger side trim element (9).	
10			AR83.10-P-4509FR
13	Install in the reverse order.		

P68.10-4974-08

Remove Glove Compartment



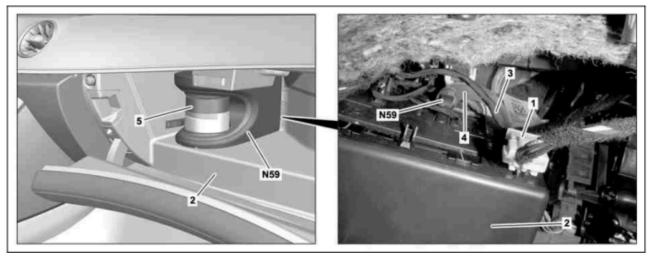
P68.10-4974-08



Shown on model 257 except code P21 (air quality package)

1 2	Glove compartment Cover	3 Bolts 4 Electrical connecto	or 5 Screw 6 Guides	
X	X	Remove/install		
1		Remove trim piece from front passenger side instrument panel and place to one side.	1 Do not disconnect electrical connectors.	AR68.10-P-1187FR
2		Remove trim under front passenger side instrument panel.		AR68.10-P-1502FR
3		Remove bolts (5).		
4		Remove screw/bolts (3).	One bolt (3) is located in the glove compartment (1) on right.	
5		Pull out glove compartment (1) until the electrical connector (4) is accessible.	i Installation: Push guides (6) of glove compartment (1) into instrument panel.	
6		Detach air duct from glove compartment (1).		
7		Disconnect electrical connection (4).		
8		Disconnect electrical connector from separate trunk locking switch (S88/6).	Model 257 with code 887 (independent boot locking)	
9		Disconnect electrical connector and hose from fragrance system alternator.	Model 257, 290 with code P21 (Air quality package)	AR83.40-P-0201FR
10		Remove glove compartment (1).		
11		Remove separate trunk locking switch (S88/6) from the glove compartment (1).	Model 257 with code 887 (independent boot locking) When replacing glove compartment (1).	
12		Remove fragrance system alternator from the glove compartment (1).	Model 257, 290 with code P21 (Air quality package) When replacing glove compartment (1).	AR83.40-P-0201FR
13		Remove glove compartment lamps from the glove compartment (1).	When replacing glove compartment (1).	
14		Install in the reverse order.		

