



Introductory information on the new start of a model series EQC

Model 293

Mercedes-Benz



SN00.00-P-0008H	Introductory information on the new start of a model series	02.05.2019
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Model 293

Preface

This introductory information presents the technical highlights of the new EQC. In particular, it is intended to provide information in the areas of service, maintenance/repair, and Aftersales. The reader should be familiar with Mercedes-Benz model series currently on the market.

The content-related focus of this introduction information lies in the presentation of new and changed major assemblies and systems.

This introductory information is not intended as a basis for repairs or for the diagnosis of technical problems. Further information for this purpose is available in the Workshop Information System (WIS). This is being updated continuously. The information stored there always corresponds to the state of the art of the vehicles.

The introductory information presents initial information about the new EQC. The content of the introduction information is not subject to the Update Service. Supplements are not envisaged.

Modifications and new features are published in the corresponding literature types in the WIS.

The information in this introductory information corresponds to the status of the copy deadline in April 2019. It may thus deviate from the actual series production configuration.

Introduction

As of 2019, a new generation of fully electric vehicles starts based on the Mercedes-Benz GLC. With the EQC, the first

Mercedes-Benz vehicle of the EQ product and technology brand is coming to the road. The EQC is a 5-seater, medium-size luxury SUV with a silhouette that resembles a coupé. To distinguish itself visually from the Mercedes-Benz SUV with combustion engine, the EQC has its own exterior and interior design. For example, the headlamps and the air inlet grilles merge into a "black panel" surface.

The new EQC 400 4MATIC is offered in a performance variant with 300 kW. The EQC is driven by a new fully electric drive system which has one electric machine at the front axle and one at the rear axle. A control allows dynamic torque distribution from 0 – 100 % between the two driven axles and thus creates the prerequisites for high driving dynamics.

The electrical energy for the electric machines is supplied by a powerful high-voltage battery. It has a usable gross energy content of approx. 80 kWh and is located in the underbody of the EQC. Overall, the EQC achieves a range of 471 km (NEDC).

The high-voltage battery can be charged at a household socket, a Mercedes-Benz Wallbox, or a public charging station. The possibility of charging via a direct current at a public charging station is new. This, once again, significantly reduces the charging time. New EQ services, such as eRouting, the familiar Mercedes-Benz Wallbox, or access to the quick-charging network support a customer-oriented and modern charging infrastructure.

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SN00.00-P-3003-01H	Model survey		
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Model **293**

Model overview for market launch

Model	Vehicle	Motor	Output [kW]	Torque [Nm]	Automatic transmission	Manual transmission
EQC 400 4MATIC	293.890	780.998	300	760	-	-

SN00.00-P-0080-16H	Design		
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Model **293**

Exterior

With its seamless and clear design, the EQC clearly distinguishes itself from the Mercedes-Benz SUV with combustion engine. Beading and lines are significantly reduced. Headlamps and air inlet grilles merge into one black-panel surface.

As the first model of the new Mercedes-Benz architecture, the new EQC has many styling details, which are characteristic of fully-electric vehicles:

- The "Black Panel" surface surrounds the headlamp functions with a consistent luminescent band and the cooler grille function
- Front headlamp with strip in EQ blue on a black background
- Illuminated star with code 494 (USA version)
- Front bumper with large air inlet grille on the bottom with 2 radiator fins
- One "EQC" badge on each of the side fenders
- Back longitudinal member panel with chrome insert as standard equipment or black running board with nubbed stainless steel insert as special equipment
- Newly designed liftgate with two-piece rear lamps and consistent luminescent band
- Rear bumper with vehicle registration number in the trim



EQC 400 4MATIC, front right side view

P00.00-A017-79



P00.00-A016-79

EQC 400 4MATIC, front left side view



P00.00-A015-79

EQC 400 4MATIC, rear right rear view

Interior

The vehicle interior of the EQC shows a new interpretation of the Mercedes-Benz Design of the "electro aesthetic".

The overall design idiom is inspired by Consumer Electronics, which is reflected in an increased square design of the control elements.

Main features of the vehicle interior design:

- Instrument panel designed for optimized driving and strongly reduced to the essentials in terms of volume and complexity
- One highlight of the instrument panel is a metallic galvanized high-tech cassette with integrated air vents in the EQ "electro design"
- The integrated control and display concept as part of the Mercedes-Benz operating philosophy
- The free standing cockpit display (2 x 10.25 inches in "bonded glass technology") appears to float in a cutout of the instrument panel
- The instrument panel is framed by a metal-look "lamella collar"
- The metal-look "lamella collar" continues as a design highlight in the trim elements of the door trim and integrates the mid-range speakers
- The EQ character is underscored in the interior by the experience of a modern world of color and supplemented by innovative, newly developed surfaces



P68.10-A016-79

EQC 400 4MATIC, ARTICO imitation leather in the interior

***EQC 400 4MATIC, ARTICO
imitation leather in the interior***



P68.00-A004-76

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SN00.10-P-0010-02H	Technical data		
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Model **293**

Feature	Value	Unit
Vehicle data (general)		
Vehicle length	4761	mm
Vehicle width with folded out outside mirrors	2096	mm
Height of the vehicle ¹	1623	mm
Wheelbase	2873	mm
Front axle track width	1625	mm
Rear axle track width	1615	mm
Curb weight DIN	2420	kg
Curb weight EG	2495	kg
Payload EG	445	kg
Drag coefficient c_w	0.29 (basic model) 0.28 (with running board equipment)	-
	¹ FF DIN =location ready to drive without driver, ECE: M1- (car approval) suspension (series)	

Feature	Value	Unit
Vehicle data (electric drive)		
2 asynchronous motors, all-wheel drive		
CO2 emission	0	g/km
Power consumption (NEDC)	19,7 - 20,8	kWh/100 km
Range (NEDC)	445 - 471	km
Rated output	300	kW
Max. torque	760	Nm
Maximum vehicle speed	180 (governed)	km/h
Acceleration 0-100 km/h	5.1	S
Front axle electric machine		
Structure	Internal rotor	
Operating voltage nominal	330	V
Max. output (as per ECE-R85)	148	kW
Rotational speed at max. output	3850	1 rpm
Max. torque	380 (certified)	Nm
Rotational speed at max. torque	0-3500	1 rpm
Rear axle electric machine		
Structure	Internal rotor	
Operating voltage nominal	330	V
Max. output (as per ECE-R85)	162	kW
Rotational speed at max. output	5400	1 rpm
Max. torque	375 (certified)	Nm
Rotational speed at max. torque	0-4000	1 rpm
High-voltage battery		
Model	Lithium-ion	
Weight	652	kg
Number of modules	6	
Number of cells	384 (2x48/4x72)	
Capacity (usable/installed)	231	ah
Energy content (NEDC)	80	kWh
Max. output	360	kW
Nominal voltage	349	V
AC charging AC charging time 10 – 100% SOC (State of Charge – charge level) (net)		
Mains outlet 1.8 kW	53,25	H
Mains outlet 2.3 kW	40,75	H
Wallbox charging station 3.7 kW	21,5	H
Public 7.4 kW	11,00	H
DC charging DC charging time 10 – 80% SOC (State of Charge – charge level) (net)		
Public 110 kW (ECE)	40	min

SN00.00-P-0080-08H	Maintenance strategy		
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The new EQC is subject to maintenance according to the already familiar maintenance logic. The maintenance scopes, in particular of service A and service B, are compiled according to process-related and vehicle-related criteria.

The maintenance interval of 25,000 km (15,500 mi) or 12 months (Economic Commission for Europe (ECE)) and possible country-specific kilometer intervals are retained however. Furthermore, service A and service B continue to apply in turn as well as a "PLUS package" that can be freely selected by the customer.

The dust filter is replaced during every service; the activated charcoal particle filter is replaced during every service B.

Additional maintenance work

The vehicle-specific additional maintenance work is subject to the following intervals:

- Replace brake fluid – every 2 years
- Replace coolant (both circuits) – every 200,000 km (124,000 mi) or every 10 years

- Testing of the condition and function of the trailer hitch during every service B

The additional maintenance intervals are retained.

Service contract

Also with the new EQC, we will connect customers with service contracts to our service network in the long-term. All information and the cost transition table were made available with the "Launch Information Marketing" in December 2018 and, since then, have been available in the "Launch Information Platform." As a result, sufficient time remains to calculate the service contract costs comprehensively and competitively and to offer them to our customers as from the sales release. As with all new model series, the availability of the product line "Excellent" (Full Service) and at least one other service contract product must be ensured in every market. Please contact the colleagues at Daimler Financial Services for attractive product bundles with financing and leasing, insurance, and service contract and support them if necessary. All offers must be available in the market as of the sales release.

SN08.00-P-0001-05H	Control and display concept		
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General

The EQC has an operating and display concept adapted for the electric drive. The objective of the new development was to expand interaction with the vehicle and its functions through gestures, touch, or the voice control system. The EQC is equipped with four individual user interfaces. Apart from the instrument cluster and the multimedia display, one head-up display (A40/12) and one control element are provided for the climate control.

Instrument cluster

The instrument cluster of the EQC consists of a 10.25 inch display. The familiar tubes for the instrument cluster are generated optically on the screen:

Tube display on left

- Maximum available output of the drive system
- State of charge

- Total range
- ECO display
- Current vehicle speed
- Specific indicator lamps

Tube display on right

- Power display with display of the currently called up electrical output or the current recuperation

Multifunction display

- Status display of the transmission modes
- Status display of the transmission position
- Sound generator, nonfunctional
- Support systems status display
- Drive system readiness to drive



P54.33-A010-75

Power availability display

The power availability display of the EQC has a special presentation to show the electrical output. The current electrical power request or the current recuperation is displayed. The current power request is shown in a semicircle on the top edge through segments in steps of 1% from 0 – 100 %; the current output is shown in the center as percentage.

The current recuperation is also shown in semicircular form, but at the bottom, by means of segments in %. When

the vehicle is in the recuperation phase, a % value of recuperation appears.

If the electrical operating energy input is restricted due to a low charge level of the high-voltage battery or very low outside temperatures, the state of the condition restriction is permanently shown to the driver when electrical energy is taken from the high-voltage battery.

Once a specific lower limit of drive power has been reached, the driver must acknowledge a warning message that appears in the middle display area.



While the right-hand tube display can be selected, the left-hand tube is permanently visible.

Indicator lamps and warning messages

The EQC has the familiar scope of indicator lamps and warning messages from GLC 350 e 4MATIC plus those which relate to the high-voltage battery.

This includes, for example, the warning message in the event of reduced operating energy input due to the following causes:

- Low charge level of the high-voltage battery
- High-voltage battery too cold / too warm

Trip computer

The trip computer of the EQC provides data and information on travel time, average speed, distance, and remaining range. The information is shown in the multifunction display.

The display "after start/after reset" undergoes adaptations of the units and scalings, such as kWh for the average electrical consumption.

The display "side of vehicle" visually represents of the position of the vehicle socket for the DC charging or AC charging.

View of energy flow display shown

- 1 Charge level of high-voltage battery
- 2 Electric machines (drive system)
- 3 Energy flow
- 4 High-voltage battery

The display of the current value when the charging current is limited is also new.

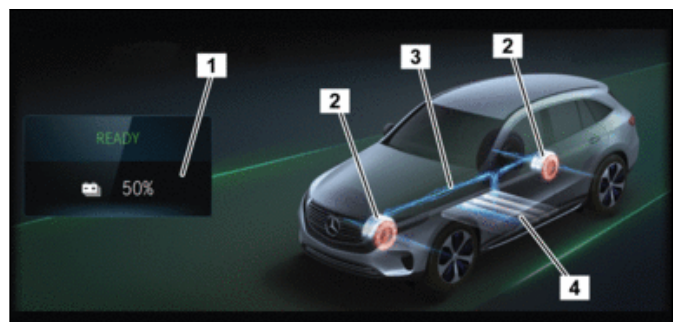
The resetting of the trip computer takes place in the menu "reset values" via a swipe up or down on the touch control (left finger navigation pad on steering wheel).

Energy flow display

In the multimedia display, right 10.25" display of the head unit/instrument cluster display cluster (A40/16), the energy flows of the various operating statuses are shown to the driver. So, for example, the energy flow during charging, the recuperation and discharging during acceleration and while driving are shown.

In the energy flow display are shown highlighted on the active components of the drive system. The energy flow between the individual components is shown on color. Depending on the operating status, the energy flow has different colors:

- White: Strong acceleration (boost effect)
- Copper: Driving at a constant speed or moderate acceleration
- Blue: recuperation (Charging of the high-voltage battery) or overrun mode



P54.33-A011-80

ECO display

ECO display 2.0 shows drivers their driving style with respect to acceleration, coasting down and driving at a constant speed in the instrument cluster. So that drivers can check their driving style for efficiency and, if necessary, adapt it, the ECO display provides an assessment of the driving style in a situation-specific manner through icons

that are highlighted in color. Through the ECO display, the driver can immediately learn how to achieve as efficient as driving style as possible and this continue to drive with increasing efficiency. The achieved range compared to a sporty driving style is shown as bonus kilometers. As soon as all segments are filled, an illumination is shown for additional motivation.

View of ECO display 2.0



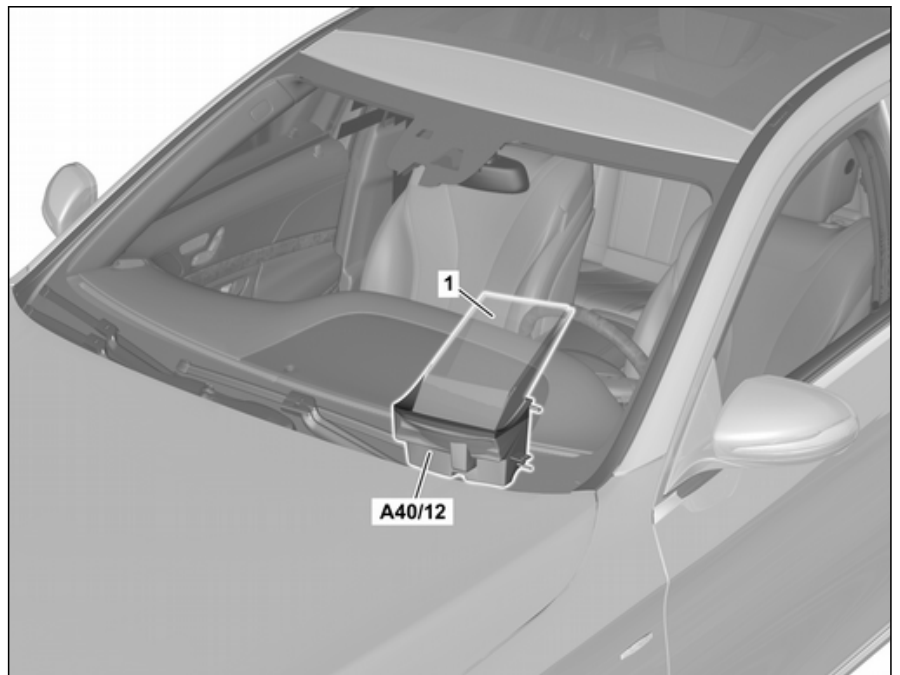
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Head-up display

The head-up display (A40/12) projects into the field of view of the driver:

- Information of the navigation system
- Information of the driver assistance systems
- Warning messages

A40/12 *Head-up display*
 1 *Projection surface*



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SN00.00-P-0080-01H	Operating strategy		
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General

Operation of the EQC takes place exclusively with the energy of the high-voltage battery. The high-voltage battery supplies the high-voltage on-board electrical system of the vehicle with 80 kWh (NEDC) of energy content.

Consumption and range depend heavily on the driving style, even for electric vehicles. During recuperative braking, the electric machines ideally generate the entire braking torque as a generated. The high-voltage battery is charged with the electrical energy produced in the process. This takes place automatically if the high-voltage battery is empty.

The following parameters influence the consumption and range of the EQC:

- Flexible all-wheel distribution
- High-voltage energy management (EMM)
- Pre-air conditioning
- Preheating of the high-voltage battery
- Transmission modes
- Regenerative braking system (RBS)
- Intelligent engine management

Flexible all-wheel distribution

Optimum energy efficiency is achieved by as-required and continuous control of the all-wheel distribution. If the full output is not called up, the electric machine that is not needed switches off completely.

The maximum recuperative deceleration is achieved by an ideal all-wheel distribution (e.g. 70-% front axle, 30% rear axle) and enables optimum recuperation.

To ensure maximum traction and driving stability even on snow and ice, the operation strategy recognizes the spinning wheels. Because both electric machines are actuated independently of each other, a torque at one axle can be generated on the other axle in the event of a loss of traction.

High-voltage energy management (EMM)

The high-voltage energy management is the link between the high-voltage battery and, correspondingly, the high voltage components, which are regulated by the operation strategy.

Some of the essential tasks are listed in the following:

- Activation and deactivation of the high voltage components in accordance with the HV safety requirements

- Determining the usable amount of energy in the high-voltage battery
- Energy distribution between the HV components based on the available energy
- Forecast of the currently available electrical output of the drivetrain
- Coordination of the charging process (interaction between the high-voltage battery and charge components)
- Calculation of the electric range and electric consumptions for the trip computer
- Examination of the HV safety requirements and as-needed transfer to a safe condition

Pre-air conditioning

Before a planned drive or before an approaching charging process, the pre-entry climate control allows preconditioning of the vehicle interior and/or high-voltage battery to take place. The climate control systems, battery cooling, EMM, and chargers are involved in this process.

The vehicle interior can be air-conditioned when the vehicle is switched off. If the vehicle is connected to power supply equipment, the charging of the high-voltage battery takes priority up to a specified minimum charge level. Under the following conditions, the runtime of the pre-entry climate control can be reduced:

- The vehicle is not connected to power supply equipment
- The high-voltage battery is not fully charged

Via the active pre-entry climate, the charge level of the high-voltage battery can be reduced even if the charging cable connector is plugged in

During cooling/heating, the following functions are switched on as required:

- Automatic air conditioning
- Blower
- Seat ventilation
- Steering wheel heater
- Wall heating
- Mirror heater
- Rear window heater
- Fragrancing
- Ionization

Preheating of the high-voltage battery

The preconditioning of the high-voltage battery relates to its warming for the purpose of range extension or relates to the warming or cooling to shorten the charging time. It is automatically initiated, based on various environmental and system temperatures, as well as logical links for the purpose of recognizing upcoming long-distance journeys and approaching charging processes.

Transmission modes

The drive programs of the EQC include:

- INDIVIDUAL is used a set several parameters individually
- SPORT means design of the drivetrain to the highest driving performance
- COMFORT is the default setting and offers not only convenient coordination but also ensures ideal climate control

- ECO means a vehicle behavior optimized for low consumption
- Maximum Range is an intelligent drive program, which can achieve the maximum possible range. Only available in selected countries, such as Western Europe, Canada, U.S.A.

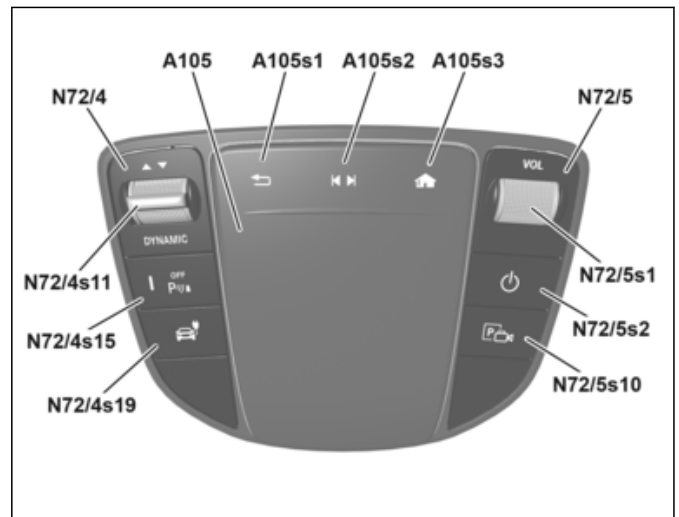
The transmission modes can be selected using the DYNAMIC SELECT switch in the lower control panel on the left (N72/4).



The ESP® OFF function is implemented in EQC via a Softkey in the multimedia display.

Touchpad with lower control panels

A105	Touchpad
A105s1	"Back" button
A105s2	Background audio button
A105s3	Home and Favorites button
N72/4	Left lower control panel
N72/4s11	DYNAMIC SELECT switch
N72/4s15	PARKTRONIC button (with code 235 (Active Parking Assist with PARKTRONIC))
N72/4s19	HU button (EQ menu, head unit)
N72/5	Right lower control panel
N72/5s1	Volume adjustment button
N72/5s2	"ON" button
N72/5s10	Parking system button (with code 235 (Active Parking Assist with PARKTRONIC))



P82.85-A213-11

Regenerative braking system (RBS)

The drive concept permits recuperation during vehicle deceleration. The electric machine is operated as an alternator and generates a braking torque on the wheels. The electric power generated flows back into the high-voltage battery. Energy management controls the return flow of the energy. The possible recuperation power depends on the state of the high-voltage battery (state of charge and temperature).

The driver can influence the strength of the recuperation and the associated drag deceleration himself via the brake pedal (approx. 10 % pedal travel). When the brake pedal is pressed slightly, the vehicle is decelerated more strongly by the electric machine and recuperation increased. If the brake pedal is pressed more strongly, the service brake is

also used to decelerate the vehicle. Both systems work together in these driving conditions.