Install Fragrance System



P83.40-5486-08

Shown on model 257

1 Electrical	connect	or
--------------	---------	----

- 2 Glove compartment
- 3 Electrical wiring harness

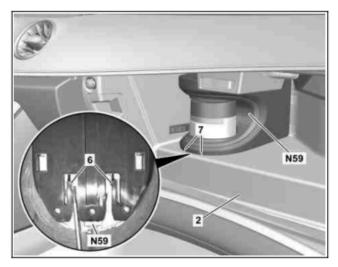
Shown on model 257

2	Olaura.	compartment
/	CHOVE	companmen

- 6 Catch hook
- 7 Recesses N59 Perfume atomizer generator

Hose Vial 4 5

Perfume atomizer generator N59

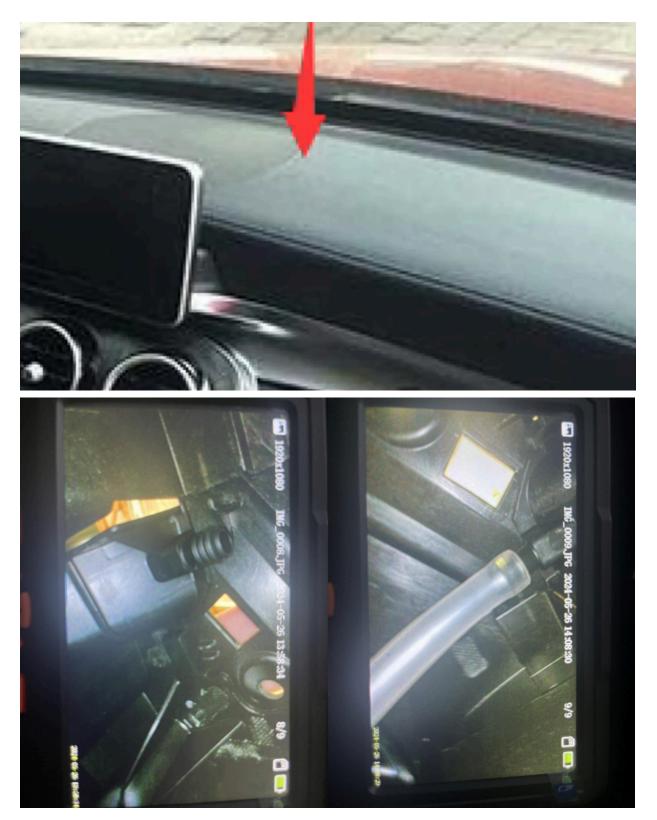


P83.40-5487-11

	Information on preventing damage to electronic components due to electrostatic discharge		AH54.00-P-0001-01A
XX	Remove/install		
1	Remove trim under front passenger side instrument panel.		AR68.10-P-1502FR
2	Remove electrical connector (1) from glove compartment (2) and expose electrical wiring harness (3).		
3	Disconnect electrical connector (1).		
4	Detach hose (4) from fragrance system alternator (N59).	i Installation: Ensure that hose (4) is seated correctly.	
5	Open flap on glove compartment (2).		
6	Remove flacon (5).		
7	Release catch hooks (6) through cutouts (7) using a suitable tool as shown.		
8	Remove fragrance system alternator (N59).		
9	Install in the reverse order.		

Reference Images

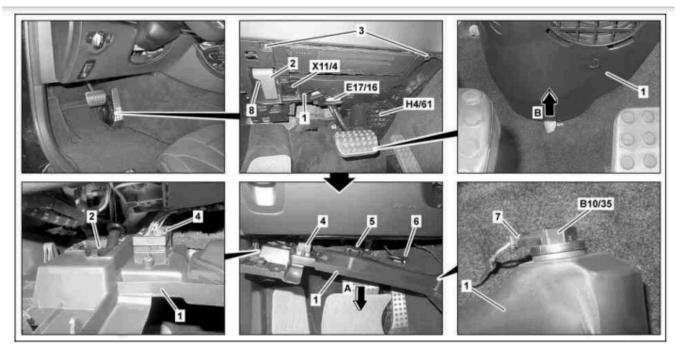
The Fragrance System reserve hole may be difficult to locate, it might be useful to utilize an endoscope or borescope to help see better. It will likely be close to the top, directly under the dash, around where you see the arrow in the picture below.



<u>lonizer</u>

Installing (or removing) the lonizer requires removing the driver footwell, and installing the ionizer. From there you will pop out the reserve pieces for the Fragrance System, install it, and once wiring is done, put everything back and plug it all in.

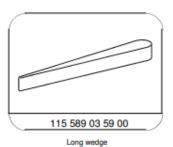
Remove Driver Footwell Panel



P68.10-5947-09

Shown on model 257.### 1#

1 2	Cover Engine hood release handle	7 8	Electrical connector Screw
3	Bolts	B10/35	Left footwell air outlet temperature sensor
4	Electrical connector	E17/16	Left front footwell lamp
5	Electrical connector	H4/61	Instrument cluster speaker
6	Electrical connector	X11/4	Diagnostic connector



	Information on preventing damage to electronic components due to electrostatic		AH54.00-P-0001-01A
XX	discharge Remove/install		
1	Adjust steering column upward.		
2	Adjust driver seat to the rear.		
3	Switch off ignition and store transmitter key outside of transmission range (min. 2 m).		
4	Remove front door sill.		
5	Remove screw/bolts (3).		
6	Loosen trim (1) and lower (arrow A) until electrical connectors (4, 5, 6, 7) are accessible.	Cong wedge	*115589035900
7	Disconnect electrical connectors (4, 5, 6, 7).		
8	Remove screw/bolt (8).		
9	Remove engine hood release handle (2) to the rear out of trim (1).		
10	Unhook retaining tab of trim (1) from floor covering (arrow B) and remove trim (1).		
11	Remove diagnostics connection (X11/4).	When replacing trim (1).	
12	Remove instrument cluster speaker (H4/61).	When replacing trim (1).	
13	Remove left footwell vent air outlet temperature sensor (B10/35) or right footwell vent air outlet temperature sensor.	When replacing trim (1).	
14	Remove left front footwell lamp (E17/16) or right front footwell lamp.	When replacing trim (1).	
15	Install in the reverse order.		
			-

Install Ionizer

Your car should already have an air duct with a bracket you are able to hook the lonizer onto, but the lonizer will not be there. The lonizer holes will also be sealed shut.

Note: You can create a stencil with cardboard and use a hot screwdriver or similar tool to burn out the required holes. Be careful, as the heat may melt the screwdriver handle if too hot.



P83.40-5543-07

Shown on model 257 except code 463 (Head-up Display)

Shown on model 257 with code 463 (Head-

Driver side air vent ionizer

1 Air duct

Air duct

up Display)

1 N18/9 N18/9 Driver side air vent ionizer

<image>

P83.40-5544-06

Coding Instructions

HVAC222 Module

Use the HVAC222 module to unlock the core functionality of your new Air Balance System. After unlocking, you can make changes, they may appear to immediately revert back, but after a hard reset the values will stabilize.

Unlock Access

Bus Trace	 Image: Second sec		le Codes 🛛 🛛 Data D)isplay/IO Contro	ol O Complete Vehic	de Coding 🔹 ECU Exchange 🍨 :	Symbolic Trace
🛈 🛓 🦌 🖬 🖬 No filter active 🗸 🌾	Diagnostic Services Search	[Global Search				Configu
Now monitoring on Geven	<please enter=""></please>			Settings Desc	ription		
Rel.Time[ID Data	Diagnostic			Logical Link	HVAC222 (UDS_C	AN D)	
	HVAC222 (UDS_CAN_D) Hex Services Protocol Parameter Sets Aktuelle Datan		^		DJ_SecurityAcces		Unit
	Communication Control	_SecurityAccess"		Params		value	Unit
	Control DTC Setting						
	🖶 🗃 Flash-Jobs		~	PDU:			2
		nit preconfigured Read ID Read DTC Clear DT	re				
	Process Values 🥒						
	Name	Value			Unit	RangeInfo	Error
	Name [Tester]	Value [611]			Unit	RangeInfo	Error
	Name	Value			Unit	RangeInfo	Error
	Name [Tester]	Value [611]			Unit	Rangelnfo Value OK	Error
Logicəl Link List	Name [Tester] VariantidentificationAndSelection	Value [511] eNEGATIVE			Unit		Error
FGL_KWP_CAN_D (KWP_CAN_D)	Name [Tester] VariantIdentificationAndSelection SID-RQ	Value [611] eNEGATIVE 0x22			Unit	Value OK	Enor
FGL_KWP_CAN_D (KWP_CAN_D) FGL_KWP_KM20_CAN_D (KWP_CAN_D) FGL_NISSANUDS_CAN_D (NISSANUDS_CAN_D)	Name [[Tester] VariantidentificationAndSelection SID-R0 RecordData/dentifier	Value [611] eNEGATIVE 0x22 0xF100			Unit	Value OK	Error
FGL_KWP_CAN_D (KWP_CAN_D) FGL_KWP_KM20_CAN_D (KWP_CAN_D) FGL_NISSANUDS_CAN_D (NISSANUDS_CAN_D) FGL_RENAULTUDS_CAN_D (RENAULTUDS_CA)	Name [Tester] VariantidentificationAndSelection SID-RQ RecordDataIdentifier HVAC222 (UDS_CANLD)	Value [611] eNEGATIVE 0x22 0x7100 [768]			Unit	Value OK	Error
F FGL_KWP_CAN_D (KWP_CAN_D) F FGL_KWP_KM20_CAN_D (KWP_CAN_D) F FGL_NISSANUDS_CAN_D (NISSANUDS_CAN_D) F FGL_NISSANUDS_CAN_D (RENAULTUDS_CAN F FGL_UDS_CAN_D (NDS_CAN_D)	Name [Tester] VariantidentificationAndSelection SID-RQ RecordData/dentifier H-VAC222 (UDS_CAN_D) Response State	Value [611] eNEGATIVE 0x22 0x7100 [7e8] notacknowledged			Unit	Value OK Value OK	Error
FOLLKWP_CAN_D (KWP_CAN_D) FOLLKWP_KMD (CAN_D (KWP_CAN_D) FOLLKSANUDS_CAN_D (KWS_ANUDS_CAN_D) FOLLNSANUDS_CAN_D (KWS_CAN_D) FOLLSAN_UCS_CAN_D (CAN_CAN_D) FOLLUDS_CAN_D (CAN_CAN_D) FOLLUDS_KAN_D (CAS_CAN_D) FOLLUDS_KENENT(UDS_CAN_EXT) FOLLUDS_KENENT(UDS_KENENT)	Name [Testel] VenantidisticationAndSelection SID-R0 RecordDataIdentifier HAA222 (UDS_CAN_D) Response State SID-NA	Value [611] eNEGATIVE 0x22 0xF100 [7e8] not acknowledged 0x7F			Unit	Value OK Value OK Value OK	Error
FGL KWP_CAN_D (KWP_CAN_D) FGL KWP_KAN_CAN_D (KWP_CAN_D) FGL KWP_KAN_CAN_D (KNSANUDS_CAN_D) FGL FRSHVETUDS_CAN_D (RENAULTUDS_CAN_F) FGL LOS_CAN_D (USS_CAN_D) FGL LOS_CAN_D (USS_CAN_D) FGL LOS_CAN_D (USS_CAN_D) FGL LOS_CAN_D (USS_CAN_D) FGL LOS_CAN_EXT(USS_CAN_EXT) FGL LOS_CENENT_LOS_CENENT FGL LOS_CENENT_LOS_Ethernet_DolP	Name [Teste] VariantidentificationAndSelection SID-R0 RecordDataIdentifier HVAC222 (UDS_CAN_D) Response State SID-R0 SID-R0 NR	Value [611] eNEGATIVE 0x22 0xF100 [7e8] notacknowledged 0x7 0x2			Unit	Value OK Value OK Value OK Value OK	Error