An additional possible for manually influencing the recuperated power is provided by the two rear steering wheel gearshift buttons. The following recuperation levels are relevant for the deceleration if the accelerator pedal is released (deceleration recuperation):

- D auto
Intelligent recuperation with ECO Assist
- D+
No recuperation: The vehicle coasts, rolls freely
- D
Normal recuperation corresponds to weak recuperation (default setting)

- D-
Medium recuperation
- D --
Strong recuperation: Maximum vehicle deceleration in overrun mode



After another vehicle start or after re-engaging transmission position "D," the default setting is set automatically.

The standard equipment with steering wheel gearshift buttons allows the customer to shift up or down, just like a

conventional drive. To enter manual recuperation mode, a quick touch on one of the steering wheel gearshift buttons is necessary. The right steering wheel gearshift button reduces the recuperation (just like upshifting for a conventional drive). With the left steering wheel gearshift button, the drag recuperation is increased (just like actively shifting down for a conventional drive). The available maximum recuperation depends on the vehicle speed and the current charge level and the temperature of the high-voltage battery.



P82.90-2607-78

S110/1 Steering wheel downshift button

S111/1 Steering wheel upshift button

Intelligent engine management

The intelligent drive management takes into consideration the course of a road and the traffic situation in advance to consume the energy of the high-voltage battery with the best possible energy efficiency while driving. For this purpose, information on the radar sensor system, multifunction camera, and navigation system are used.

The intelligent drive management also reduces the vehicle's consumption and increases the electrical range. And last but not least, it provides support in numerous driving situations and thus offers the driver a high level of comfort.

The functions of the intelligent drive management are:

- Intelligent recuperation
- ECO Assistant
- Active range monitoring
- EQ-optimized navigation

Intelligent recuperation

The regenerative brake system is used as an alternator for recuperation in order to enable the use of the electric machine depending on the driving situation. The recuperation is flexibly adapted to current and future traffic situations. For this, apart from the radar data, the vehicle also evaluates other information such as map and camera data from the Traffic Sign Assist. Depending on the situation, regained energy can be efficiently stored as kinetic energy or electrical energy, and, in this way, the range can be increased.

The function increases the range through effective use of energy:

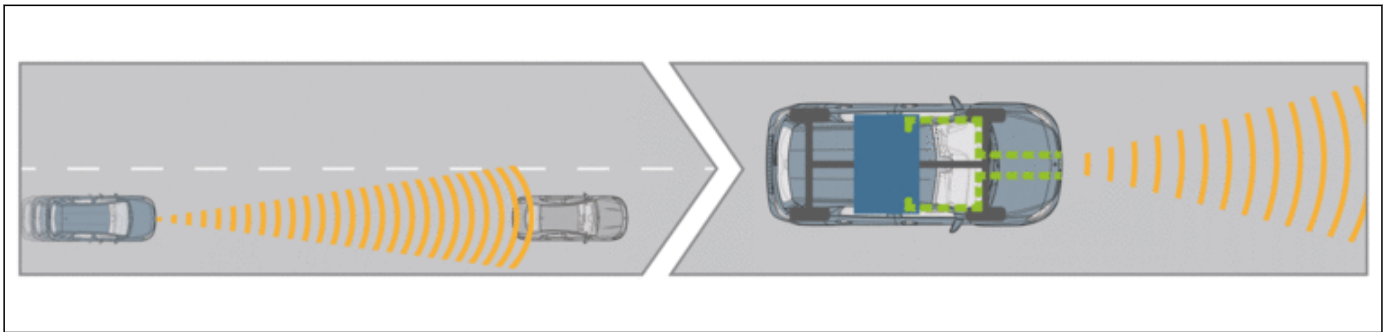
- As kinetic energy, if coasting operation makes sense
- As electrical energy, if deceleration by means of recuperation is ideal

The evaluation of the driving situation takes place based on information on the surroundings with the aid of radar data, camera data, and map data.

The correct regenerative torque is adjusted via recuperation steplessly from free rolling up to a predefined deceleration.

Information regarding distance and speed differential is provided by the radar sensor system. A distance control system calculates the ideal acceleration or deceleration depending on the traffic situation. Additionally, the speed

limits recorded by the multifunction camera are evaluated and adapted to the recuperation. The speed limits from the map data are evaluated in advance and adapted to the recuperation by means of coasting simulation. For the customer, the adaptations of the recuperation are visualized in the energy flow diagram of the head unit and via the current recuperated power in the power meter.

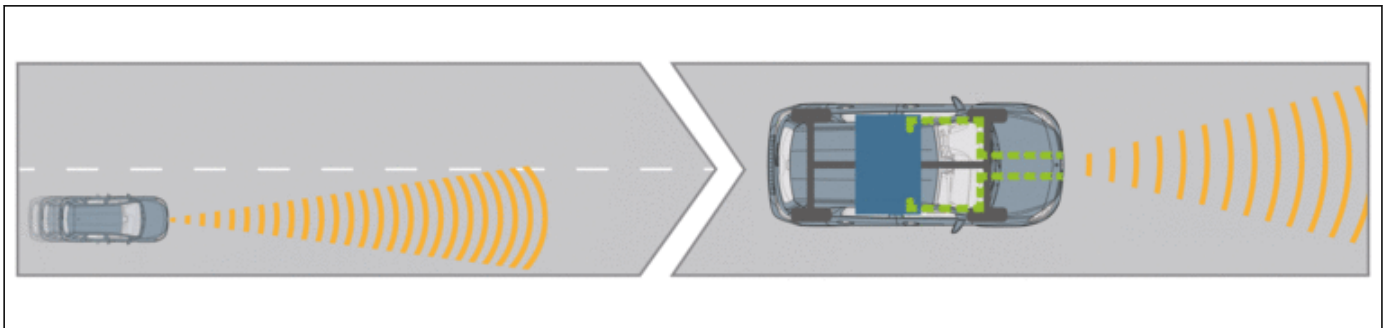


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Schematic diagram of the recuperation via the radar sensor system with recognition

The radar detects a vehicle in front driving more slowly and provides the relevant data (distance, relative speed, etc.) on the suspension FlexRay.

Automatic initiation of the stepless increase in recuperation (just like shifting down in a conventional drive) in order to maintain the same distance from the vehicle in front ▶ Saving the kinetic energy in electrical energy



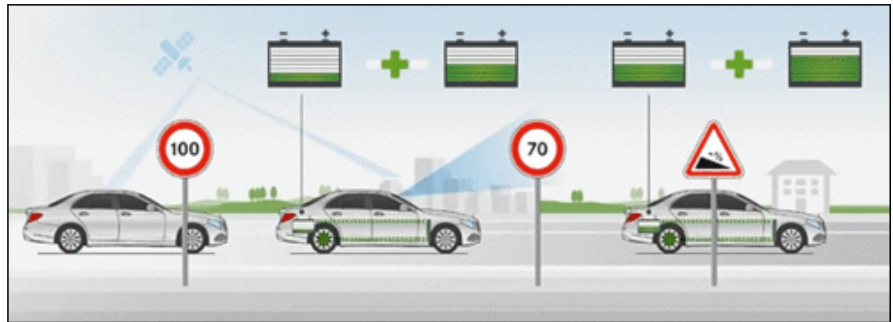
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Schematic diagram of the recuperation via the radar sensor system without recognition

There is no vehicle in the radar's detection range or a detected vehicle is moving away

Automatic stepless reduction in recuperation until free rolling/overrun mode is guaranteed. To prevent free rolling, e.g. towards a red traffic light or an intersection, overrun mode is restricted in urban traffic. To prevent an excessive increase in speed, recuperation when traveling downhill on a steep slope is adjusted. ▶ No energy consumption

Schematic diagram of recuperation via map and camera data



P42.22-A000-74

ECO Assistant

With ECO Assist, saving energy has never been so comfortable. When active, the driver receives recommendations to release the accelerator pedal for the current driving situation when appropriate. The reward for following ECO Assist's recommendation is a reduction in energy consumption and so a greater electric range.

- More energy saving and therefore more range due to the support of a highly efficient driving style
- Enhancement of preventive driving
- The ECO Assist considers, in its efficiency strategy, the route profile, speed limits, and distance from the vehicles driving ahead
- ECO Assist continuously generates coasting simulations in the background: Depending on the charge level of the high-voltage battery and the traffic situation, it calculates whether the vehicle should ideally roll freely ("coast") with as little motion resistance as possible or whether it should be decelerated for efficient charging of the high-voltage battery (recuperation)
- Within the system limit, ECO Assist regulates the drive (recuperation) according to the situation as soon as the driver's foot leaves the accelerator pedal

- Via the "Release Accelerator" (foot from gas) symbol, the driver is provided with a discrete request to release the accelerator pedal
- Simultaneously, there is a graphic providing the driver with the reason for the recommendation (for example, "intersection ahead" or "slope ahead")

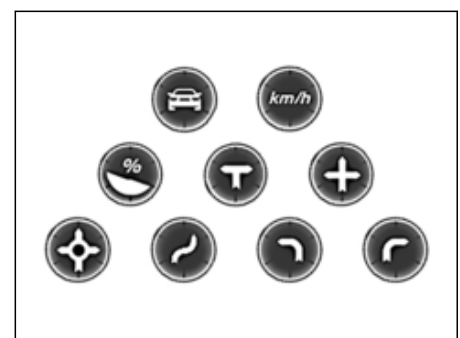


The ECO Assist is active with recuperation level D auto.

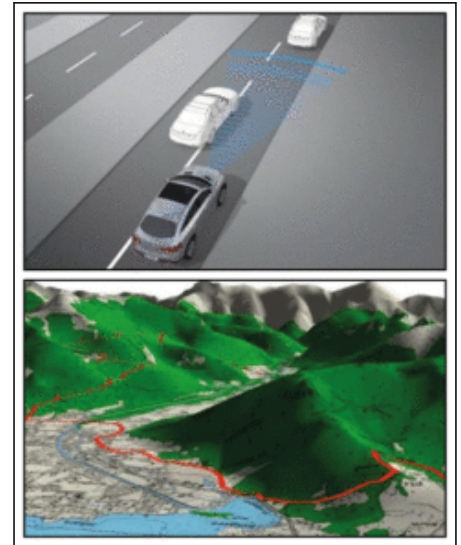
ECO Assist evaluates data on the expected course of the vehicle. If the system has recognized an upcoming event, this is displayed in the multifunction display. The following events are recognized and displayed:

- Vehicle in front
- Speed limit
- Descending gradient
- Intersections and roundabouts
- Corners

Pictograms on the recognized events



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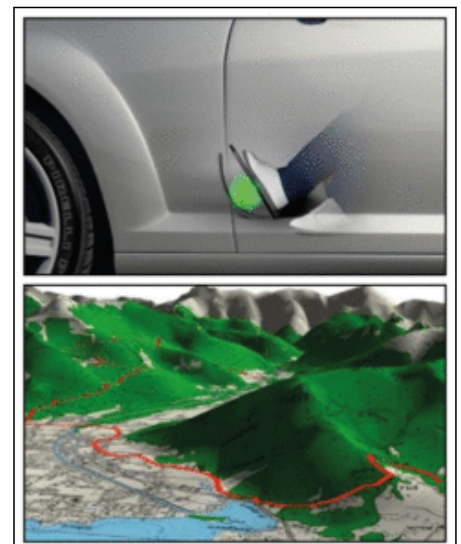
View shown on ECO Assist

P54.71-A002-72

Active range monitoring

Fully electric driving is more comfortable than ever with Active Range-Monitoring. The driver no longer has to think about the best-possible achievable range. During active navigation, Active Range Monitoring supports the driver in reaching the next charging stop or destination. If it is necessary to reach the destination, the driver is supported with recommendations for changes to climate control or the

drive program. If the driver changes to one of the energy efficient drive programs "ECO" or "Maximum Range," the Active Range Monitoring uses the haptic accelerator pedal to adjust the acceleration and speed. To do this, it recommends, above a pressure point, situation-based, efficient acceleration and speed to the driver so that the destination can be reached. This enables stress-free travel and less fear of insufficient range.

View of Active Range Monitoring shown

P54.71-A003-72

EQ-optimized navigation

During route guidance, the EQ-optimized navigation takes into consideration the electrical range as well as the current consumption and topography and, if necessary, plans charging stop along the route. The quickest route is always

used as the basis for route guidance and the charging stops are planned in a time-optimized manner, based on the charging capacity and the availability of charging stations. The EQ-optimized route is available both in the head unit in the vehicle and via the Mercedes me App so

that the customer can plan his journey reliably." Due to greater transparency, a more precise and probable arrival time and a more precise and probable journey time can be planned for the customer by taking into account the available charging stations and charging times. The most time-efficient route is always used.

The following prerequisites are necessary to calculate a route:

- Mercedes me connect is available
- User account is set up on Mercedes me connect and the vehicle is connected to the account
- the following services are available in the Mercedes me Portal and can be activated:
 - "EQ remote & navigation services"
 - "EQ-optimized navigation"
 - "Display of charging stations"
- The route option "Optimized for EQ" is switched on

SN00.00-P-0080-15H	Electrical system		
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Model **293**

Overview of the on-board electrical systems

The power supply in the EQC is provided by two separate on-board electrical systems, the high-voltage on-board electrical system with high-voltage battery, and the 12 V on-board electrical system with 12 V on-board electrical system battery.

High voltage on-board electrical system with high-voltage battery

A very powerful high-voltage battery is used in the EQC. The body with two modules with 48 cells and four modules with 72 cells enables a compact design. The high-voltage battery has a usable energy content of 80 kWh and is located in the underbody of the EQC.

The high-voltage battery enables driving with battery power alone for 471 km in the NEDC. The external charging takes place via a 230 V socket, wallbox charging station charging station or a public charging station via the vehicle's own AC charger for the high-voltage battery or DC current charge-connection unit.

In deceleration mode and during braking, charging is performed via recuperation. The electric machines then work as alternators.

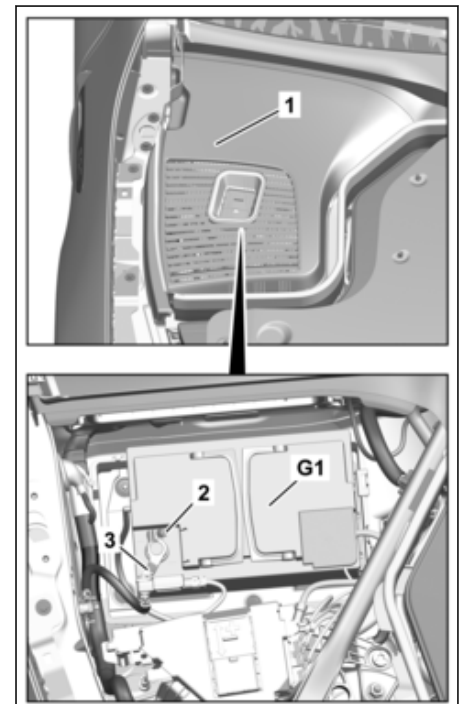
12 V on-board electrical system with on-board electrical system battery

The 12 V on-board electrical system is supplied with energy from the high-voltage on-board electrical system by means of the DC/DC converter. During this process the DC/DC converter generates 12 V direct voltage from the HV direct voltage of the high-voltage on-board electrical system and charges the on-board electrical system battery (G1). The on-board electrical system battery is located in the engine compartment.

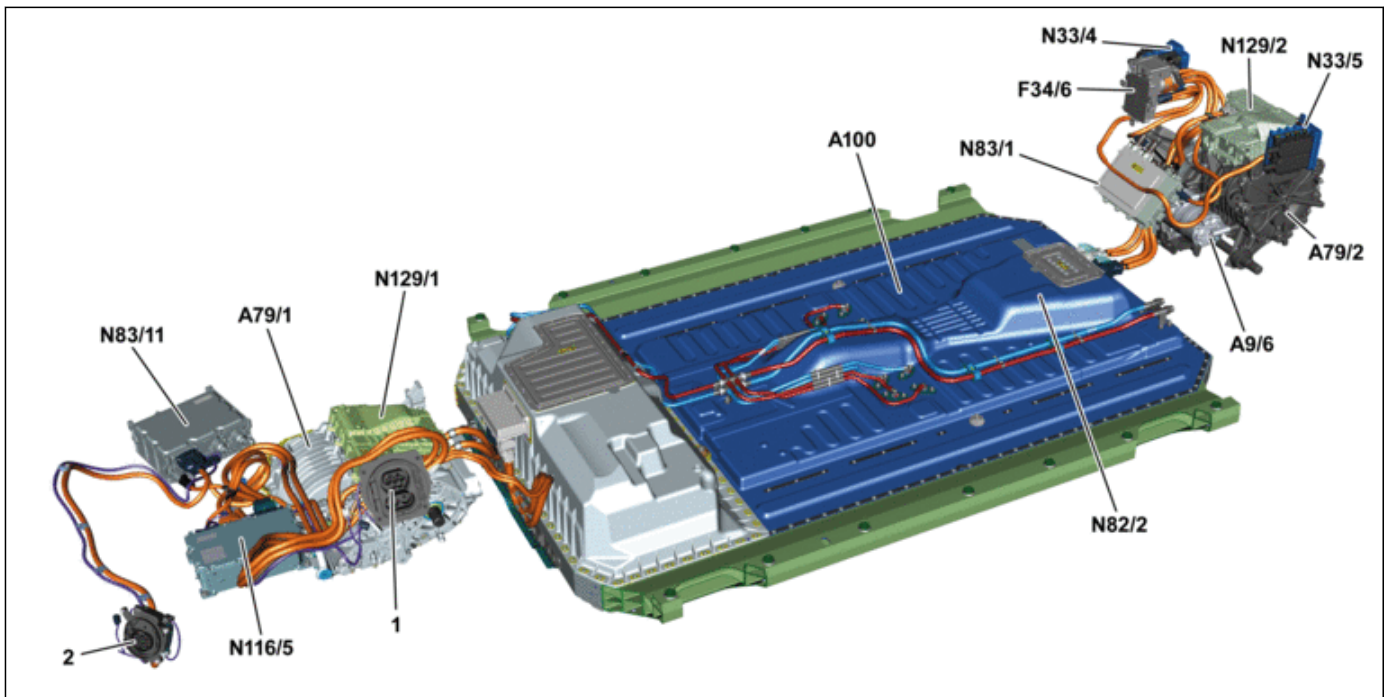
Vehicle network support

All EQC control units used are supplied via the on-board electrical system battery. The on-board electrical system support ensures that it is charged at all times. If the charge level of the on-board electrical system battery falls below a threshold during operating status, it is charged via the DC/DC converter. In doing so the comfort functions in the on-board electrical system are switched off for the duration of the charging.

- G1** *On-board electrical system battery*
1 *Cover*
2 *Nut*
3 *Ground cable*



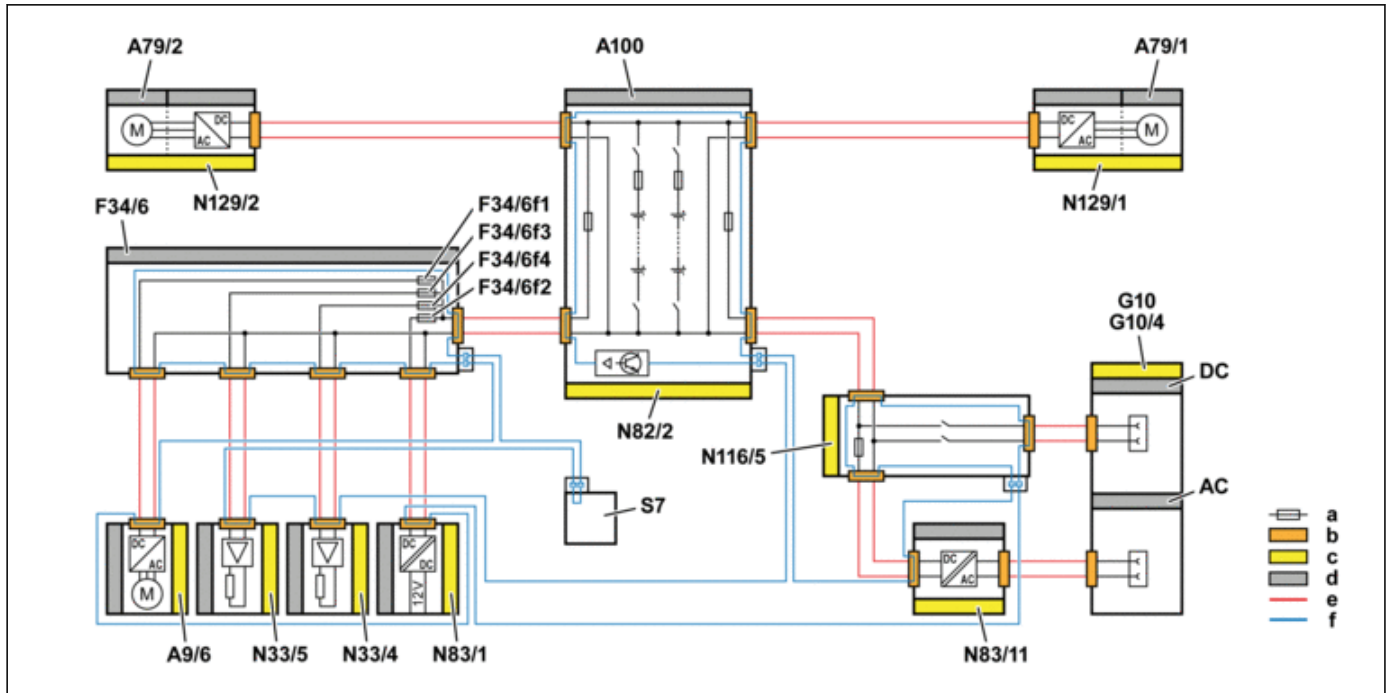
P54.10-A045-03



P47.70-A003-79

Overview of the high-voltage components

1	Vehicle socket DC charging/AC charging (except Japan/China) or vehicle socket DC charging (Japan/China), shown on combo 2 socket (except Japan/China)	N33/5	High voltage PTC heater (high-voltage battery)
2	AC charging vehicle socket (Japan/China)	N82/2	Battery management system gateway control unit
A9/6	Electric refrigerant compressor	N83/1	DC/DC converter control unit
A79/1	Electrical machine 1	N83/11	Alternating current charger for high-voltage battery
A79/2	Electrical machine 2	N116/5	Direct current charge connection unit
A100	High-voltage battery module	N129/1	Electric machine 1 power electronics control unit
F34/6	High-voltage power distributor	N129/2	Electric machine 2 power electronics control unit
N33/4	High voltage PTC heater (vehicle interior)		



P54.10-A055-79

Overview of the high-voltage components

A9/6	Electric refrigerant compressor	N116/5	Direct current charge connection unit
A79/1	Electrical machine 1	N129/1	Electric machine 1 power electronics control unit
A79/2	Electrical machine 2	N129/2	Electric machine 2 power electronics control unit
A100	High-voltage battery module	S7	High-voltage disconnect device
F34/6	High-voltage power distributor	G10	DC/AC charging vehicle socket
F34/6f1	Fuse 1	G10/4	AC charging vehicle socket
F34/6f2	Electrical fuse 2	AC	Alternating current
F34/6f3	Fuse 3	DC	Direct current
F34/6f4	Electrical fuse 4	a	Fuse
N33/4	High voltage PTC heater (vehicle interior)	b	Plug-in connector
N33/5	High voltage PTC heater (high-voltage battery)	c	Control unit
N82/2	Battery management system gateway control unit	d	High-voltage components
N83/1	DC/DC converter control unit	e	High-voltage line
N83/11	Alternating current charger for high-voltage battery	f	Interlock line

High-voltage battery

The high-voltage battery is attached below the passenger compartment. It consists of six modules, which contain a total of 384 lithium-ion cells of the newest generation. Two modules each contain 48 lithium-ion cells and four modules each contain 72 lithium-ion cells.

The high-voltage battery has three control units. Two of them control the battery management and the third, a

gateway, ensures communication between the two former ones.

The battery management system control units monitor the following parameters:

- Interlock circuit
- Voltage
- Current flow

- Temperature
- State of contactor
- Status of insulation monitoring

When fully charged, the high-voltage battery delivers a nominal output voltage of 365 V. Contactors integrated in the high-voltage battery module can, if necessary, disconnect the high voltage outlet of the high-voltage battery from the high-voltage on-board electrical system. The high-voltage battery also supplies the 12 V on-board electrical system with power via the DC/DC converter.

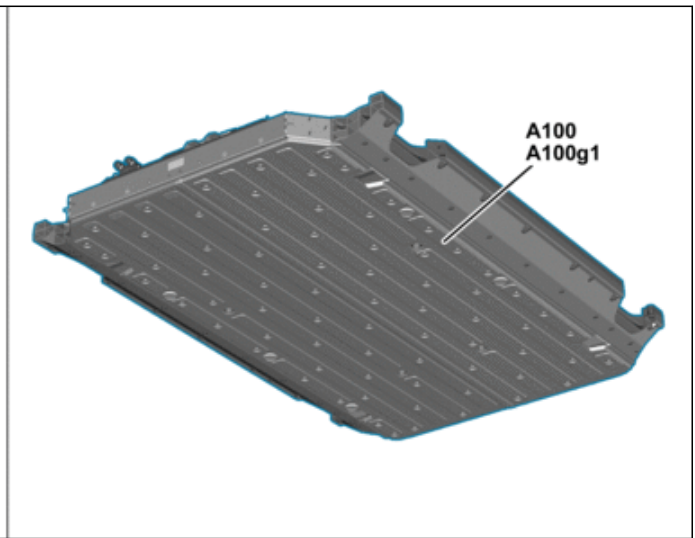
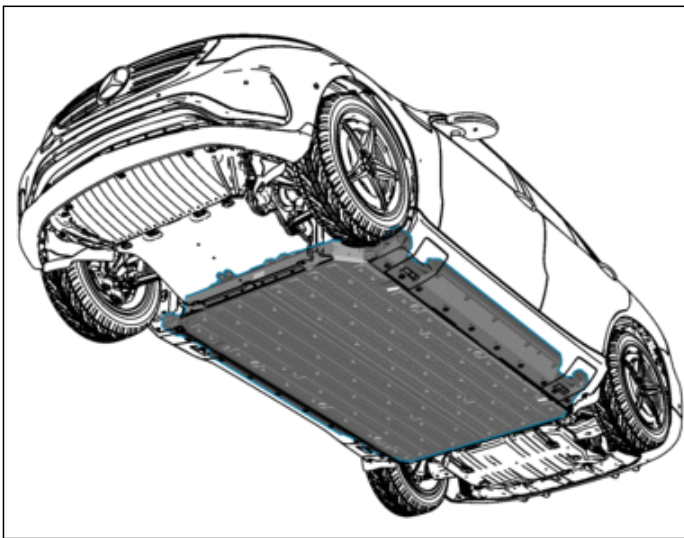
The permissible operating temperature of the high-voltage battery is -25 °C to +60 °C. The temperature of the high-

voltage battery is recorded by temperature sensors in the battery management control unit.

High temperatures reduce the service life of the high-voltage battery. The high-voltage battery is therefore cooled via a coolant circuit under normal operating conditions. At high temperatures, the coolant is cooled via a heat exchanger refrigerant coolant (chiller) of the air conditioning system. This guarantees the optimum output of the high-voltage battery.



See Chapter "Cooling"



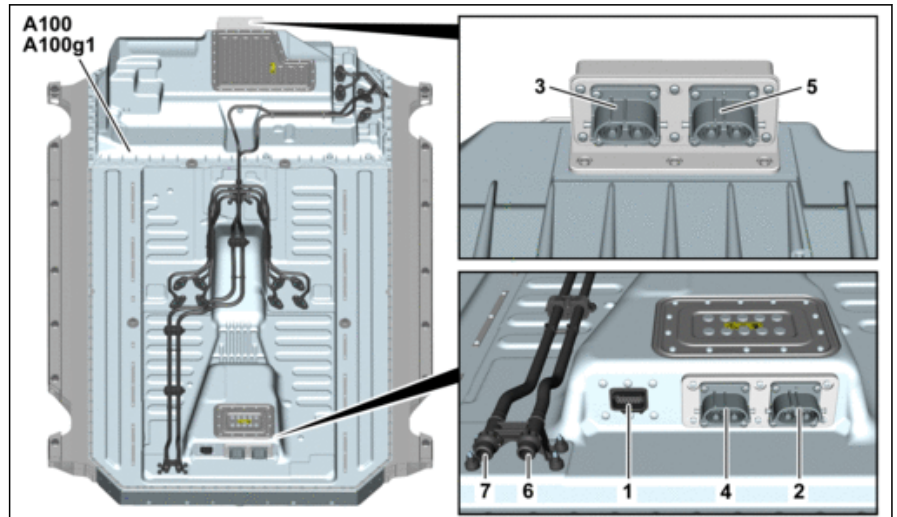
A100 High-voltage battery module

A100g1 High-voltage battery

P54.10-A024-78

Connections

- | | |
|--------|--|
| 1 | Connection to on-board electronics |
| 2 | High-voltage connection for high-voltage power distributor (F34/6) |
| 3 | Power electronics control unit high-voltage connection for electric machine 2 (N129/2) |
| 4 | Power electronics control unit high-voltage connection for electric machine 1 (N129/1) |
| 5 | Direct current charging connection unit high-voltage connection (N116/5) |
| 6 | Coolant feed point |
| 7 | Coolant return flow |
| A100 | High-voltage battery module |
| A100g1 | High-voltage battery |



P54.10-A053-75

Notes on the high-voltage battery

When properly used, the high-voltage battery will not present any hazard.

Information on safe handling

To rule out the danger of a short circuit, mechanical damage, e.g. due to pressure, must be avoided. In addition, the high-voltage battery must not be subject to a thermal load, e.g. through the effect of heat or welding. During painting work and oven drying, please comply with the Service Information SI98.00-P-0020A. The formation of poisonous and caustic gases creates a risk of injury. As per the information in the repair instructions, personal protective equipment should also be worn in addition to safety shoes. After an accident, please comply with the following Service Information: SI54.10-P-0035A

Notes on the service life of the high-voltage battery

If the vehicle is switched off for an extended period of time, ensure a sufficient SOC (State of Charge – charge level) of the high-voltage battery because otherwise, it may be pre-damaged or damaged as a result of deep discharging. During extended non-operational times, the Service Information SI54.10-P-0024A "battery maintenance" must be observed.

Temperatures below -25 °C and over 40 °C, to which vehicle is exposed for more than 7 days, may result in irreversible battery damage. The vehicle must not remain at

a standstill with a discharged high-voltage battery for longer than 14 days. Otherwise, battery damage may be the result.



When handling high-voltage batteries that were damaged by operational handling or due to an accident, proceed according to the guideline "Safe handling of lithium-ion batteries" (e.g. via XENTRY Portal).



Please note the general information about the high-voltage battery: AH54.10-P-0006-01MEV

Power supply equipment

All components involved in the charging process (AC charger for high-voltage battery, DC current charge-connection unit, vehicle socket, charging cable) of the EQC are to be standardized in accordance with international standards (e.g. IEC62196-2) in such a way that they are future proof. This facilitates easy charging at vastly differing electricity grids and power supply equipment.

The EQC can be charged both at a mains outlet and at a public charging station or wallbox charging station. When charging at a mains outlet, the charging current must be limited if necessary to ensure that the local power network is not overloaded.

As soon as the charging cable has been connected, the vehicle's own alternating current charger for high-voltage battery communicates via a discrete control line (Control Pilot) with the control box in the charging cable or the charging station. At the same time, the performance data on the power supply equipment is relayed and the power consumption of the alternating current charger for the high-voltage battery is adapted accordingly. Only then does the alternating current charger initiate the charging process. At the same time, it monitors the voltage, amount of charge and the charging period in order to protect the high-voltage battery. With the AC charger installed in the EQC for the high-voltage battery, a maximum charging capacity of 7.4 kW is possible. With the DC current charge-connection unit installed in the EQC for the high-voltage battery, a maximum charging capacity of 110 kW (ECE) is possible. In this way, a charging time of approximately 40 minutes is possible at a charging stroke of 10 – 80 % SOC.

The exact procedure for charging process and the various charging possibilities can be found in the current operator's manual.



Charging times see Chapter "Technical Data"

Optimized charge settings and status

With the introduction of the EQC, precise planning and predictability of the electric range is enabled and the charging process is optimized:

- Optimization of the charging process via various charge settings, e.g. max. SOC release (max. charge level)
- More precise planning and predictability of the electric range through the inclusion of driver assistance systems

DC charging/ AC charging vehicle socket (except Japan/China), shown on Combo-2 socket

- G10 DC/AC charging vehicle socket
- 3 Status indication
- 4 Locking status indicator lamp
- 5 Charging process indicator lamp
- 6 Abort charge button

Vehicle socket DC charging/AC charging indicator lamps (except Japan/China)

Permanent illumination of the locking status indicator lamp (4) in white shows that the DC charging/AC charging (G10)

- Charge settings ensure full mobility and precise planning
- Improved status display through maximum transparency of the charging process (e.g. current charge level, estimated time for defined SOC and push notifications when the charging process started or ended)

Mercedes me Charge & IONITY

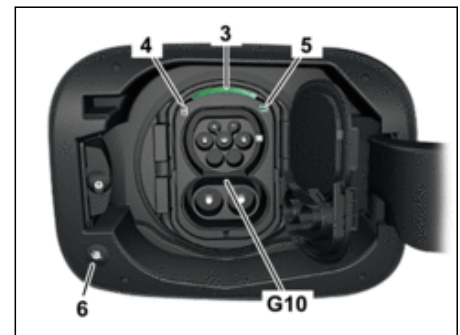
The services "Mercedes me Charge" and "IONITY" (discounted quick charge) enable simple and inexpensive charging of the vehicle at public charging stations.

Via the Mercedes me App and the head unit (A26/17), access to charging stations can be authenticated comfortably with remote access. Alternatively authentication is possible via the Mercedes me Charge RFID card.

Access to "IONITY" is also contained in the "Mercedes me Charge" service. IONITY is a comprehensive quick-charging network along the freeways in Europe, with a station output of up to 350 kW. This enables problem-free long-distance driving. With the "IONITY" service (discounted quick charge), inexpensive charging of the vehicle is provided at the IONITY charging stations.

Charger feed-in socket

The charger feed-in socket ensures the electrical contact with the charging cable. In vehicles with AC socket (Japan/China) or Combo socket (except Japan/China), the charging cable connector is locked during the charging process by an actuator motor.



P54.10-A047-71

vehicle socket is unlocked. If the locking status (4) indicator lamp flashes white, that means there is fault during locking or unlocking.

Overview of charging process indicator lamp (5)

LED	Function
OFF	-
Flashing orange	Connecting
Flashing Green	Battery being charged
Lights up green	Battery fully charged
Red, high-frequency flashing (90 seconds)	Fault with the vehicle – charging process not possible

Cancellation of the charging process and unlocking the charging cable

The vehicle unlocks the DC charging/AC charging vehicle socket only if the central locking system is released via the unlocking switch or the unlocking of the driver's door.

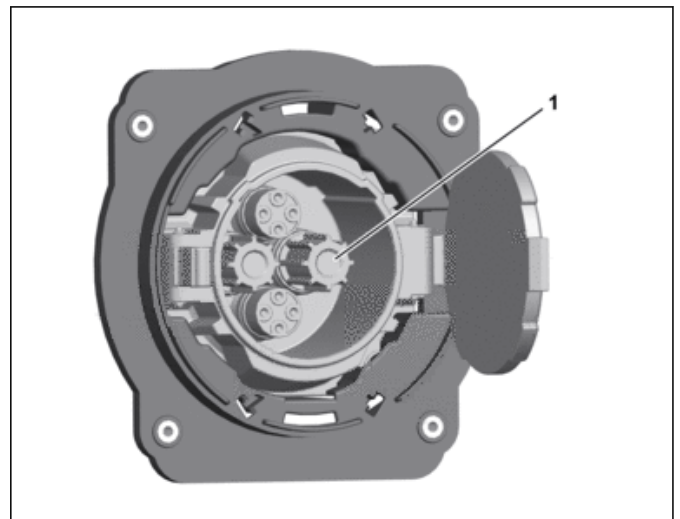
Likewise, the DC charging/AC charging vehicle socket is unlocked if the drive authorization system recognizes a valid key for code 889 (KEYLESS-GO). The release of the charging cable therefore occurs in the following sequence:

- The vehicle is unlocked or a valid key is recognized for code 889 (KEYLESS-GO)

- Or the abort charge button is pressed
- After pressing the switch, the charging process indicator lamp flashes orange
- After the charging process indicator lamp goes out, the locking status indicator lamp lights up permanently in white
- The charging cable can now be removed

DC charging vehicle socket (Japan)

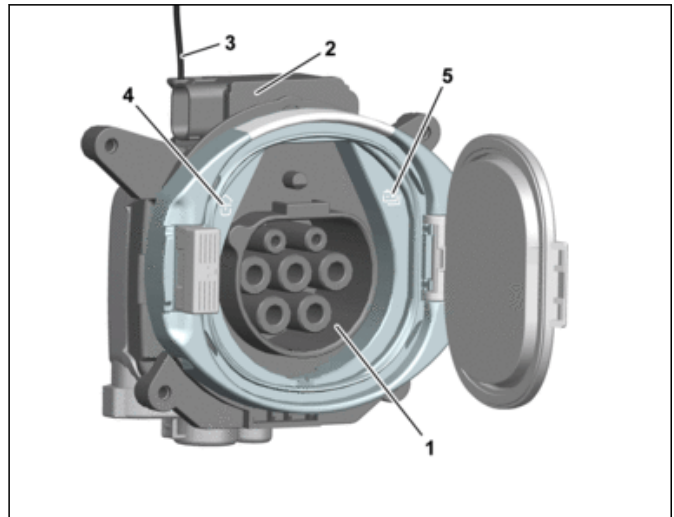
1 Electrical contact



P54.10-A020-81

AC charging vehicle socket (Japan/China)

- 1 Electrical contact
- 2 Actuator motor (for electrical locking of charging cable connector)
- 3 Emergency release cable
- 4 Locking/unlocking LED
- 5 Charge monitor LED



P54.10-A019-81

The DC charging/AC charging vehicle socket contains the following electrical contacts depending on the version:

- Contacts for respective charging current:
 - Alternating current or three-phase current (L1, L2, L3, N and PE)
 - Direct current (DC+ and DC-)
- Control Pilot contact (CP) for communication with the charging station
- Proximity Pilot contact (PP)

The Proximity Pilot contact has the following tasks:

- Detect whether vehicle and/or charging station plug connection is plugged in
- Coding of max. current load capacity of charging cable via a resistor

Additionally, the locking and unlocking LED and charge monitor LED are located directly above the electrical contacts of the AC charging vehicle socket (Japan/China) or the combo socket (except Japan/China). They visually represent the current state of the charger feed socket.

The following component parts are additionally located at the AC charging vehicle socket (Japan/China) or the Combo socket (except Japan/China):

- Actuator motor (for electrical locking of charging cable connector)
- Mechanism with emergency release cable for emergency release of the charging cable connector

Emergency release of the charging cable connector (vehicle socket AC charging (Japan/China) or combo socket (except Japan/China))

The charging cable connector is protected during the charging process against unauthorized removal by being electrically locked in the charger feed-in socket.

If the charging cable connector cannot be removed from the feed charger socket after a charging process (in the event of an error), it can be released mechanically by pulling on the emergency release cable.



The emergency release cable is located either behind a side or the bottom trim in the load compartment or trunk.

Charging cable for charging via the mains outlet (mode 2)

The single-phase charging cable, available in two length variants, has been adapted to meet country-specific standards and it is supplied in a pocket in the load compartment.

The charging cable includes the In-Cable Control and Protecting Device (IC-CPD). To meet the safety requirements as per IEC61851 a ground fault circuit breaker and a communication device (PWM module) for setting the power are integrated. To protect users and the electric vehicle, the IC-CPD fixed permanently into the charging cable switches the power contacts between the vehicle's plug-type connection and the infrastructure side, and sends the charging current upper limit to the vehicle. In the event of a fault or if there is a voltage drop, the charging process is interrupted immediately. The charging cable switches the power contacts between the vehicle's plug-type connection and the shockproof plug only after the vehicle requests voltage. Connectors not plugged in are therefore de-energized.

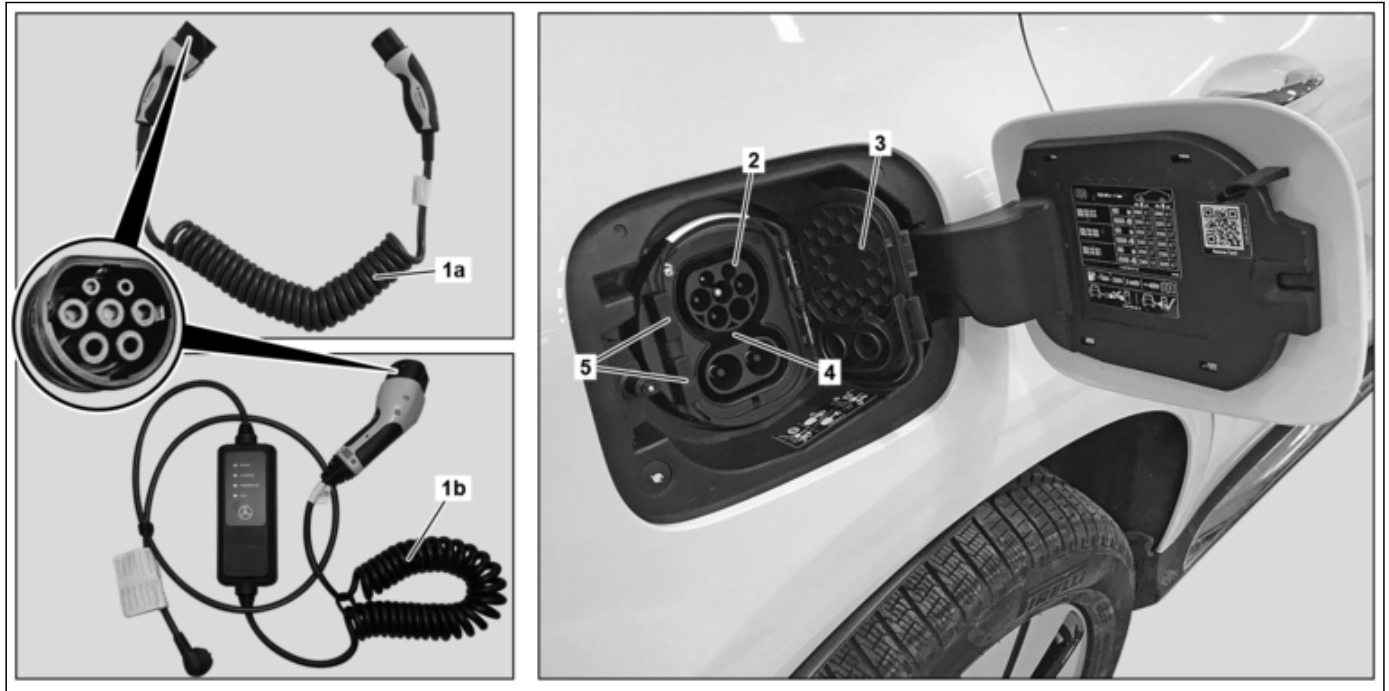
Charging cable for public charging stations (mode 3)

The single-phase charging cable has been adapted to the country-specific standards, and it is available as special equipment in two length versions.