FGL, WAP, CAN, D, (WAP, CAN, D) FGL, WAP, FMC, CAN, D, (WAP, CAN, D) FGL, WAP, FMC, CAN, D, (WAP, CAN, D) FGL, MISSANUDS, CAN, D, (WAP, CAN, D) FGL, UDS, CAN, D, (WAP, CAN, D) FGL, UDS, CAN, D, (WAP, CAN, PAN, V) FGL, UDS, CAN, D, (WAP, CAN, PAN, V) FGL, UDS, EMANNEL, DAPI (WAP, CAN, PAN, V) FGL, UDS, EMANNEL, DAPI (WAP, SHANNEL, SHANNEL, DAPI (WAP), SHANNEL, DAPI (WAP, SHANNEL,	Name [Testel] ValiantidianticationAndSelection SID-R0 Raccrd2braidentifier HAC222 (UDS_CAN_D) Response State SID-NR SID-R0-NR NEGATIVE RESPONSE CODES	Value [611] eNECENTIVE 0x22 0x7100 [7e8] not acknowledged 0x7F 0x22 General Reject			Unit	Value OK Value OK Value OK Value OK	Error
ForLUNP_CAN_D (INVP_CAN_D) ForLUNP_IANC CAN_D (INVP_CAN_D) ForLUNP_IANC CAN_D (INVP_CAN_D) ForLUNP_IANC CAN_D (INVP_CAN_D) ForLUNDS_CAN_D (INVP_CAN_D) ForLUNDS_CAN_D (INVP_CAN_D) ForLUNDS_CAN_D (INVP_CAN_D) ForLUNDS_Entermet(INDS_Entermet) ForLUNDS_Entermet_ONP_DOBTIONS_Entermet_ONP ForLUNDS_Entermet_ONP_POTIONS_Entermet_ONP ForLUNDS_Entermet_ONP_FOTIONS_Entermet_ONP ForLUNDS_Entermet_ONP_FOTIONS_Entermet_ONP ForLUNDS_Entermet_ONP ForLUNDS_Entermet_ONP	Name [Teste] VetendidentificationAndSelection SiD-R0 Record/Detaidentifier HvAc222 (UDS_CAN_D) Response State SiD-R0-NR SiD-R0-NR NEGATIVE RESPONSE CODES [Teste]	Velue [611] eNEGATIVE 0x22 0x7100 [7e8] notacknowledged 0x7F 0x22 General Reject [611]			Unit	Value OK Value OK Value OK Value OK	Error
FIGL LWP CAN LD (WPC CAN LD) FIGL WP FAND CAN D (WPC CAN LD) FIGL WP FAND CAN D (WPC CAN LD) FIGL WP FAND LWDS CAN LD (WPC CAN LD) FIGL WPS FAND LWDS CAN LD (WPC CAN LD) FIGL UDS CAN LD (WPC CAN LD) FIGL UDS CAN LD (WPC CAN LD) FIGL UDS CAN LP (WPC CAN LD) FIGL UDS CAN LP (WPC CAN LD) FIGL UDS CAN LP (WPC CAN LP) FIGL UDS Ethermel (UPC Sthemel, DP) FIGL UDS Ethermel, DOP (WPC Sthemel, DD) FIGL UDS Ethermel, DOP (WPC Sthemel, DD) FIGL UDS Ethermel, DOP (WPC Sthemel, DD) FIGL UDS Ethermel, DD) FIGL WPS Ethermel, DD)	Name [Teste] VetendidentificationAndSelection SiD-R0 Record/Detaidentifier HvAc222 (UDS_CAN_D) Response State SiD-R0-NR SiD-R0-NR NEGATIVE RESPONSE CODES [Teste]	Value [611] eNEGATIVE 0x22 0xF100 [7e8] notacknowledged 0x7F 0x22 General Reject [611] eALL_FAILED			Unit	Value OK Value OK Value OK Value OK	
F FGL_KWP_CAN_D (KWP_CAN_D) F FGL_KWP_KM20_CAN_D (KWP_CAN_D) (F FGL_NSANUDS_CAN_D (NISSANUDS_CAN_D) FGL_RENAULTUDS_CAN_D (NISSANUDS_CAN_D) FGL_UDS_CAN_D (UDS_CAN_D) F FGL_UDS_CAN_EXT (UDS_CAN_EXT)	Name [Tested] VenendidentificationAndSelection SID-R0 RecordDataGentifier HAA222 (UDS_CAN_D) Response State SID-HR SID-HR NEGATIVE RESPONSE CODES [Testen] DJ_SecurityAccess	Value [611] eNECATIVE 0x22 0x7100 [7e8] not acknowledged 0x7F 0x22 General Reject [611] eALL_FALED 0xCB0			Unit	Value OK Value OK Value OK Value OK	