The mode 3 charging cable forms a connection between the vehicle and the standardized power supply as per

IEC61851, known as the "Electrical Vehicle Supply Equipment" (EVSE). Fault and overload protection, a shutoff function and a specific vehicle socket are integrated in the EVSE. The charging cable contains a resistance coding for the maximum current load capacity of the cable, and the standardized plug contacts to the vehicle and

infrastructure side. The charging station only switches the power contacts after voltage is requested by the vehicle. The vehicle or charging station connections not plugged into the vehicle are therefore not plugged in and de-energized.



P54.10-A065-09

1a	<i>Charging cable (with code E4L (wallbox charging station charging cable/charging station model 2 (mode 3) 4 m))</i>	2	<i>Charger feed-in socket</i>	4	<i>Sequence</i>
1b	<i>Charging cable with cable inspection box (mode 2)</i>	3	<i>Cap</i>	5	<i>Locks</i>

Start-off protection

To prevent the vehicle from driving away during a charging process or when the charging cable is plugged in, the start-off protection is activated when the plugged-in charging cable connector (Proximity=ON/SNA) is detected. The instrument cluster displays a warning message to this effect.

The start-off protection is realized here in two variants dependent on the vehicle speed:

Plugged in charging cable connector is detected during the drive (v > 5 km/h).

If, while driving (v > 5 km/h), a supposed plugged in charging cable connector (Proximity=ON) is detected or, in

the event of a defective charger, the substitute value (Proximity=SNA) is detected, the start-off protection is activated when drive range "P."

Plugged-in charging cable connector is detected at standstill (v < 5 km/h)

If a plugged-in charging cable connector (Proximity=ON) is detected in the drive range "P" or at v < 5 km/h, the start-off protection is immediately activated. If a charger is faulty, the substitute value (Proximity=SNA) is formed. In this instance, the drive-away protection is not activated until gear range "P" is engaged.

Direct current charge connection unit

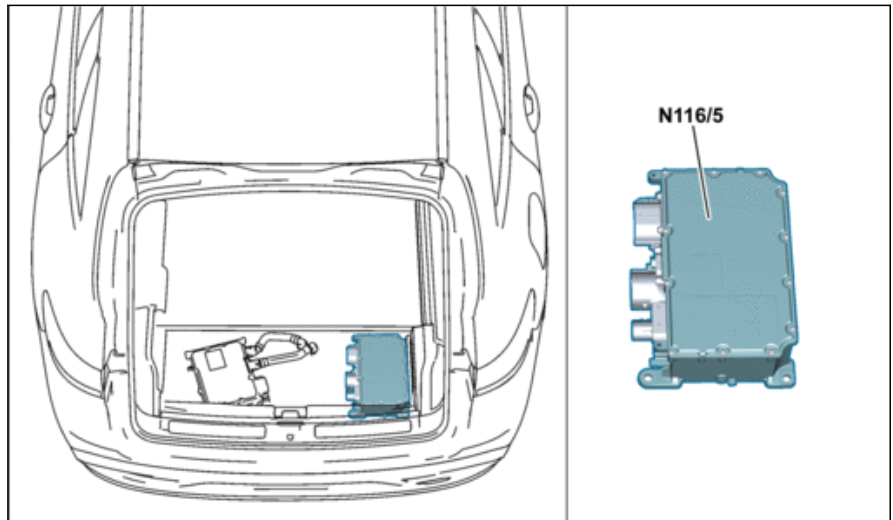
The DC current charge-connection unit is located on the right under the load compartment floor. Apart from the possibility of charging at a "normal" network connection (AC), there is now also the possibility of charging the vehicle at DC charging stations. These are often also described as quick charging stations. The DC current charge-connection unit enables DC charging for the following systems:

- Combined Charging System (CCS) when using the combo 2 plug for Europe

- Combined Charging System (CCS) when using the combo 1 plug for the U.S.A.
- CHAdeMO is the charging system for the Japanese market. An additional vehicle socket and other topology is required
- GB/T is the charging system for the Chinese market. An additional vehicle socket and other topology is required

N116/5

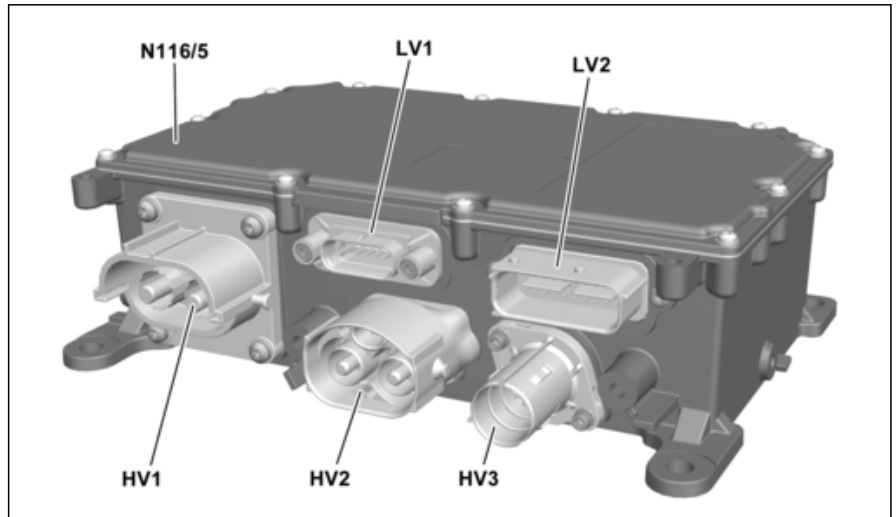
Direct current charging connection unit



P54.10-A051-75

Connections

- LV1 *Connection to on-board electronics*
- LV2 *Connection to the DC charging/AC charging vehicle socket (G10) and locking motors (socket flap and charging cable connector)*
- HV1 *Charger feed-in socket high-voltage connection*
- HV2 *High-voltage battery high-voltage connection (A100g1)*
- HV3 *High-voltage connection for AC charger for high-voltage battery (N83/11)*
- N116/5 *Direct current charging connection unit*



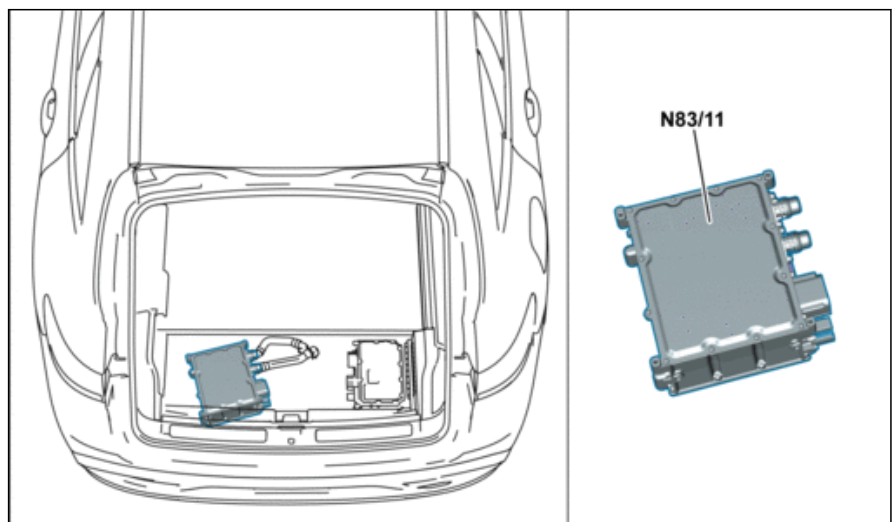
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Alternating current charger for high-voltage battery

The AC charger for the high-voltage battery is located on the left under the load compartment floor. It converts the

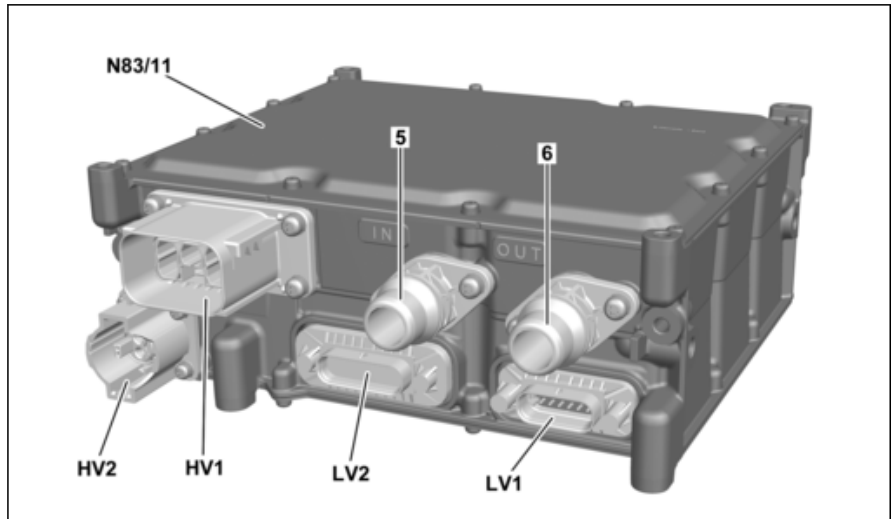
alternating voltage of an external voltage source, e.g. charging station, into direct voltage.

- N83/11 *Alternating current charger for high-voltage battery*



P54.10-A050-75

N83/11	Alternating current charger for high-voltage battery
LV1	Connection to on-board electronics
LV2	Not assigned
HV2	Direct current charging connection unit high-voltage connection (N116/5)
HV1	DC charging/AC charging vehicle socket high-voltage connection
5	Coolant feed point
6	Coolant return flow

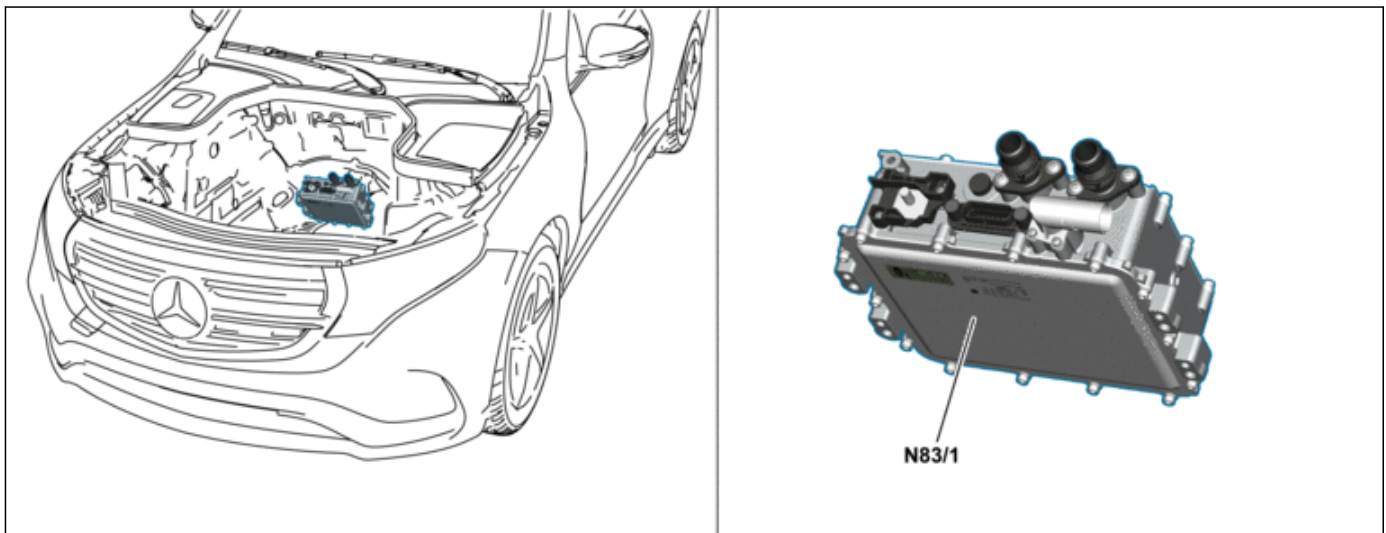


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DC/DC converter control unit

The DC/DC converter control unit is in the rear area of the engine compartment on a holder. It generates the 12 V

direct voltage for the 12 V on-board electrical system from the direct voltage of the high-voltage battery.



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N83/1 DC/DC converter control unit

Power electronics

The power electronics are integrated in the drive system and connected directly to the high-voltage battery module and coolant circuit. Its tasks are as follows:

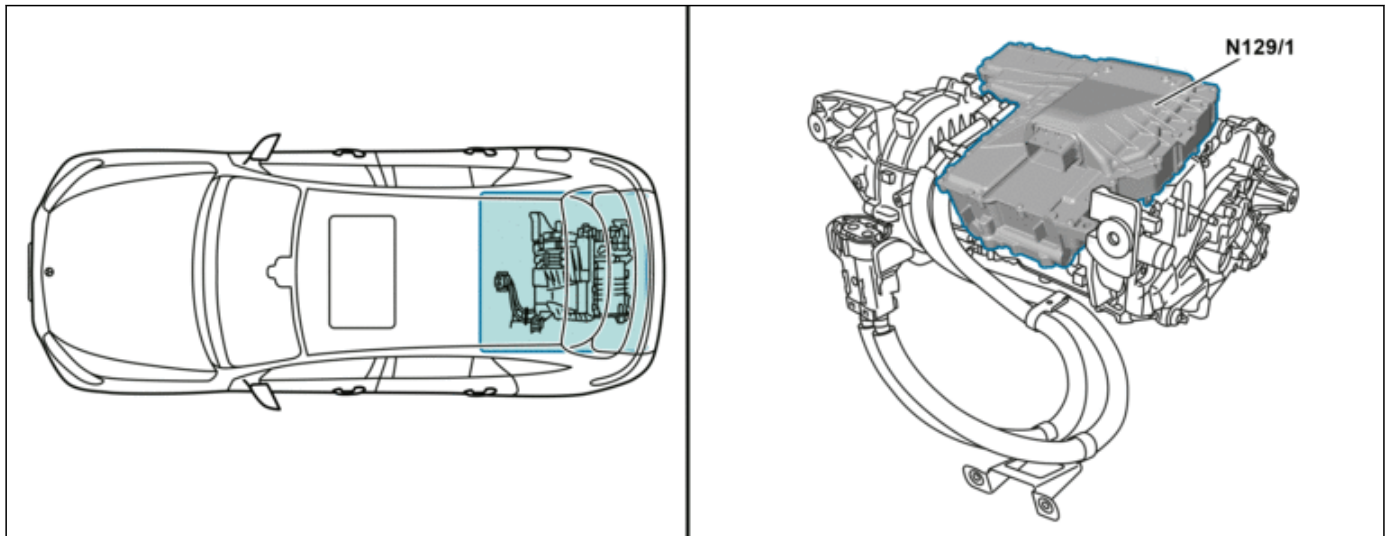
- Voltage supply
- Control of the electric machine
- Monitoring of the temperature and position of the electrical machine

- Creating diagnoses and forecasts of the available torque for the powertrain control unit

To operate the electric machine, the DC/AC converter generates the 3-phase alternating voltage in the power electronics from the direct voltage of the high-voltage battery. As a result, the rotational speed and the temperature of the electric machine are recorded by the power electronics.

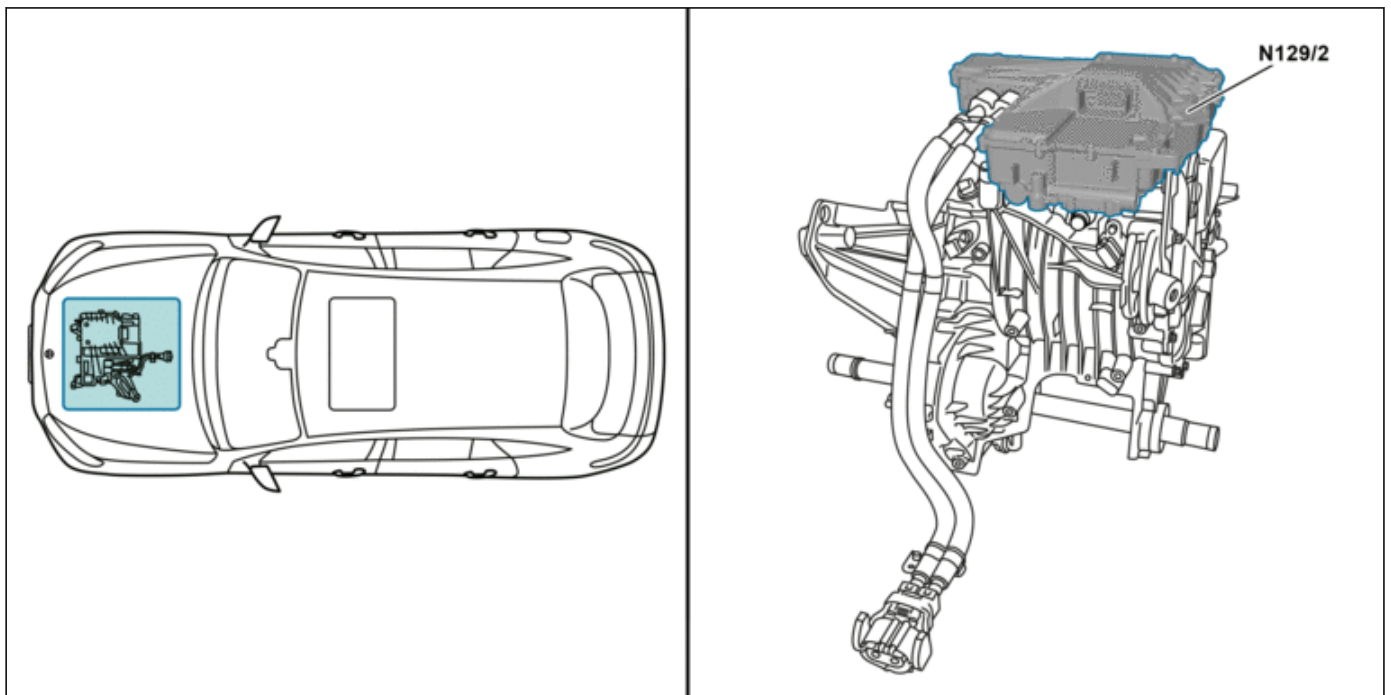
If the electric machine is operated in overrun mode as an alternator, the power electronics converts the induced

alternating voltage into a direct voltage and thus supplies the high-voltage on-board electrical system.



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N129/1 *Electric machine 1 power electronics control unit*



P08.20-A002-79

N129/2 *Electric machine 2 power electronics control unit*

High-voltage power distributor

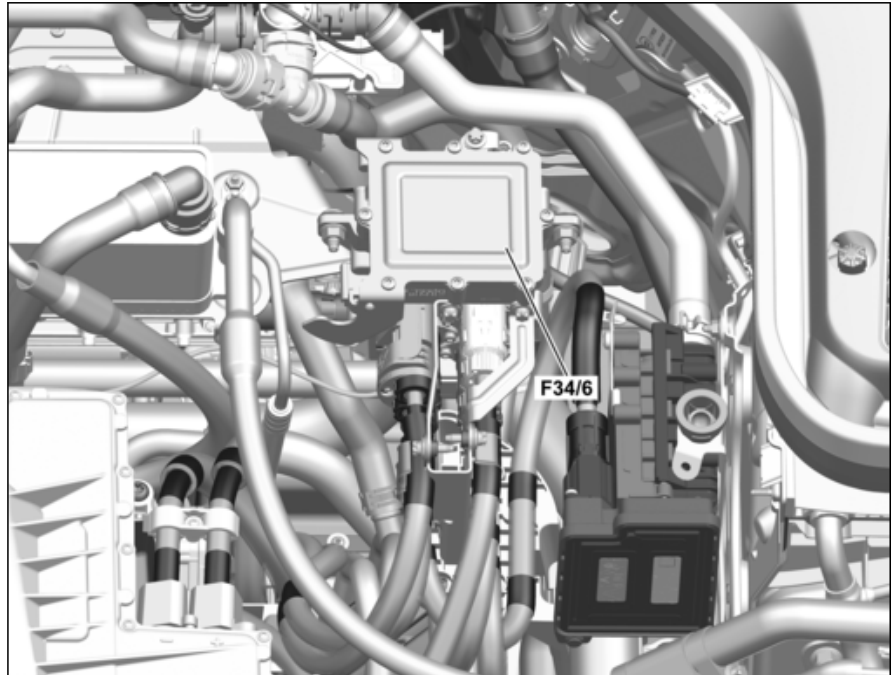
The high-voltage power distributor (F34/6) is located in the EQC in the rear area of the engine compartment. It is fed by the high-voltage battery with high voltage direct voltage and supplies the following high voltage components:

- Electric refrigerant compressor (A9/6)

- High voltage PTC heater (vehicle interior) (N33/4)
- High voltage PTC heater (high-voltage battery) (N33/5)
- DC/DC converter control unit (N83/1)

To protect the lines of the high voltage components, four retainers are located in the high-voltage power distributor. The retainers are accessible and can be changed.