Set Air Balance to Installed

Bus Trace	Quick Test	Diagnostic Services	Variant Coding 🛛 🛛 F	Tash Programming 🛛 🛛 Diagnostic T	rouble Codes O Data Display / 10 Contro	Complete Vel	hicle Coding 🛛 🛛	ECU Exchange	e o Symboli	c Trace		
🕽 🛓 🕨 🖬 🖬 No filteractive 🗸 🌾	VariantCoding											
	Initialization:	Detaults (ittline) (None			Coding Sets						
on monitoring on Grann	ECU:	HVAC222 (UDS_CA			Connect Disconnect	File:	<no file=""></no>			Los	ıd	Configure
Rel.Time[ID Data					Junea Disconnea	Coding Set	<no coding="" set<="" td=""><td>></td><td></td><td></td><td>~</td><td></td></no>	>			~	
	Domain:	[010] Konfigurationskodi	erung Schreiben		~	Comment	<no comment=""></no>	-				
		Set to default	All Domains	~	Reset All Domains ~	Commone	CIAD COMIMEND					
							Save	All Dome	ains 🗸	De	lete	
	Internal Codin	3										
	Fragment -			Meaning	Original Meaning		D	escription -	Byte =	Bit -	Bit le	Unit
	Lenkervarian	te		<not available=""></not>	<not available=""></not>				0	0	1	
	HVAC-Varia	nte		<not available=""></not>	<not available=""></not>				0	1	2	
	Glasvariante			<not available=""></not>	<not available=""></not>				0	3	3	
	(reserved)			<not available=""></not>	<not available=""></not>				0	6	1	
	Emplanger O	ananeizang		vilor available?	t available>				0	7	1	
	SA Beduftung	(scent)		SA Beduftung Code 210K verbaut	<r at="" available=""></r>				1	0	1	
	SA lonisierun	g (Ionization)		SA lonisierung Code 211K verbau	t <rpt available=""></rpt>				1	1	1	
	Ortealitier			violatione.	virot available>				1	2	1	
	Bedienung ül	oer Fzg-Schlüssel		<not available=""></not>	<not available=""></not>				1	3	1	
	Klimatisieren	während OnBoard-Ladung		<not available=""></not>	<not available=""></not>				1	4	1	
	Klimatisieren	über Hochvoltbatterie		<not available=""></not>	<not available=""></not>				1	5	1	
	SA Standheiz	ung/Standlüftung		<not available=""></not>	<not available=""></not>				1	6	2	
	Anzahl Intens	itätsstufen für Beduftung		<not available=""></not>	<not available=""></not>				2	0	1	
	Panorama-Fr	- estglasdach		<not available=""></not>	<not available=""></not>				2	1	1	
gical Link List	SA Heckded	kel-Fernschliessung (PTCM)	<not available=""></not>	<not available=""></not>				2	2	1	
FGL_KWP_CAN_D (KWP_CAN_D)	(reserved)			<not available=""></not>	<not available=""></not>				2	3	1	
FGL_KWP_KM20_CAN_D (KWP_CAN_D)	Head-Up Dis	play		<not available=""></not>	<not available=""></not>				2	4	1	
FGL_NISSANUDS_CAN_D (NISSANUDS_CAN_D) FGL_RENAULTUDS_CAN_D (RENAULTUDS_CAT	Privacy - Abc	lunkelung Fondscheiben Co	de 840	<not available=""></not>	<not available=""></not>				2	5	1	
FGL_UDS_CAN_D (UDS_CAN_D)	Nightvision C	ode 610		<not available=""></not>	<not available=""></not>				2	6	1	
FGL_UDS_CAN_EXT (UDS_CAN_EXT) FGL_UDS_Ethernet (UDS_Ethernet)	CRC Checks	ummenprüfung		<not available=""></not>	<not available=""></not>				2	7	1	
FGL_UDS_Ethernet_DoIP (UDS_Ethernet_DoIP)	0			en en en la la la la s	er et er reffelstetet				2	0	0	
FGL_UDS_Ethernet_DolP_DOBT (UDS_Ethernet_C FGL_UDS_Ethernet_DolP_PTI (UDS_Ethernet_DolF	Read from ECL	Error: Negative response	received (10)									h
HVAC222 (UDS_CAN_D)	Current Coding:											-
KWP_CAN_D	Current Couling.											h 🗸 🕯
NISSAN_KLINE_CAN_D NISSANA_CAN_D		1										
	Do Coding				0%							
>	- Do Couling				0 %							

HVAC222 Module (Continued)