F34/6 High-voltage power distributor



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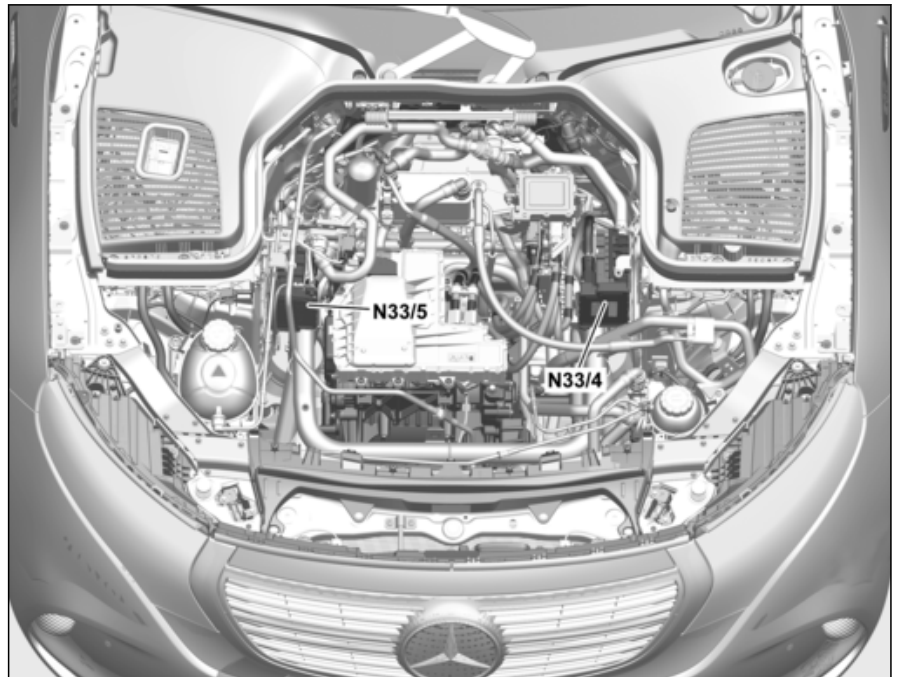
High-voltage PTC heater

High voltage PTC heater N33/4 and N33/5 are located in the engine compartment and are supplied by the high-voltage power distributor.

Both PTC heaters are high voltage water heaters and are identically constructed. The PTC heater N33/4 generates

the heat for the vehicle interior. The PTC heater N33/5 is used to heat the high-voltage battery at low outside temperatures. If necessary, it generates additional heat for the vehicle interior.

- N33/4 *High voltage PTC heater (vehicle interior)*
- N33/5 *High voltage PTC heater (high-voltage battery)*



P08.50-A002-06

Acoustic ambient protection

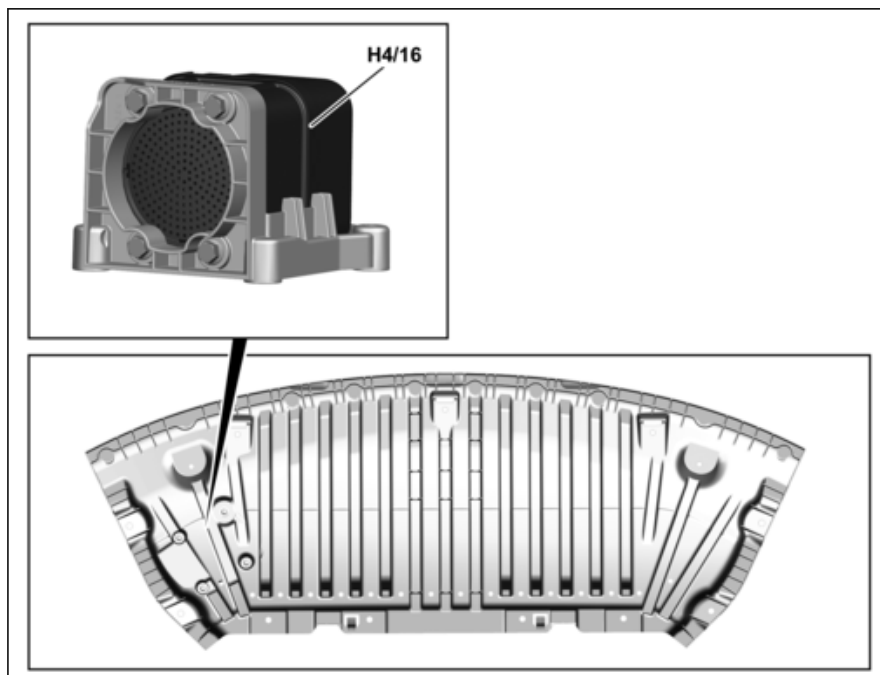
Since the vehicle is very quiet at low speeds in all operating modes, there is a danger that it will not be noticed by other road users, or will not be noticed until a very late stage. Two sound generators that are constructed identically are used as a technical version of the acoustic presence indicator in the EQC.

The sound generators consist of a control unit, an audio end stage, and a speaker. Depending on the speed and

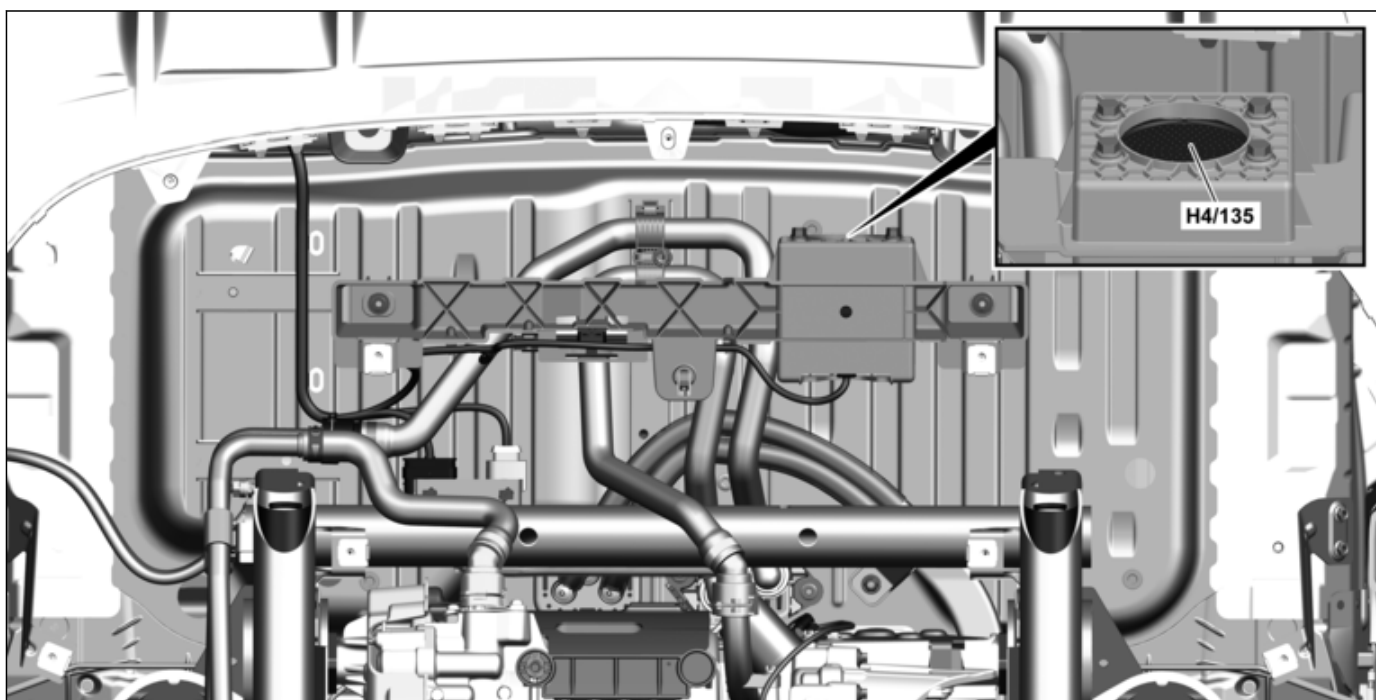
accelerator pedal position, the sound generators generate an audio signal between 0 and 30 km/h. At speeds greater than 30 km/h, the sound generators are deactivated because the rolling and wind noises are loud enough that the vehicle can be perceived.

The sound generator is located in the front right of the vehicle on the bottom of the engine compartment. The rear end sound generator is located in the rear area on the underbody.

H4/16 Sound generator



P08.20-A014-06



P08.20-A015-09

H4/135 Rear end sound generator

SN20.00-P-0010-01H	Cooling		
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Model 293

The thermal management of the EQC comprises the cooling of the components of the high-voltage on-board electrical system and the climate control of the vehicle interior. The cooling of the components of the high-voltage on-board electrical system takes place through two closed coolant circuits that are not connected to each other:

- Low-temperature circuit 1
- Low-temperature circuit 2

Low-temperature circuit 1 cools electric machines 1 and 2, the DC/DC converter, and the AC charger for the high-voltage battery. Low-temperature circuit 2 cools the high-voltage battery.

The low-temperature circuits each have a coolant pump, the speed of which can be regulated, and various regulation valves.

To lower the energy consumption and reduce the cool down of the engine compartment at high vehicle speeds, an air regulation system is to be installed in front of the cooler. Two actuator motors open and close the air regulation system under certain conditions.

The two coolers of the low-temperature circuits are integrated in a cooling module. A fan motor located centrally behind it (M4/7) ventilates the cooling module. The powertrain control unit (N127) actuates the fan motor, air regulation system, and all coolant pumps via the LIN.

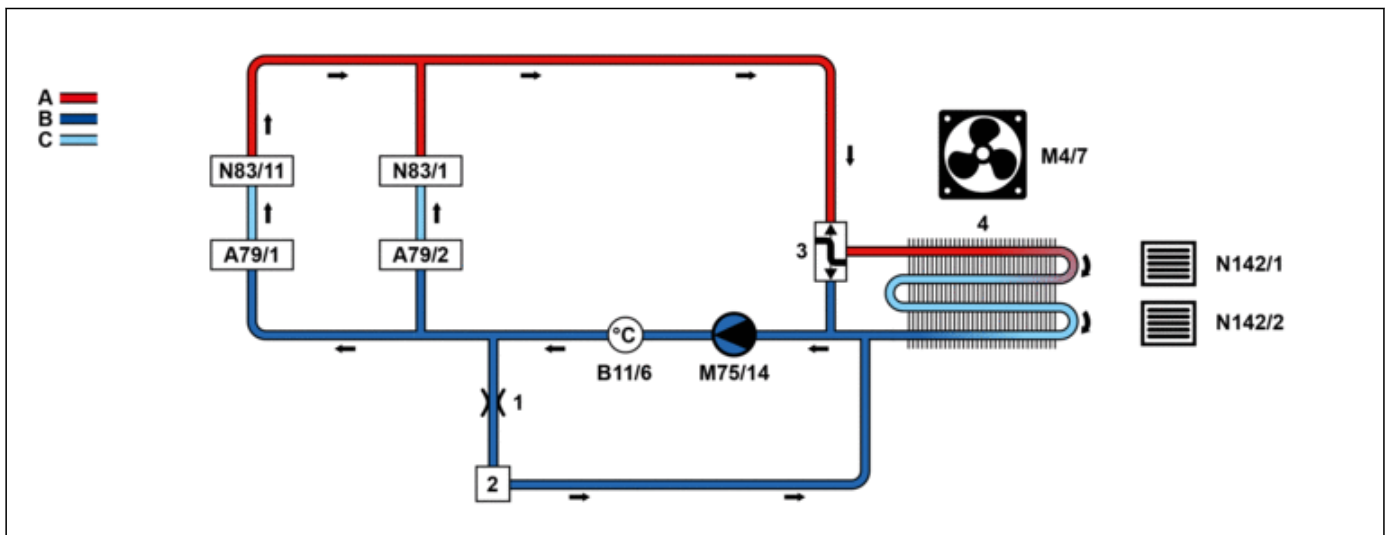
Low-temperature circuit 1

Low-temperature circuit 1 cools the electric machines, the DC/DC converter, and the AC charger for the high-voltage battery.

The powertrain control unit regulates low-temperature circuit 1. It evaluates the data of the low temperature coolant circuit 1 temperature sensor and, if necessary, actuates the low-temperature circuit 1 coolant circulation pump.



The power electronics are also flowed through for low outside temperature, always with a minimum coolant volume flow (dependent on the coolant temperature).



P08.50-0002-78

Schematic diagram of electric drive low-temperature circuit (low-temperature circuit 1)

1	2-mm restrictor	M75/14	Low-temperature circuit coolant circulation pump 1
2	Expansion reservoir for low-temperature circuit 1	N83/1	DC/DC converter control unit
3	Low-temperature circuit 1 self-regulating thermostat	N83/11	Alternating current charger for high-voltage battery
4	Radiator low-temperature circuit 1	N142/1	Upper air regulation system control unit
A79/1	Electrical machine 1	N142/2	Lower air regulation system control unit
A79/2	Electrical machine 2	A	Coolant warmed
B11/6	Low-temperature coolant circuit 1 temperature sensor	B	Coolant cooled
M4/7	Fan motor	C	Coolant partially heated or cooled down

Low-temperature circuit 2

Low-temperature circuit 2 cools the high-voltage battery.

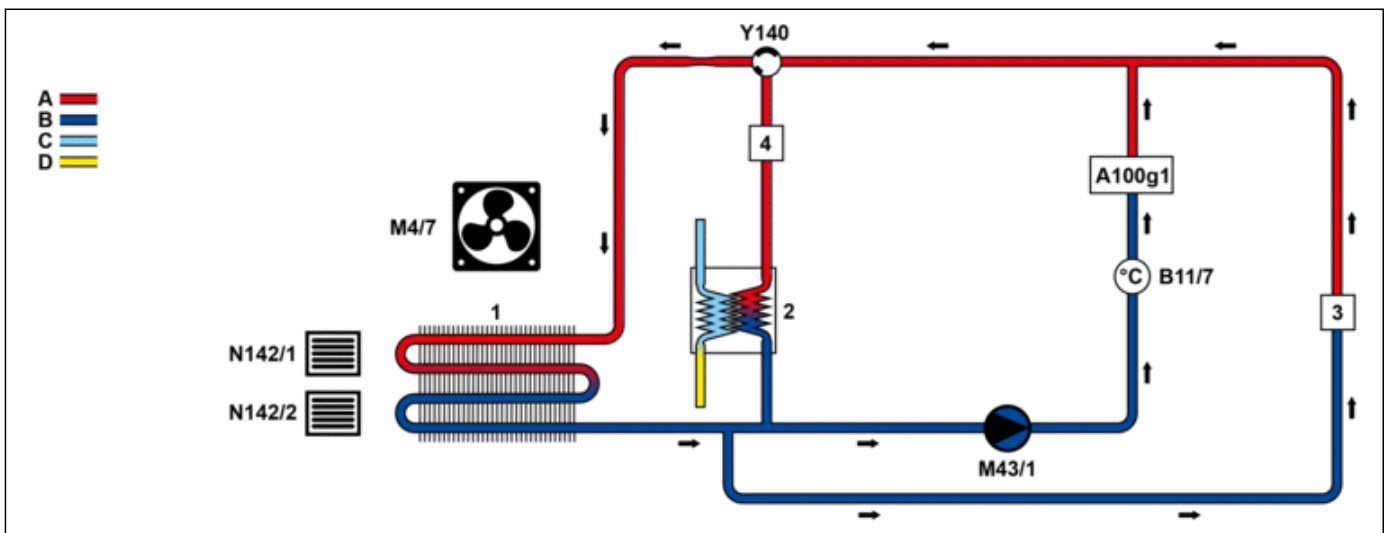
The powertrain control unit regulates low-temperature circuit 2. It evaluates the data of the low temperature coolant circuit 2 temperature sensor and, if necessary, actuates the low-temperature circuit 2 coolant circulation pump. According to the ambient temperature waste heat from the high-voltage battery is led away over the low-temperature circuit 2 cooler or over the heat exchanger attached to the refrigerant circuit. Regulation of low-temperature circuit 2 takes place over actuation of the high-voltage battery cooling switchover valve.

The heat exchanger cools the coolant by means of the refrigerant injected into the heat exchanger and evaporated. The cooled down coolant is subsequently available to low-temperature circuit 2.

At low temperatures of the high-voltage battery, the coolant is led over the heat exchanger blocked off from the high-voltage battery cooling expansion valve.

If the enable is awarded by the energy management the powertrain control unit makes the request to the climate control control unit (N22/1) via the CAN network for actuation of the electric refrigerant compressor. The control unit for the climate control then actuates the electric refrigerant compressor via the LIN. The high-voltage battery cooling expansion valve is opened by the control unit for the climate control and the refrigerant flows through the heat exchanger. In this way, thermal energy is extracted from the low-temperature circuit 2.

The cooling output is primarily dependent on the level of actuation to the electric refrigerant compressor. If the high-voltage battery's state of charge is very low, the output of the electric refrigerant compressor is regulated down to 0 kW.



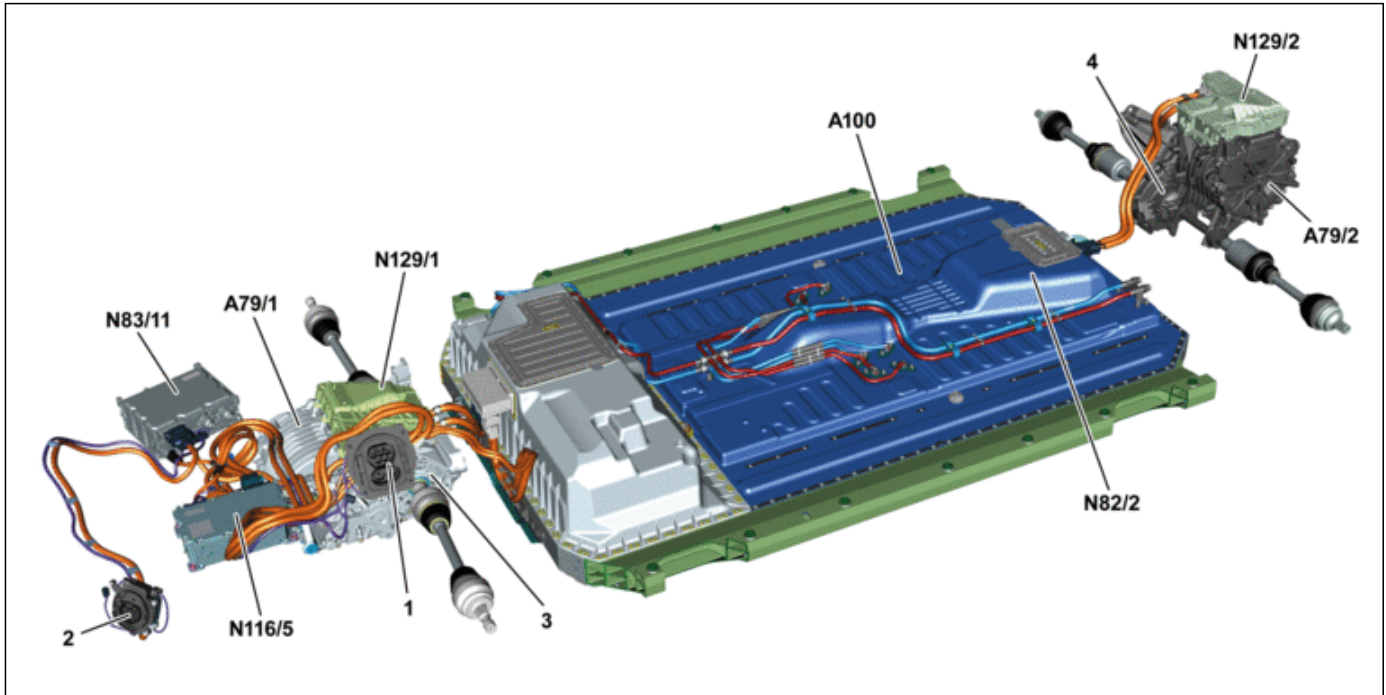
P08.50-0001-78

Schematic diagram of the high-voltage battery low-temperature circuit (low-temperature circuit 2)

1	Low-temperature circuit 2 cooler	N142/1	Upper air regulation system control unit
2	Heat exchanger	N142/2	Lower air regulation system control unit
3	Low-temperature circuit 2 expansion reservoir	Y140	High-voltage battery cooling system switchover valve
4	High-voltage PTC heater	A	Coolant warmed
A100g1	High-voltage battery	B	Coolant cooled
B11/7	Low-temperature coolant circuit 2 temperature sensor	C	Refrigerant (high pressure, liquid)
M4/7	Fan motor	D	Refrigerant (low pressure, gaseous)
M43/1	Low-temperature circuit coolant circulation pump 2		

SN00.00-P-0080-13H	Drive		
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Model 293



P47.70-A004-79

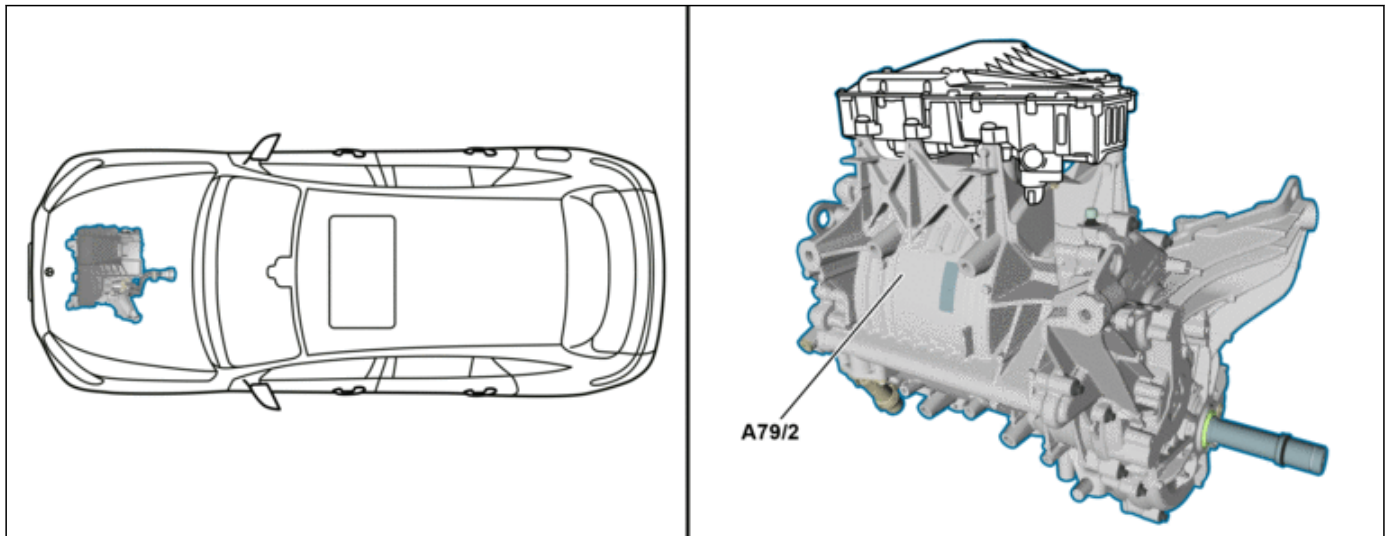
Powertrain overview

1	DC charging/ AC charging vehicle socket (except Japan/China), shown on Combo-2 socket	A100	High-voltage battery module
2	AC charging vehicle socket (Japan/China), shown on model 2	N82/2	Battery management system gateway control unit
3	Electric machine 1 transmission	N83/11	Alternating current charger for high-voltage battery
4	Electric machine 2 transmission	N116/5	Direct current charge connection unit
A79/1	Electrical machine 1	N129/1	Electric machine 1 power electronics control unit
A79/2	Electrical machine 2	N129/2	Electric machine 2 power electronics control unit

The EQC has, as the first Mercedes-Benz representative of the new EQ product and technology brand, a completely newly developed drive system. The EQC carries a compact electrical drivetrain both on the front axle and rear axle. The electric drivetrain is a compact unit comprising of the electric machine, DC/AC converter, and transmission, through which an additional park pawl is provided for the rear axle. The transmission consists of a 2-stage input transmission and an integrated bevel gear differential. The transmission for electric machine 2 in the left direction of travel and for electric machine 1 in the right direction of

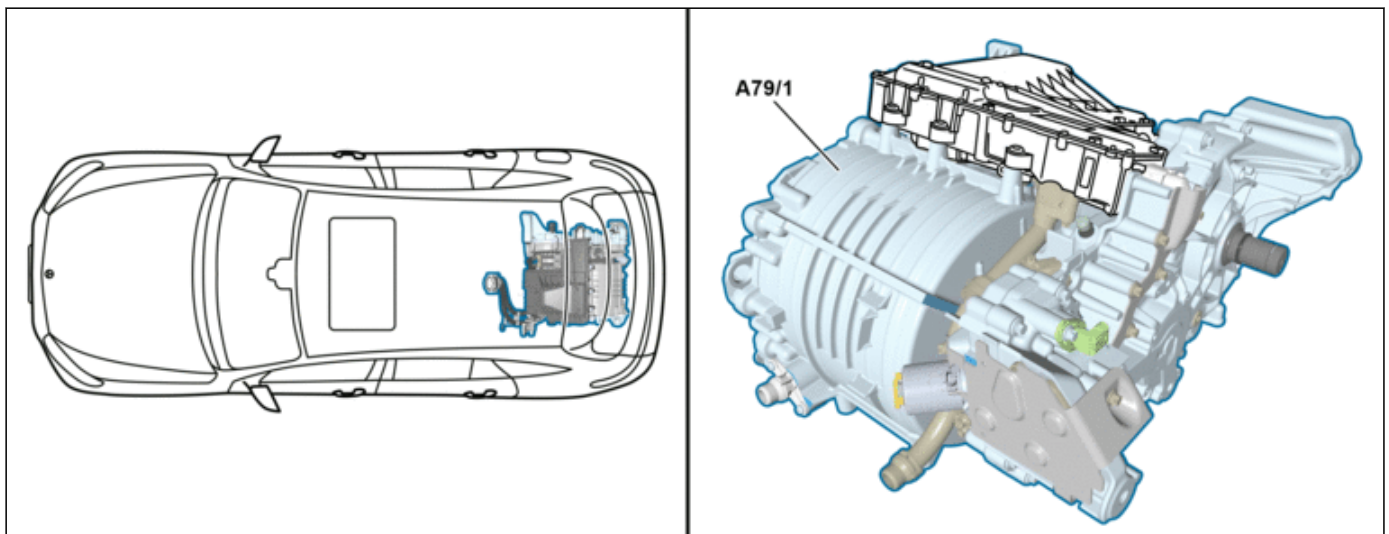
travel is attached to the electric machine. Due to the characteristics of the electric machine, no clutch is required. The electric machine is, as far as the motor and the actuator are concerned (recuperation), driven and used independently of the direction of travel. In deceleration or braking mode, the mechanical rotary motion is converted into electrical energy and used to charge the high-voltage battery. Both drivetrains deliver a joint maximum output of 300 kW and have the driving characteristics of an all-wheel drive. The intelligent control allows for a dynamic torque distribution, across a wide operating range, between the

two driven axles and thus creates the prerequisites for high vehicle dynamics.



A79/2 *Electrical machine 2*

P08.10-A002-78



A79/1 *Electrical machine 1*

P08.10-A001-78

DIRECT SELECT

The DIRECT SELECT lever includes the following lever positions:

- "R", reverse gear
- "N", neutral and start position (no power transmission, vehicle can move freely)
- "D", 1 forward gear is available.

The selector lever has different positions and power levels:

- Park position
- Shift to 'N', a power level is crossed.
- Shift to "D" or "R", a higher power level is crossed.

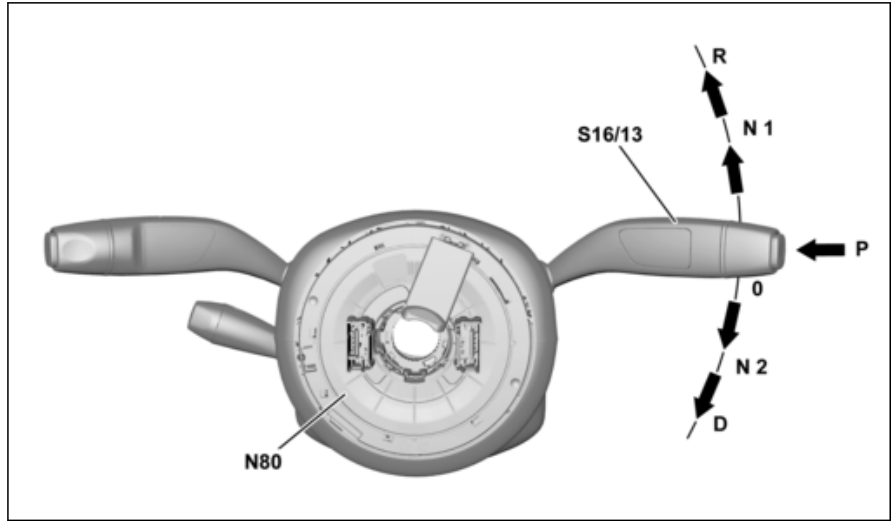
The park pawl can be requested from a vehicle speed < 7 km/h.

View of steering column tube module from front

- 0* Park position
- D* Drive
- P* Park lock and start position

- R* Reverse gear
- N1* Neutral position 1
- N2* Neutral position 2
- N80* Steering column module control unit

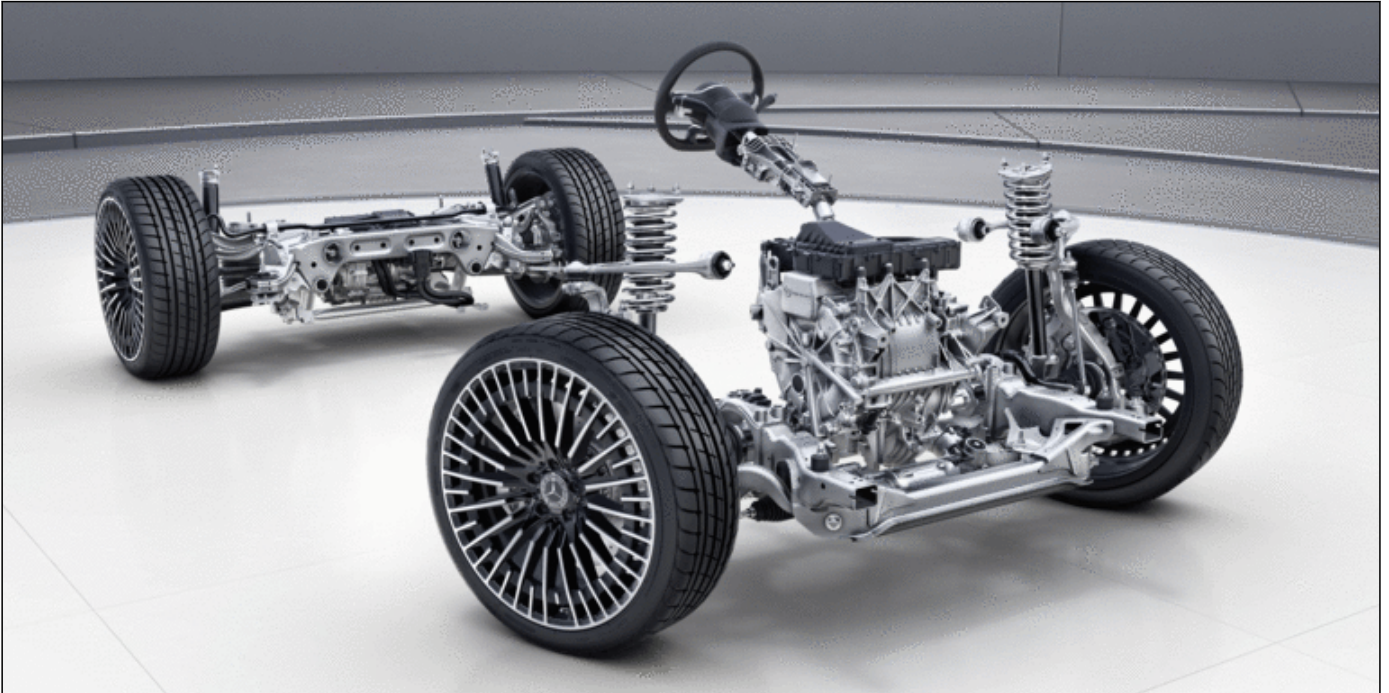
- S16/13* DIRECT SELECT lever



P54.21-3991-05

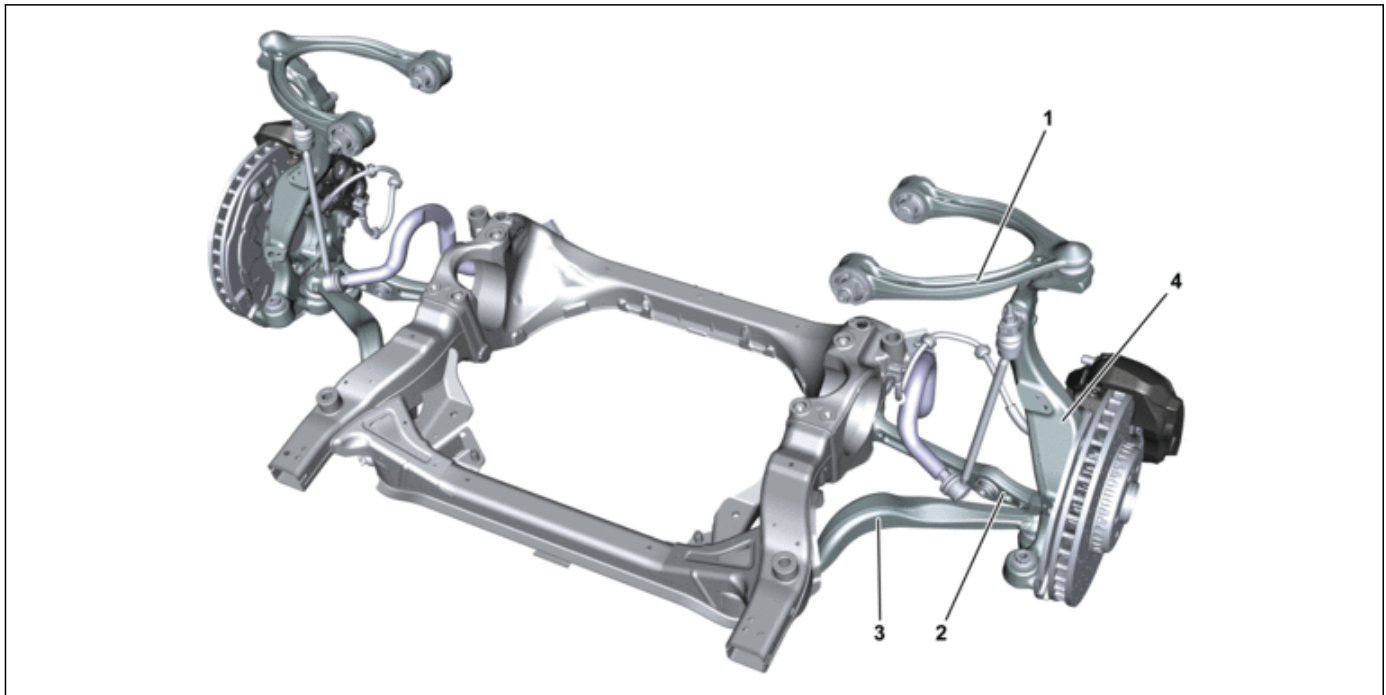
SN32.00-P-0001-01H	Axles and suspension		
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Model **293**



P32.00-A006-79

Shown on suspension/steering EQC 400 4MATIC



P33.10-2546-79

A 4-link front axle is shown

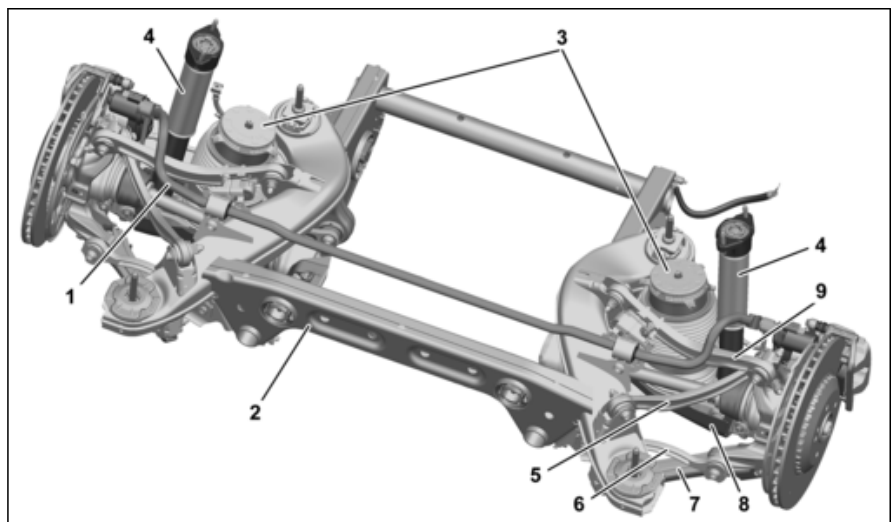
- | | | | |
|---|------------------------------|---|------------------|
| 1 | Upper transverse control arm | 3 | Strut rod |
| 2 | Spring control arm | 4 | Steering knuckle |

Front axle

The front suspension is from the current model series 253 and is designed as a 4-link front axle.

A 5-link rear axle is shown

- | | |
|---|--------------------------|
| 1 | Stabilizer bar |
| 2 | Rear axle carrier |
| 3 | Air suspensions |
| 4 | Rear axle shock absorber |
| 5 | Strut rod |
| 6 | Tie rod |
| 7 | Thrust arm |
| 8 | Spring control arm |
| 9 | Camber strut |



P35.10-A018-05

Rear axle

The rear axle is from the current model series 253 and is designed as a 5-link rear axle.

Suspension and damping

The EQC has, as standard, a conventional steel suspension at the front axle and a 1-chamber air

suspension with integrated level control system at the rear axle.

Electronic rear axle level control

The electronic rear axle level control system monitors the rear axle level and is implemented with two air suspension bellows. The objective of electronic rear-axle level control is to keep the rear-axle level constant irrespective of the load status and any driving-dynamics related pitch motion of the vehicle.



On vehicles with electronic rear-axle level control, the same component parts (AIR BODY CONTROL relay, AIR BODY CONTROL compressor and AIR BODY CONTROL pressure relief valve) are used as on vehicles with Code 489 (AIR BODY CONTROL).

Brakes

The EQC has the front axle brake from the current model series 253 with internally ventilated and punched compound brake disks. The rear axle brake comes from model series 213.

Compound brake disk

The EQC, like model series 253, is equipped with a new compound brake disk. The composite brake disk is in two

parts and consists of a profiled sheet steel casing on the inside and a toothed brake plate made of cast iron. The combined corrosion protection concept newly developed for this system involves galvanic coating of the metal casing with additional painting of the entire component.

Electric parking brake (EPB)

The EQC is equipped with the familiar electric parking brake from model series 253. A combined floating brake caliper with electric parking brake function is installed on the rear axle. The control of the electronic parking brake is located on the left of the instrument panel below the rotary light switch.

Steering

Electrical power steering

The EQC, like model series 253, is equipped with the familiar electromagnetically-assisted rack-and-pinion steering as standard. The electric power steering comprises the steering gear, rack-and-pinion steering, the torque sensor for the electric power steering, the actuator motor for the electric power steering and the electrical power steering control unit. The electric power steering provides stepless speed-dependent regulation of the steering assistance.

User interface CAN (CAN HMI)

	Control unit	Additional information
A26/17	Head unit	with code 548 (Connect 20 MID (NTG6)) or code 549 (Connect 20 HIGH (NTG6))
A40/12	Head-up display	With CODE 463 (Head-up display)
A76	Left front reversible emergency tensioning retractor	with CODE 299 (PRE-SAFE® system)
A76/1	Right front reversible emergency tensioning retractor	with CODE 299 (PRE-SAFE® system)
B84/14	Augmented reality camera	with code U19 (Augmented reality)
N2/10	Supplemental restraint system control unit	-
N66/2	Backup camera control unit	with code 218 (Reversing camera) except code 235 (Active Parking Assist with PARKTRONIC)
N73	Ignition lock control unit	-
N88	Tire pressure monitor control unit	With code 475 (Tire pressure monitor)
N133/1	Instrument cluster control unit	-

Diagnostic CAN (CAN D)

	Control unit	Additional information
N73	Ignition lock control unit	-
N112/9	HERMES control unit	With code 362 (HERMES LTE)

Electric drive CAN (CAN ED)

	Control unit	Additional information
H4/16	Sound generator	With code B53 (Acoustic ambient protection)
H4/135	Rear end sound generator	With code B53 (Acoustic ambient protection)
N82/2	Battery management system gateway control unit	-
N82/3	Battery management system control unit	-
N82/4	Battery management system control unit	-
N83/1	DC/DC converter control unit	-
N83/11	Alternating current charger for high-voltage battery	-
N112/9	HERMES control unit	-
N116/5	Direct current charge connection unit	-
N127	Drivetrain control unit	-

Vehicle dynamics CAN (CAN H)

	Control unit	Additional information
N2/10	Supplemental restraint system control unit	-
N30/8	Regenerative braking system control unit	-

Interior CAN (CAN B)

	Control unit	Additional information
A98/1	Sliding roof control module	With CODE 414 (Sliding roof)
N10/6	Front central control unit	-
N10/8	Rear central control unit	-
N22/1	Climate control control unit	-
N28/1	Trailer recognition control unit	With code 550 (Trailer hitch)
N32/1	Driver seat control unit	with code 275 (Electrically adjustable driver's seat with memory function)
N32/2	Front passenger seat control unit	with code 241 (Memory switch for left electrically adjustable front passenger seat) or code 242 (Electrically adjustable front passenger seat with memory function)
N32/15	Driver multicontour seat control unit	with code 409 (Front left/right multicontour seats)
N32/16	Front passenger multicontour seat control unit	with code 409 (Front left/right multicontour seats)
N69/1	Driver door control unit	-
N69/2	Front passenger door control unit	-
N69/3	Left rear door control unit	-
N69/4	Right rear door control unit	-
N69/5	KEYLESS-GO control unit	-
N70	Overhead control panel control unit	-
N73	Ignition lock control unit	-
N121/1	Trunk lid/liftgate control control unit	With CODE 890 (EASY-PACK liftgate)
N162	Ambiance illumination control unit	With CODE 877 (Ambiance illumination)

Steering wheel CAN (CAN LR)

	Control unit	Additional information
N80	Steering column module control unit	-
N135	Steering wheel electronics	-

Periphery CAN (CAN PER)

	Control unit	Additional information
A40/11	Mono multifunction camera	with code 243 (Active Lane Keeping Assist), code 513 (Traffic Sign Assist), Code 608 (Adaptive Highbeam Assist) or code 628 (Adaptive Highbeam Assist Plus), except code 51B (Euro NCAP) and except code 23P (Driving Assistance Package)
B92/6	Right outer rear integrated radar sensor	With CODE 234 (Blind spot assist)
B92/11	Left outer rear integrated radar sensor	With CODE 234 (Blind spot assist)
E1n9	Left headlamp control unit	with code 640 (Dynamic LED headlamps, SAE, for right-hand traffic system) or code 641 (Dynamic LED headlamps for left-hand traffic system) or code 642 (Dynamic LED headlamps for right-hand traffic system)
E2n9	Right headlamp control unit	with code 640 (Dynamic LED headlamps, SAE, for right-hand traffic system) or code 641 (Dynamic LED headlamps for left-hand traffic system) or code 642 (Dynamic LED headlamps for right-hand traffic system)
N73	Ignition lock control unit	-
N127	Drivetrain control unit	-