Increase Scent Strength (Optional)

d	Quick Test Diagnostic Services Variant Coding F	Flash Programming 🛛 🛛 Diagnostic Trouble Co	les 😐 Data Display / IO Control 😐 Complete	Vehicle Coding ●	ECU Exchange Symboli	c Trace	
Bus Trace	VariantCoding						
	Initialization:		Coding Se	ts			
Now monitoring on CAN1	ECU: EVAC222 (LIDS CAN D)		File:	<no file=""></no>		Load	Configure.
Rel.Time[ID Data		 Connect 	Disconnect Coding Set	<no coding="" se<="" th=""><th>**</th><th></th><th>- -</th></no>	**		- -
	Domain: [010] Konfigurationskodierung Schreiben		Comment	<no comment<="" th=""><th></th><th></th><th>_</th></no>			_
	Set to default All Domains	~ Reset	All Domains \sim				
	Internal Coding			Save	All Domains 🗸 🗸	Delete	
		1					
	Fragment -	Meaning	Original Meaning	t	Description = Byte =	Bit - Bit I	e Unit
	Lenkervariante	<not available=""></not>	<not available=""></not>		0	0 1	
	HVAC-Variante	<not available=""></not>	<not available=""></not>		0	1 2	
	Glasvariante	<not available=""></not>	<not available=""></not>		0	3 3	
	(reserved)	<not available=""></not>	<not available=""></not>		0	6 1	
	Empfänger Standheizung	<not available=""></not>	<not available=""></not>		0	7 1	
	SA Beduftung	SA Beduttung Code 210K verbaut	<not available=""></not>		1	0 1	
	SA lonisierung	SA Ionisierung Code 211K verbaut	<not available=""></not>		1	1 1	
	SA Luttliter	<not available=""></not>	<not available=""></not>		1	2 1	
	Bedienung über Fzg-Schlüssel	<not available=""></not>	<not available=""></not>		1	3 1	
	Klimatisieren während OnBoard-Ladung	<not available=""></not>	<not available=""></not>		1	4 1	
	Klimatisieren über Hochvoltbatterie	<not available=""></not>	<not available=""></not>		1	5 1	
	On Diandincizang/Dianditationg	motoralable.	not available>		1	6 2	
	Anzahl Intensitätsstufen für Bedultung (Scent Intensity)	3 Stufen	 not available> 		2	0 1	
	Panorama-Festglasdach	3 Stufen 4 Stufen	<not available=""></not>		2	1 1	
Logical Link List	SA Hockdockol/Fornechlipsoung (PTCM)	4 Stuten	hot available>		2	2 1	
FGL_KWP_CAN_D (KWP_CAN_D)	(reserved)	<not available=""></not>	<not available=""></not>		2	3 1	
F FGL_KWP_KM20_CAN_D (KWP_CAN_D) F FGL_NISSANUDS_CAN_D (NISSANUDS_CAN_D)	Head-Up Display	<not available=""></not>	<not available=""></not>		2	4 1	
F FGL_RENAULTUDS_CAN_D (RENAULTUDS_CAN	Privacy - Abdunkelung Fondscheiben Code 840	<not available=""></not>	<not available=""></not>		2	5 1	
F FGL_UDS_CAN_D (UDS_CAN_D) F FGL_UDS_CAN_EXT (UDS_CAN_EXT)	Nightvision Code 610	<not available=""></not>	<not available=""></not>		2	6 1	
F FGL UDS Ethernet (UDS Ethernet)	CRC Checksummenprüfung	<not available=""></not>	<not available=""></not>		2	7 1	
F FGL_UDS_Ethernet_DoIP (UDS_Ethernet_DoIP)	Developed Society	en ek er reiteleten.	en ek er reiteleten		2	0 0	
F FGL_UDS_Ethernet_DoIP_DOBT (UDS_Ethernet_C F FGL_UDS_Ethernet_DoIP_PTI (UDS_Ethernet_DoIF	Read from ECU: Error: Negative response received (10)						h
HVAC222 (UDS_CAN_D)	Current Coding:						h 🗸 3
P KWP_CAN_D P NISSAN_KLINE_CAN_D P NISSANA_CAN_D							h
< >>	Do Coding		0 %				

Hard Reset

Trace	Quick Test Diagnostic Services Variant Control	ding	s o Data	Display / 10	Control Complete Vehicle	e Coding 🛛 e CCU Exchange 🔍	Symbolic Trace
🛓 🕨 🖿 No filter active 🗸 🌾	Diagnostic Services						
monitoring on CAN1	Search	Glob	al Search				Configur
Time[ID Data	<please enter=""></please>			Settings	Description		
nine[ib baa	Diagnostic			Logical L	ink HVAC222 (UDS_C4	N_D)	
	E HVAC22 (UDS, CAN, D) First Services Protocol Parameter Sets Alkametine Jobs Communication Control First Services Communication Control E Communication Control E Communication E Communication E Communication E Communication E Communication E Communication		^	Single El Proper Param		Value	Unit
	til ∰ Flesh-Jobs ∨						×
	Transmit Cyclic (ms) 2000 🔹	nsmit preconfigured Read ID Read DTC Clear DTC					
	Transmit Cyclic (ms) 2000 🗘	Read ID Read DTC Clear DTC Value]		Unit	RangeInfo	Error
	Transmit Cyclic (ms) 2000 🖨	Read ID Read DTC Clear DTC]		Unit	RangeInfo	Error
	Transmit Dyclic (ms) 2000 Process Values Name [Tester] VariantdentificationAndSelection	Read ID Read DTC Clear DTC Value [611] eNEGATIVE]		Unit		Error
cəl Link List	Transmt Oyciic (ms) 2000 (ms) Process Values Name (Traster) VariantidentificationAndSelection SID-RO	Read ID Read DTC Clear DTC Value [611] eNEGATIVE 0x22 0x22 0x22]		Unit	Value OK	Error
GL_KWP_CAN_D (KWP_CAN_D)	Transmit Oyclic (ms) 2000 \$ Process Values Name [Tester] VaintificentificationAndSelection SID-RO RecordDataIdentifier	Read ID Read DTC Clear DTC Value [611] eNEGATIVE 0x22 0x7100			Unit		Error
L_KWP_CAN_D (KWP_CAN_D) L KWP KM20 CAN D (KWP CAN D)	Transmit Dyclic (ms) 2000 \$ Process Values Image: Comparison of the	Read DTC Clear DTC Volue [611] eNEGATIVE 0x22 0x7100 [768]]		Unit	Value OK	Error
AL_KWP_CAN_D (KWP_CAN_D) AL_KWP_KM20_CAN_D (KWP_CAN_D) AL_NISSANUDS_CAN_D (NISSANUDS_CAN_D) AL_RENAULTUDS_CAN_D (RENAULTUDS_CAN	Transmt Oyclic (ms) 2000 Process Values Name [Tester] VariantidentificationAndSelection SID-RO RecordDataIdentifier HVAC222 (UDS_CAN_D) Response State	Read ID Read DTC Clear DTC Value [611] eNEGATIVE 0x22 0xF100 [7e8] not acknowledged]		Unit	Value OK Value OK	Error
IL_KWP_CAN_D (KWP_CAN_D) IL_KWP_KM20_CAN_D (KWP_CAN_D) IL_NISSANUDS_CAN_D (NISSANUDS_CAN_D) IL_RENAULTUDS_CAN_D (RENAULTUDS_CAP IL_UDS_CAN_D (UDS_CAN_D)	Transmit Oyclic (ms) 2000 Process Values Image: Constraint of the second secon	Read ID Read DTC Clear DTC Velue [611] eNEQATIVE 0x22 0xF100 [7e8] 0x16 schoowledged 0x7F]	-	Unit	Value OK Value OK Value OK	Error
IL KWP_CAN_D (KWP_CAN_D) IL KWP_KM20 CAN_D (KWP_CAN_D) IL INISSANUDS_CAN_D (NISSANUDS_CAN_D) IL RENAULTUDS_CAN_D (NISSANUDS_CAN_D) IL UDS_CAN_D (UDS_CAN_D) IL UDS_CAN_D (UDS_CAN_EXT) IL UDS_CAN_D KT (UDS_CAN_EXT)	Transmit Dyctic (ms) 2000 (ms) Process Values Image: Constraint of the second selection VariantidentificationAndSelection SID-RO RecordDataIdentifier HvAcc22 (UDS, CAL_D) Response State SID-NR SID-NR SID-NR SID-NR SID-RO-NR	Read ID Read DTC Clear DTC Value [611] [611] eNEGATIVE 0x22 0x4100 0x420 0x4100 [7:e8] not acknowledged 0x72 0x72 0x72 0x76 0x72		-	Unit	Value OK Value OK Value OK Value OK	Error