Radar-CAN rear (CAN S2)

	Control unit	Additional information
B92/7	Right outer rear radar sensor	With CODE 23P (Driving assistance package)
B92/10	Left outer rear radar sensor	With CODE 23P (Driving assistance package)
N62/4	Mercedes-Benz Intelligent Drive control unit	With CODE 23P (Driving assistance package)

Telematics CAN (CAN A)

	Control unit	Additional information
A26/17	Head unit	with code 548 (Connect 20 MID (NTG6)) or code 549 (Connect 20 HIGH (NTG6))
A40/16	Head unit/instrument cluster display cluster	-
A105	Touchpad	With code 446 (Touchpad only)
B84/15	Hand motion sensor	With code 77B (Contactless gesture control at front)
N123/8	Mobile phone cradle control unit	with code 897 (Wireless mobile phone charging) or code 899 (Multifunction telephony)

Suspension FlexRay (Flex E)

	Control unit	Additional information
A40/11	Mono multifunction camera	with code 51B (Euro NCAP)
A40/13	Stereo multifunction camera	With CODE 23P (Driving assistance package)
B92/12	Short and long-range radar sensor	With CODE 23P (Driving assistance package)
B92/20	Collision warning system radar sensor	With CODE 258 (COLLISION PREVENTION ASSIST)
N30/8	Regenerative braking system control unit	-
N62	Parking system control unit	With code 235 (Active parking assist with PARKTRONIC)
N62/4	Mercedes-Benz Intelligent Drive control unit	With CODE 23P (Driving assistance package)
N68	Electrical power steering control unit	-
N73	Ignition lock control unit	-
N80	Steering column module control unit	-
N97	Rear axle electronic level control control unit	-
N127	Drivetrain control unit	-

Media Oriented System Transport (MOST)

	Control unit	Additional information
A26/17	Head unit	-
N40/3	Sound system amplifier control unit	With code 810 (Sound system)

Heater LIN (LIN B28)

	Control unit	Additional information
N10/8	Rear central control unit	-
N25/6	Rear seat heaters control unit	With CODE 872 (Rear seat heater)
N32/1	Driver seat control unit	With CODE 221 (Left electrically adjustable driver seat)
N32/2	Front passenger seat control unit	With CODE 222 (Electrically adjustable right front seat)

KEYLESS-GO LIN (LIN B27)

	Control unit	Additional information
N38	Rear switching module	With code 871 (HANDS-FREE ACCESS)
N69/5	KEYLESS-GO control unit	-

A/C operating unit LIN (LIN B8-3)

	Control unit	Additional information
N22/1	Climate control control unit	-
N22/4	Rear air conditioning operating unit	With code 581 (Automatic air conditioning)
N58/1	Climate control operating unit	-

Air conditioning control LIN 3 (LIN B8-3)

	Control unit	Additional information
A9/6	Electric refrigerant compressor	-
N22/1	Climate control control unit	-

Rain/light sensor LIN (LIN B16)

	Control unit	Additional information
B38/2	Rain/light sensor with additional functions	-
N10/6	Front central control unit	-

Seat occupied recognition LIN (LIN E2)

	Control unit	Additional information
N2/10	Supplemental restraint system control unit	-
N110	Weight Sensing System (WSS) control unit	With CODE U10 (Automatic front passenger airbag shutoff)
N112/9	HERMES control unit	With code 362 (HERMES LTE)

Lower control panel LIN (LIN A3)

	Control unit	Additional information
N72/1	Upper control panel control unit	-
N72/4	Left lower control panel	-
N72/5	Right lower control panel	-

High voltage safety

The interlock circuit is used for recognizing a completely connected HV system and is used as a safety precaution against access to active parts. For this purpose, a (+/-) 20 mA/88 Hz signal from the interlock circuit is looped through all component parts of the high-voltage on-board electrical system that are to be opened. To this end, there is a jumper in every removable and unscrewable high-voltage connection that conceals access to the high voltage contacts. When disconnecting or unscrewing the high-voltage connection, the jumper interrupts the interlock circuit.

The interlock circuit is also led switched in a series via the 12 V control units plug connection of the high-voltage components. When detaching a control units plug connection the interlock circuit is interrupted via the contacts interlock input and output.

A discontinuity of the interlock circuit while driving does not lead to switching off of the high voltage on-board electrical system. The high-voltage on-board electrical system is switched off only if selector lever position N or P is engaged for longer than three seconds and the vehicle speed is $v < 5$ km/h. Furthermore the high voltage on-board electrical system is also switched off in the selector lever position "D" for opening of the engine hood.

After switching off the ignition the vehicle cannot be started again if there is a fault in the interlock circuit. For an existing fault in the interlock circuit the vehicle standstill functions (ignition "OFF") are interrupted and the high voltage on-board electrical system deactivated.

Every access to the high-voltage on-board electrical system leads to an interruption of the interlock circuit and

thus to the deactivation of the high-voltage on-board electrical system under the above-mentioned conditions.

**Note**

The power electronics control unit, the battery management control unit, the alternating current charger for high-voltage batteries and the DC/DC converter control unit have an evaluation circuit for the interlock signal.

The Interlock alternator is located in one of the two battery management system control units. In every active high-voltage component (e.g. high-voltage battery and AC charger for high-voltage batteries), there is an interlock evaluation logic which carries out its own evaluation.

The error statuses can also be determined through evaluation of signals from the interlock circuit in the active high-voltage components (e.g. discontinuity, short circuit). In the other components (electric refrigerant compressor, high-voltage PTC heater), the interlock circuit is looped through.

**Note**

If, in the event of a crash, the SRS control unit triggers the pyrofuse (F63) or if the high voltage shutoff device is opened, the terminal 30c-signal line is interrupted and the following systems are switched off:

- High-voltage on-board electrical system
- Charging system
- Electrical drive

SN00.00-P-0080-07H	Driver assistance systems		
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Model 293

The driver assistance systems offer greater safety and comfort due to the increased driver assistance. The areas integral safety and Mercedes-Benz Intelligent Drive are increasingly interacting and cooperate synergistically in a cross-system concept. The EQC receives the current generation of the Driving Assistance Package (FAP 4.5).

The EQC makes a modular offer to the driver assistance systems. In addition to the standard equipment, the special equipment offers the possibility to individually construct the vehicle with regard to driver assistance. The most important driver assistance systems are compiled in packages.

The following driver assistance systems are available as individual systems:

- Blind Spot Assist (with code 234 (Blind Spot Assist))
- Traffic Sign Assist (with CODE 513 (Traffic Sign Assist))

Driving Assistance Packages:

- Driving Assistance Package with code 23P:
 - Active Distance Assist DISTRONIC
 - Comfortable braking towards stationary objects
 - Extended automatic restart in traffic jam
 - Adaptation of ground speed in case of Active Distance Assist DISTRONIC before route events (curves, roundabouts, toll stations, T-intersections) as well as when turning off/exiting highways/expressways
 - Active Steer Assist
 - Active Lane Keeping Assist
 - Active Emergency Stop Assist with automatic unlocking and initiation of an emergency call to the MB emergency center once the vehicle is at a standstill (country-dependent)

- Active Speed Limit Assist with anticipatory response to a change in the speed limit
- Active Brake Assist
 - With cornering and cross-traffic function
 - With end-of-tailback emergency braking function
- Evasive Steering Assist
- Active Lane Keeping Assist
- Active Blind Spot Assist
- PRE-SAFE® PLUS

Parking assistance systems

The following equipment is available as parking assistance systems:

- Reversing camera (with code 218 (Reversing camera))
- Active Parking Assist (with code 235 (Active Parking Assist with PARKTRONIC))
- Parking Package with reversing camera (with code P44 (Parking Package))
- Parking Package with 360° camera (with code P47 (Parking Package with 360° camera))

Steering wheel

The new steering wheel generation is used in the EQC. The control elements for the driver assistance systems TEMPOMAT/limiter are the Active Distance Assist DISTRONIC are located on the multifunction steering wheel. Acoustic feedback is provided for operations via the touch control (finger navigation pads). A speaker in the vehicle gives the acoustic operation feedback. It can be set via the multimedia system.

Multifunction steering wheel



P68.10-A018-76

SN00.00-P-0080-03H	Information, multimedia and communications systems		
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Model **293**



P68.10-A016-79

Information, multimedia and communications systems

The EQC receives the new Generation 6 telematics. the audio system with CONNECT 20 (code 548 (Connect 20 MID (NTG6))) is standard equipment. Special equipment is CONNECT 20 with code 549 (Connect 20 HIGH (NTG6)).

The system is the ability to learn thanks to artificial intelligence and can be personalized by the user. Additional special features are the high-resolution Widescreen Cockpit with Touchscreen operation and the intelligent voice control with natural speech recognition.

Feature	Description
Personalization, themes	Various settings can be saved under eight user profiles.
Augmented reality (with code U19 (Augmented reality))	During navigation, the navigation instructions, street names and house numbers are shown for example in the live video of the route in the multimedia system display.
Voice control	Natural speech recognition is possible with the convenient voice control. The user doesn't have to learn any voice commands. Different vehicle functions can also be operated via voice control.
Service activation/enabling	The activation and enabling of online services has been standardized via a software switch.
Car sharing	The multimedia system offers greater options for using car2go services.

Personalization

The personalization allows for the creation and administration of up to seven different driver profiles and

one guest profile. Depending on the vehicle equipment, the following settings can for example be saved in a profile:

- Climate control

- Display style of multimedia system
- Favorites, theme displays and suggestions
- Radio (including station list)
- Driver's seat and mirror settings (with code 275 (Electrically adjustable driver's seat with memory function))
- Most recent navigation destinations
- Ambiance illumination (with CODE 877 (Ambiance illumination))
- DYNAMIC SELECT I (Individual)

For recurring driving situations, e.g. long trips on the freeway, the preferred settings can be consolidated and saved. During this process, e.g. displays, such as the navigation map and favorite radio station as well as the preferred drive program can be set. These settings are saved when creating a theme display under the desired name (e.g. **"Long trip"**). During the next freeway trip, this theme display can be directly selected without having to realize each individual setting again.

Depending on the vehicle equipment, the following settings can, for example, be saved in a theme display:

- Visual style in the display of the multimedia system
- Main menu for multimedia system display
- Active audio source (e. g. radio or USB)
- Navigation settings
- Ambiance illumination (with CODE 877 (Ambiance illumination))
- DYNAMIC SELECT drive program

Augmented reality (with code U19 (Augmented reality))

The scenery in front of the vehicle is recorded by a camera and shown in the multimedia system display. Virtual objects and markings are then shown in the image. These can, for example, be street names, house numbers and navigation instructions.

Widescreen Cockpit

An innovation in the EQC is the free standing Widescreen Cockpit with an instrument cluster and a display of the multimedia system under the same glass cover. Both displays measure 10.25 inches (26 cm) diagonally. The settings in the instrument cluster can be controlled via touch control (left finger navigation pad on the steering wheel). The control of the contents of the multimedia system takes place via Touch Control (right finger navigation pad on steering wheel). The instrument cluster is characterized by an intuitive operation with two directly selectable zones. The instrument cluster and multimedia system display are, in each case, actuated by a separate control unit.

Head-up-display (with code 463 (Head-up display))

The Head-up display (A40/12) projects driving-relevant information (e.g. speed, navigation information) onto the windshield into the field of view of the driver. In this connection, solely information redundant to the displays is shown in the instrument cluster. The display of this information means that the driver does not have to avert his eyes from driving activities.

Control possibilities

Touch Control (finger navigation pads on steering wheel)

In the EQC, the Touch Control function is offered via the finger navigation pad on the steering wheel. All functions in the instrument cluster and multimedia system display can be operated via the finger navigation pads.

Touchpad in center console (with code 446 (Touchpad only))

Using the touchpad, all functions in the multimedia system display can be operated with gestures, similar to, for example, smartphones and tablet PCs. Furthermore, the touchpad facilitates handwriting recognition via which the destination addresses for the navigation can for example be entered.

Multimedia system display (touchscreen)

The display of the multimedia system is designed as a touchscreen. In addition to the tried-and-tested interaction via touch control and the touchpad, the multimedia and communication systems can also be operated via the multimedia system display.

LINGUATRONIC voice control

With LINGUATRONIC, the operation of the different systems is easier and more convenient. LINGUATRONIC can understand natural speech and offers the user the possibility to freely formulate their request without having to learn voice commands. In addition, LINGUATRONIC facilitates the execution of the desired action with a single voice input, e.g. **"Drive me to Mercedesstraße 100 in Stuttgart"**. The activation of the voice control via the keyword **"Hey Mercedes"** is also new. It is available in addition to the voice control switch on the steering wheel.

The following functions are available with the Mercedes EQ-specific voice commands:

- Displaying the energy flow: "Show me the energy flow"
- Reading out charge settings: "What are my charge settings?"
- Adjusting the max. SOC: "Charging up to 85%"
- Switching the auxiliary climate control on or off "Switch the auxiliary climate control on/off" or "Keep the vehicle air-conditioned"
- Search for charging point: "Where is the next charging station?" or "Where is the next charging point"

- Remaining range "How far can I drive" or "Tell me the current range"

Mercedes me connect

Mercedes me connect will be offered as an equipment package for the European market (15 countries that are supported by the Customer Assist Center in Maastricht).

Mercedes me connect offers, among other things, the following services:

- Accident and Breakdown Management (Mercedes me button and/or automatic accident or breakdown detection)
- Concierge Service (if service is activated), service appointment requests or similar (Mercedes me button)
- Mercedes-Benz Emergency Call System (SOS button)



The Concierge Service is available only in the U.S.A., Canada, Japan, Korea, and China.

The buttons integrated in the overhead control panel (service and info) are bundled in the EQC in the overhead control panel in the Mercedes me button.

Telephony

Hands-free function

The microphones for the hands-free function are no longer in the inside rearview mirror housing, rather are located at the front in the roof lining.

Smartphone integration (with code 14U (Smartphone Integration Package))

The following smartphone integration technologies are supported:

- Apple CarPlay
- Android Auto

The smartphone integration offers the driver access to apps on their smartphone. The human machine interface (HMI) is provided by the smartphone so that it is also available when driving. For all technologies, special apps are required that have been developed and released for the respective equipment. A basic set of apps can be preinstalled on the smartphone.

Inductive charging (with code 897 (Wireless mobile phone charging))

The inductive charging of the mobile phone takes place via the contact surface of the mobile phone cradle control unit. It offers the possibility of charging suitable smartphones wirelessly in the vehicle. The charging pad is accommodated in the front area of the center console in a stowage box/tray.



Only with code 899 (multifunction telephony): The mobile phone is capacitively coupled to the vehicle exterior antenna via the antenna on the mobile phone cradle control unit.

Sound system

The following sound systems can be selected in the EQC:

- Standard sound system (standard)
 - Speaker 6 (incl. frontbass 1)
 - Max. total power: 100 W
- Advanced Sound System (with code 853 ("Midline" sound system))
 - Speaker 9 (incl. frontbass 2)
 - 1 external booster amplifier
 - Max. total power: 225 W
- Burmester® surround sound system (with code 810 (Sound system))
 - Premium sound speaker 13 (incl. frontbasses 2)
 - 1 external Class-D amplifier
 - Burmester® lettering
 - Optimized sound pattern
 - Max. total power: 590 W

Digital Owner's Manual

The owner's manual for the vehicle is digitalized. The information contained therein can be called via the above-mentioned operating options in the multimedia system display.

The Digital Operator's Manual is supplemented with a printed edition.

SN00.00-P-0080-09H	Exterior lighting		
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Model 293

The EQC receives MULTIBEAM LED headlamp with ILS (Intelligent Light System) and active high beams assistant PLUS as standard equipment.

Shown on EQC 400 4MATIC with dynamic LED headlamp (MULTIBEAM LED), left attachment side



P82.10-A066-75

Dynamic LED headlamp (MULTIBEAM LED)

The EQC has newly formed headlamps with the MULTIBEAM LED lighting system, which allows anti-glare driving with continuous high beam. The MULTIBEAM LED lighting system facilitates optimal road illumination for different driving situations and weather conditions. The possible light functions are implemented by adjusting both the light output and the light distribution. The LED matrix consists of 24 individual LED, located in two rows. These generate a high beam strip matrix, through which the anti-glare high beam is realized. In the high beam, a curved high beam occurs as a result of displacement of the light center in the strip matrix.

The following additional functions are facilitated due to the control options of the lighting system:

- Active Highbeam Assist Plus
- City light
- Motorway light
- Cornering illumination
- Traffic circle light / junction light

Luminescent band in the radiator grille

The radiator grille of the EQC has a luminescent band on the top end in the form of a transversely running fiber-optic

cable. The luminescent band is characteristic for the EQC and serves as a position light or, in the state of the EQC, as a Coming Home light function.

Mercedes star

The EQC has an illuminated brand logo as special equipment for the North America market. The brand logo lights up as an additional position light when the low beam is switched on.

Rear lamps

The rear lamps of the EQC are in three parts. One one-piece luminescent band, completely fitted with LED, is located between the two rear lamps, which are also completely equipped with LED. The brake and turn signal light can be operated at different intensities depending on the driving condition and brightness of the environment (day/night) (multi-level functionality).

The luminescent band has the tail light and rear fog light functions integrated in it.

Shown on EQC 400 4MATIC rear lamps in LED technology with luminescent band, left side attachment



P82.10-A067-75

SN82.10-P-0010-01H	Interior illumination		
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Model **293**

Interior illumination

In the EQC, the ambient lighting with code 877 is used as special equipment.

With the ambient lighting, 64 light colors are also available that can be created by mixing the primary colors red, green and blue. The chips actuate the corresponding LEDs. In addition to the 64 light colors, 10 so-called color worlds are offered, which illuminate the vehicle interior with multiple coordinated light colors. The color world can in turn be combined with the available display styles so that an harmonious overall impression is created. Light effects are

added to this that can be individually activated. This includes a welcome effect. The brightness can be configured in two brightness zones in stages from 0 to 10.

Particularly noteworthy here is the further developed integration and layout of the ambient lighting in the vehicle interior. This new kind of ambient lighting is tangible, in particular, in the transition area between the upper and lower part of the instrument panel. The free standing Widescreen Cockpit as well as the center console are also integrated in the ambient lighting.

Ambient lighting (with code 877)



P82.20-A017-76

SN00.10-P-0010-22H	Seats		
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Model 293

The seats of the EQC fulfill the highest standards with regard to comfort, safety, and material selection. The combination options for the seats with the lines, packages and special equipment have been restructured. The seats are differentiated by their contour, seam patterns and the material of the covers as well as the type of head restraints. Special equipment such as the seat heating, seat ventilation or the multicontour seats increase the traveling comfort for the vehicle occupants.

Front seats

Seat climate control (with code 401 (Seat climate control for driver and front passenger))

The seat climate control includes the seat heating and the seat ventilation. For the seat ventilation, there is a radial fan located in each case in the upholstery of the seat cushion and the backrest that supplies the air through the seat structure. The intaken air flows through the seat structure and is transferred via the fans downward and toward the rear. The vehicle occupant is surrounded by a

pleasant air flow. Also in the case of a very hot vehicle interior, the intake of cooler ambient air allows for a very rapid cooling down of the hot seat surfaces to skin temperature. Due to the ventilation phase, the seat surface has a pleasant temperature and moisture is dissipated. The ventilation level (fan speeds and thus the air speed) has three stages.

Multicontour seats (with code 409 (Left/right front multicontour seats))

Due to an electrically driven pneumatic pump, the seat side bolsters and lumbar supports for the driver and front passenger can be individually set. Due to the adjustable seat side bolsters, a better lateral support can be achieved by changing the backrest width. A pulsating and/or wave-like inflation and deflation of the lumbar support provides a massage effect in the lumbar area.

The multicontour seat functions are operated via the multimedia system display (touchscreen).

SN77.00-P-0000-01H	Sliding sunroof		
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Model **293**

As special equipment with code 414 (sliding roof), the EQC offers an electrically driven, internally running sliding roof.

EQC 400 4MATIC, sliding roof with code 414, front right side view



P77.20-A002-76

SN83.00-P-0010-01H	Climate control		
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Model 293

The EQC has the 2 zone THERMATIC automatic climate control with code 580 (air conditioning) as standard.

The climate control with 2-zone temperature control has a temperature control for the right and left sides of the vehicle. The 3-zone THERMOTRONIC with code 581 (automatic air conditioning) is available as special equipment.

The offer as standard or special equipment depends on the respective market and engine.

The heating of the EQC occurs differently depending on the ambient temperatures and the temperature of the high-voltage battery. At ambient temperatures under +5° C and when the battery is warm, heat from the cooling circuit, via the electric refrigerant compressor, is transferred into the heater circuit of the vehicle interior via the refrigerant circuit in accordance with the heat hump principle. If this heat is not sufficient to heat the vehicle interior, the electric, upstream PTC heater booster (N33/4) is activated in the heater circuit.

At ambient temperatures under +5° C to -5° and if waste heat is missing from the high-voltage battery, the heating takes place via the electric PTC heater booster (N33/4) in the heater circuit.

If the vehicle interior is heated quickly and comfortably, a second electric, upstream PTC heater booster (N33/5) is activated in the cooling circuit. The PTC heater booster in the cooling circuit is used primarily to heat the high-voltage battery.

At ambient temperatures over +5° C, the condensation heat on the evaporator and the waste heat of the compressor are used for heating the vehicle interior. If this heat is not sufficient, it can be reheated with the high voltage PTC in the heater circuit.