L, KWP_CAN_D (KWP_CAN_D) L, KWP_KAK2(CAN_D) L, KWP_KAK2(CAN_D (KWP_CAN_D) L, KENAULTUDS_CAN_D (KENAULTUDS_CAN_L) L, UDS_CAN_D (UDS_CAN_D) L, UDS_CAN_EXT (UDS_CAN_EXT) L, UDS_Ememet(UDS_Ethernet_DoIP) L, UDS_Ethernet(DDF(UDS_Ethernet_DoIP)	Transmit Oyclic (ms) 2000 \$ Process Values Image: Comparison of the	Read ID Read DTC Clear DTC Value [611] eNEGATIVE 0x22 0xF100 [768] not ecknowledged 0x7F 0x72 0x72 0x72 0x72 0x72 0x72 0x72 0x72 0x72 0x72 0x72 0x72 0x72		-	Unit	Value OK Value OK Value OK	Error
L KWP CAN D (KWP CAN D) L KWP KW20 CAN D (KWP CAN D) L KISSANUDS, CAN D (KWP CAN D) L RENAULTUDS, CAN D (KISSANUDS, CAN D) L DIS, CAN D, (CIS, CAN D) L UDS, CAN, EXT (UDS, CAN C) L UDS, CAN, EXT (UDS, CAN C) L UDS, Emernet, CIS, Ethernet, CoIP) L, UDS, Emernet, CoIP, CIOS, Ethernet, L UDS, Emernet, CoIP, CIOS, Ethernet, COIP)	Transmit Oyclic (ms) 2000 \$ Process Values * Name [Tester] Vainet/dentificationAndSelection SID-RO RecordData/dentifier HvAc222 (UDS_CAL_D) Response State SID-RO SID-RO NR SID-RO NEGATIVE RESPONSE CODES [Tester]	Read ID Read DTC Clear DTC Value [611] • •NEQATIVE • • •0:22 • • •0:10 [7:8] • • •0:26 • • • •0:27 • • • •0:28 • • • •0:29 • • • •0:29 • • • •0:29 • • • •0:29 • • • •0:29 • • • •0:29 • • • •0:29 • • • •0:29 • • • • • • • • • •		-	Unit	Value OK Value OK Value OK Value OK	Error
L, WP, ZAN, D (WP, ZAN, D) L, WP, SMBC, XAN, D (WP, ZAN, D) L, MISSANUDS, ZAN, D (NISSANUDS, CAN, D) L, LDS, ZAN, D (KDS, CAN, D) L, LDS, ZAN, ZAN, D (KDS, CAN, D) L, LDS, ZAN, ZH, (KDS, ZAN, ZH, ZH, LUSS, ZAN, ZH, (KDS, ZAN, ZH, ZH, ZH, ZH, ZH, ZH, ZH, ZH, ZH, ZH	Transmit Oyclic (ms) 2000 \$ Process Values Image: Comparison of the	Read ID Read DTC Clear DTC Value [611] eNEGATIVE 0x22 0xF100 [799] not acknowledged 0x7F 0x22 General Reject [611] eNLL_FALED		-	Unit	Value OK Value OK Value OK Value OK	
LWP CAN D (WP CAN D) LWP AND CAN D) LWP MOL CAN D (WP CAN D) LNISANUDS CAN D (NISANUDS CAN D) LNIS CAN D (US CAN D) LUB CAN D (US CAN D) LUB CAN EXT (US CAN EXT) LUB CAN EXT (US CAN EXT) LUB CHART (US CAN EXT) LUB Ethernet (US CHART) LUB Ethernet (US CHART) LUB Ethernet (US CHART) LUB Ethernet (US CAN D) P (US CAN D) P (CAN D) P (CAN D)	Transmit Dyclic (ms) 2000 Process Values ≠ Name [Tester] VariantidentificationAndSelection SID-R0 SID-R0 Responde State SID-R0 SID-R0-NR SID-R0-NR SID-R0-NR <t< td=""><td>Read ID Read DTC Clear DTC Value [611] • 0x22 0xF100 • 0x7F • • 0x22 • • 0x7F • • 0x22 • • 0x7F • • 0x22 • • 0x22 • • 0x21 • • 0x22 • • 0x20 • • 0x20 • • 0x200 • •</td><td></td><td></td><td>Unit</td><td>Value OK Value OK Value OK Value OK</td><td>Error</td></t<>	Read ID Read DTC Clear DTC Value [611] • 0x22 0xF100 • 0x7F • • 0x22 • • 0x7F • • 0x22 • • 0x7F • • 0x22 • • 0x22 • • 0x21 • • 0x22 • • 0x20 • • 0x20 • • 0x200 • •			Unit	Value OK Value OK Value OK Value OK	Error
SL_KWP_CAN_D (KWP_CAN_D) SL_KWP_KM20_CAN_D (KWP_CAN_D) SL_NISSANUDS_CAN_D (NISSANUDS_CAN_D)	Transmit Oyclic (ms) 2000 \$ Process Values * Name [Tester] Vainet/dentificationAndSelection SID-RO RecordData/dentifier HvAc222 (UDS_CAL_D) Response State SID-RO SID-RO NR SID-RO NBCATVE RESPONSE CODES [Tester]	Read ID Read DTC Clear DTC Value [611] eNEGATIVE 0x22 0xF100 [799] not acknowledged 0x7F 0x22 General Reject [611] eNLL_FALED		-	Unit	Value OK Value OK Value OK Value OK	

HU55 Module

The HU55 module will unlock the options in the display module or air conditioning menu related to the Fragrance System and Ionizer.

Enable Air Balance Menus