Pre-air conditioning

The pre-entry climate control in the EQC additionally provides greater comfort when getting in the vehicle. The vehicle interior is already pre-heated or cooled down and the air quality (with code P21 (air quality package)) improved. The pre-entry climate control thus takes place efficiently and without any emissions via the high-voltage battery.

The temporary pre-entry climate control is activated:

- By unlocking when getting into the vehicle
- Via the pre-entry climate control button
- By activating a departure time in the head unit
- Via a browser/App e.g. with a smartphone, tablet, or PC

The scope of pre-entry climate control includes:

- Automatic air conditioning
- Heating of mirror and rear windows
- Seat heater

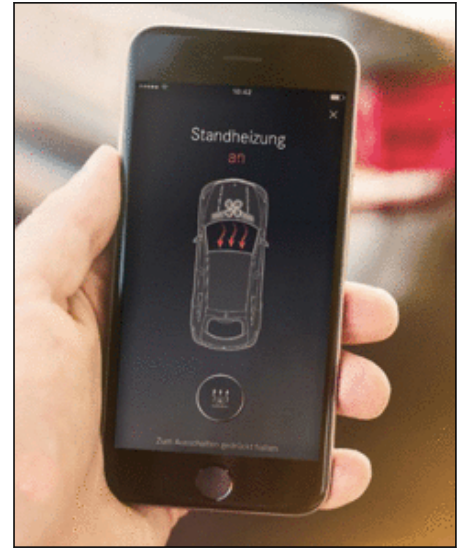
In combination with CONNECT 20 or Mercedes me connect, the coupling of the release of the vehicle with the pre-entry climate control can be configured via the vehicle key.

In general, the climate control times depend on the selected function. If the vehicle is unlocked, heating mode can be possible for a maximum of 30 minutes. Heating mode is ended after this time has elapsed, when the vehicle is started, when the pre-entry climate control button is actuated. During pre-entry climate control via the APP the pre-entry climate control button, the time is limited to 30 minutes. It can be activated for a second time for a further 30 minutes if the on-board electrical system has sufficient power. If the pre-entry climate control is actuated via the departure time, the maximum air conditioning time depends on the ambient conditions.

Pre-entry climate control of the vehicle via app

Always the optimum temperature in the vehicle with the pre-entry climate control of the vehicle interior before departure. Whether actuated weekly or daily at a previously defined time or flexibly via a smartphone app, the customer can preheat or cool vehicle interior.

The customer always has transparency concerning the pre-entry climate control process, by receiving a push notification if e.g. the pre-entry climate control was started or ended or an error occurs. If the function is used regularly, a weekly profile can be created. Customers therefore do not need to think about starting the manual pre-entry climate control on time in order for the vehicle to be preheated.

View of preconditioning of the vehicle via the App

P82.90-A004-72

AIR-BALANCE Package (with code P21 (Air quality package))

The air quality package contains the ionization, fragrancing, and improved interior filtering of 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.

ENERGIZING comfort control with code PBP (ENERGIZING package)

The ENERGIZING comfort control with code PBP (ENERGIZING package) combines various individual functions (e.g interior lighting, climate control, audio) to form programs, which are assigned to certain guiding themes. Characteristics of these individual functions generally serve to improve the individual well-being of the driver/all vehicle occupants. Mental and physical fitness can also be increased due to the attuned response of various senses. In monotonous driving situations, the driver can be supported by an activating or refreshing program; in

emotionally stressful situations, the driver can be supported by a relaxing or warming program. A program with guided relaxation exercises can help with tension.

The following is required as minimum equipment:

- Connect 20 HIGH (NTG6) (Code 549)
- Ambient lighting (code 876)

The seat heating for the driver and front passenger (code 873) is included in the package.

ENERGIZING comfort control with code PBR (ENERGIZING package plus)

The ENERGIZING comfort control with code PBR (ENERGIZING package plus) also requires the following special equipment:

- Left/right front multicontour seats with code 409
- Seat climate control for driver and front passenger with code 401

SN00.00-P-0080-04H	Locking and security		
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Model 293

KEYLESS-GO

The EQC receives the new generation of the closing and drive authorization system. New features are:

- Design of the vehicle key
- New or extended functions of the system
- KEYLESS-GO start/stop button (in combination with KEYLESS-GO Package series (Code P17))
- Remote rear-end door closing also via the vehicle key
- Vehicle access and drive authorization via smartphone as additional "key."

With the introduction of the EQC, the KEYLESS-GO Convenience Package is offered.

KEYLESS-GO Convenience Package with code P17 (KEYLESS-GO Package):

- KEYLESS-GO start
- KEYLESS-GO (vehicles with KEYLESS-GO)
- HANDS-FREE ACCESS (vehicles with HANDS-FREE ACCESS)

HANDS-FREE ACCESS is an additional comfort function that is offered as special equipment in combination with the KEYLESS-GO Convenience Package. The trunk lid can be fully automatically opened and closed via a kick movement of the foot centrally under the rear bumper. Two capacitive sensors located one above the other detect the kick movement of the foot. When a kick movement is detected, the control unit searches for a valid key. If this is found in the detection range, the control unit starts the opening of the trunk lid. An initiated movement of the trunk lid can be interrupted and reversed at any time via a kick movement. A warning tone is emitted to draw attention to the opening and closing of the trunk lid via HANDS-FREE ACCESS. A blockage detection stops the trunk lid movement once an obstacle is detected.

EASY-PACK liftgate with code 890

With the EASY-PACK special equipment, the liftgate can be opened or closed comfortably and automatically with the press of a button. This supports smaller people in particular when closing the liftgate. Thanks to a targeted opening limiter the risk of damage is additionally reduced.

The opening procedure of the liftgate can be initiated either via the button on the vehicle key, the switch in the driver's door, or the release handle on the liftgate. To avoid possible contact, e.g. with the garage door, the liftgate can be stopped in any given position.

For safety reasons, the automatic closing can be activated only via the switch on the liftgate and an automatic interruption then occurs if the cargo obstructs closing. Independently of that, manual opening and closing via the release handle on the liftgate is possible.

Digital key for smartphone (with code 896 (Vehicle access and drive authorization via mobile phone))

With the digital key, the customer has another option for unlocking/locking their vehicle and obtaining drive authorization. The system access and drive authorization via smartphone is offered in combination with Convenience Telephony Plus.

Requirements:

- Registration and setup via Mercedes me connect; in this connection, the cell phone number of the car owner, among other things, is checked
- Near-field communication (NFC) capable smartphone with a linked security modules or NFC SIM from Vodafone

If the customer holds their smartphone close to the door handle of the driver's door, the authentication takes place between their smartphone and their vehicle via NFC. NFC transfers data over very short distances, the eavesdropping of these data during the transfer process is thus very unlikely. The smartphone is placed in a NFC-capable stowage tray in the vehicle. Once authentication has taken place in the drive authorization system, the vehicle can be started via the start/stop button. The smartphone and key can both be used or can independently be used for access and/or drive authorization. The number of functions that can be executed via the key is, however, currently larger than that with the smartphone.

Apart from the NFC-capable smartphone, a digital vehicle key sticker can also be used, which, for example, is bonded to a smartphone. All functions of the digital key are then, as previously described, possible with this digital key sticker.

SN00.00-P-0080-06H	Occupant protection		
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Model 293

Safety concept

The holistic safety concept of the EQC is taken from model series 253. The EQC offers comprehensive driver assistance systems. For passive safety, the high-voltage battery applies in particular for especially strict safety specifications. The drive components of the EQC accommodated in the engine compartment and in the underbody in such a way that they save space and are protected.

Switching off the high voltage on-board electrical system

During servicing, it must be possible to switch off the high-voltage on-board electrical system. To do this, the high-voltage output of the high-voltage battery can be disconnected from the high-voltage on-board electrical system by contactors actuated by the battery management system control unit. The pyrofuse and the high voltage switch-off device are located in the control line of the contractor, connected in series.

Accident

The EQ blue strips on the wheel rims and the designation "EQC" on the side fenders allow make it possible to recognize the alternative drive concept of the EQC. No special requests to omit this lettering will be entertained (in a departure from the normal situation). This means that rescue services can identify that it is a vehicle with high voltage components. In the event of an accident, the high-voltage on-board electrical system can be shut off by the SRS control unit. In addition, there is an alternative rescue separation point (conductor loop for rescue services to be cut through physically) for immediate deactivation of the

high-voltage on-board electrical system on the left fuse box on the A-pillar.



Access to the rescue data sheets (rescue cards) of all Mercedes-Benz passenger cars is offered by Daimler AG's mobile app "Rescue Assist". In addition to a QR code scanner for the rescue stickers, this app can also be used to digitally download the rescue data sheet of the vehicle in question by means of a list.

High voltage rapid discharging in the case of a crash

In the event of a crash (pyrofuse ignited or crash signal on CAN), the contactors of the high-voltage battery are opened and the high-voltage on-board electrical system is discharged within 5 seconds to a voltage of less than 60 V. The energy is thus turned into heat by the high voltage components.

Safety function after an accident - shutoff by restraint system control unit

The automatic shutoff of the high-voltage battery and the discharging of the high voltage components take place during driving or when the ignition has been switched on via the restraint system control unit. Depending on the severity of the accident and the impact side, the high voltage on-board electrical system is switched off reversibly or irreversibly. In the event of a reversible shutoff, a restart procedure may be possible. In the event of an irreversible shutoff, the high voltage on-board electrical system is deactivated via a pyrofuse and can only be re-commissioned by the workshop personnel after replacing the pyrofuse.

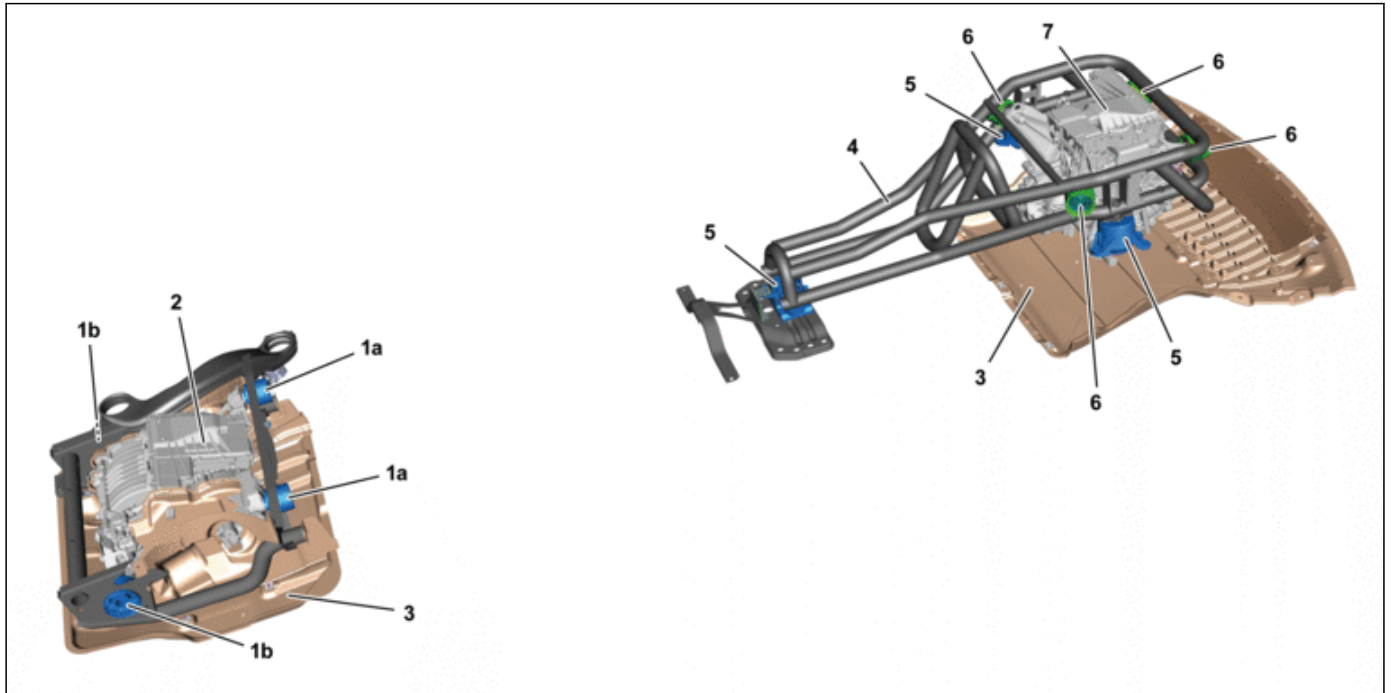
"EQC" badge on the side fenders



P00.01-A000-81

SN60.00-P-0001-02H	Bodyshell components		
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Model **293**



P60.00-A006-79

Overview of assembly frame and engine mount

- 1a *Bearing for front electric drivetrain (rear axle)*
 1b *Bearing for rear electric drivetrain (rear axle)*
 2 *Rear axle electric machine*
 3 *Drivetrain cover*

- 4 *Front drivetrain assembly frame reinforcement*
 5 *Front engine mount*
 6 *Bearing for electric drivetrain (front axle)*
 7 *Front axle electric machine*

Decoupling the drive unit

Electric vehicles have a reputation for being practically silent, in particular, because they do not have a noisy combustion engine. But maximum engine speeds of the electric machines of around 13,000 1 rpm present particular requirements for noise decoupling. In the EQC, particularly good noise comfort has been striven for through

various measures. In the EQC, the electric drivetrains are decoupled twice via the elastomer bearing:

- The front drivetrain opposite its assembly frame (4-type)
- The front assembly frame opposite the body (3-type)
- The rear drivetrain opposite its assembly frame (4-type)
- The rear assembly frame opposite the body (4-type)

SN00.01-P-0000-01H	Service Information		
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Model **293**

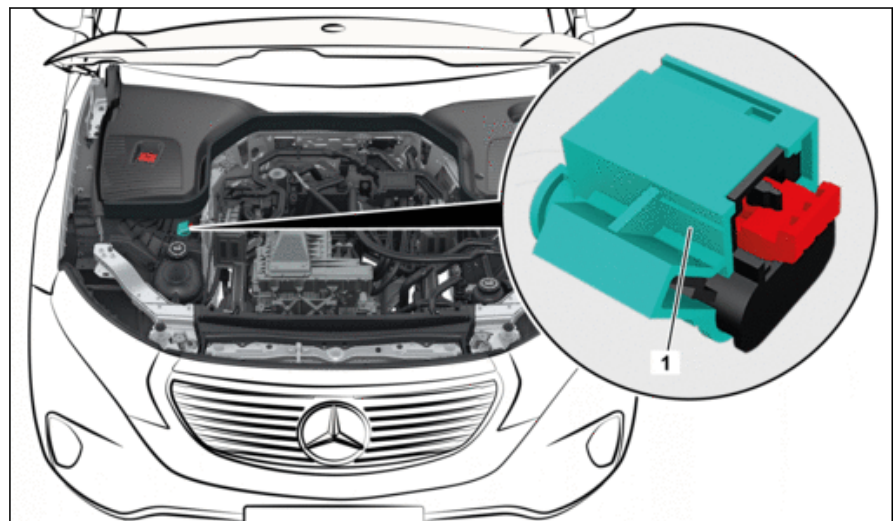
Disconnect power

To conduct any repair and service operations without any risk of electric shock, the power must be disconnected from the high voltage-on-board electrical system and it must be secured against being switched back on again. Document the enabling and the restart procedure in a vehicle power disable event log or vehicle restart procedure log. Archive the event logs together with the vehicle temperature documents. The diagnosis-based power disconnect of the

high-voltage on-board electrical system occurs through the vehicle diagnosis.

In the EQC, a manual high-voltage disconnect device is installed so that it is safe against manipulation under the hood in the area of the coolant expansion reservoir. The locking of the high-voltage disconnect device with a shackle-type lock prevents unauthorized activation of the high-voltage on-board electrical system.

1 High-voltage disconnect device



P54.10-A059-75

Diagnosis

The diagnosis of the EQC takes place as usual with XENTRY Diagnostics. This enables the vehicle to be identified with all its equipment features as well as an accurate fault assessment, fault rectification and evaluation of vehicle-specific values and parameters to be made. When conducting diagnosis activities on high voltage vehicles and their high-voltage components, special qualification measures are required. People without this qualification must not perform any diagnoses.



Only trained workshop personnel (experts in working on HV intrinsically safe series production vehicle, model series EQC model 293) are permitted to perform diagnosis-based power disconnect and work on the high-voltage on-board electrical system.

Cooling circuit



The vehicle must always be bled via the bleeding routine with the diagnostic equipment. For filling and bleeding the two cooling circuits, the following WIS documents must be observed:

- "Drain/fill coolant of main circuit" AR08.50-P-0023EQ
- "Drain/fill coolant of auxiliary circuit" AR08.50-P-0022EQ

Working on the vehicle



Only trained workshop personnel (experts in working on HV intrinsically safe series production vehicle, model series EQC model 293) are permitted to perform manual power disconnect and work on the high-voltage on-board electrical system. Please read the Service Information: "Personal protective equipment for working on high-voltage on-board electrical systems" SI54.10-P-0047A.

For manual enabling, additional training is required.

Deactivation of high voltage on-board electrical system in event of accident and short circuit

Deactivation of the high voltage on-board electrical system in the event of an accident is initiated by triggering the pyrofuse. The separator element is actuated by the Supplemental Restraint System (SRS) control unit when a crash is detected. This leads to all the poles being separated from the power sources, to deactivation of the electrical machine's generator mode, and to discharging of the capacitors to a value less than the dangerous voltage range. A gradual deactivation of the high voltage on-board electrical system takes place in the event of a short circuit using software and electrical fuses.

Safety precautions

To protect against any contact with the voltage of the high voltage on-board electrical system, numerous safety

measures have been implemented. Contact protection is provided for the entire system through the housing, insulation and covers. The components of the high voltage on-board electrical system are connected through electric lines conducting high voltages. Neither the positive nor the negative terminal of the high voltage on-board electrical system is connected to the vehicle mass.

Constructive contact protection safety measures:

- Housing
- Covers
- Insulation
- Electrical connector

The potential equalization consists of a conductive connection to the chassis (vehicle mass).

Specific component request:

- Potential separation
- Isolation resistance
- Voltage sustaining capability

Specific system requirement:

- Total resistance
- Isolation resistance
- Packaging specifications

Warning label



P08.00-2121-80

QR code for rescue services

Thanks to the QR code adhesive label, the rescue service and view the vehicle's rescue card quickly and directly. The code is scanned using an Internet-capable, mobile terminal and a free app. The rescue card is displayed in the language set in the terminal.

Two QR code adhesive labels are attached to the vehicle. One adhesive label is stuck to the inside of the fuel filler flap, the second to the opposite B-pillar.

Towing

The vehicle can be towed away up to a distance of 50 km at a maximum speed of 50 km/h. Requirement:

- Selector lever in position "N"
- The front axle has been raised or both axles are on the ground

If one of the following events occurs, the vehicle is to be loaded onto a suitable means of transport:

- The transmission cannot be brought into position "P"
- Failure of the multifunction display
- Transport of the vehicle across a length of > 50 km
- The following display message appears: Towing not permitted



Further information on tow-start and towing can be found in the current operator's manual.

SN00.00-P-0080-11H	Overview of special tools		
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Model 293

Drift

Usage Drift for assembling the radial shaft sealing rings of the drive shafts on the transmission of the electric machine.

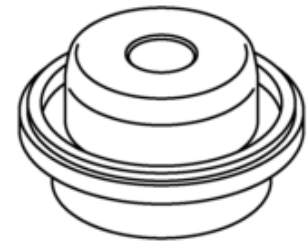
MB number 253 589 00 15 00

FG 08

Set B/C

Category Mercedes-Benz Passenger Cars Basic Operation mandatory/without exception

Note -



253 589 00 15 00

Extraction and insertion tool

Usage Extraction and insertion tool for extracting and inserting the spring link bushings in the rear axle carrier.

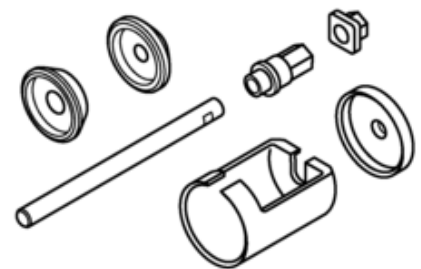
MB number 293 589 00 43 00

FG 35

Set B

Category Mercedes-Benz passenger cars special operation

Note



293 589 00 43 00

SN00.00-P-0080-11H

Extraction and insertion tool

Usage Extraction and insertion tool for extracting and inserting the bearings of the electric motors on the front and rear axle.

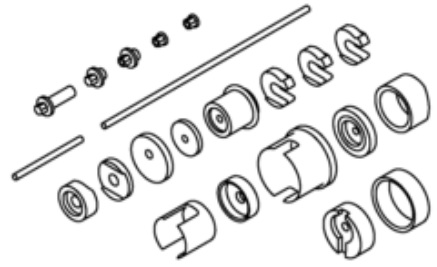
MB number 293 589 01 43 00

FG 08

Set B

Category Mercedes-Benz passenger cars special operation

Note In combination with W652 589 00 33 21 hand pump (Mercedes-Benz Passenger Cars Basic Operation mandatory/released alternative/released for cooperation), W652 589 00 33 23 hydraulic hose (Mercedes-Benz Passenger Cars Basic Operation mandatory/released alternative/released for cooperation), W652 589 00 33 22 hollow cylinder (Mercedes-Benz Passenger Car Basic Operation mandatory/released alternative/released for cooperation)



293 589 01 43 00

SN00.00-P-0080-14H	Workshop equipment		
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Model 293

Body measurement system (BLACKHAWK)

Usage Body measurement system for measuring and evaluating the body structure according to the Mercedes-Benz standard before and after reforming work.

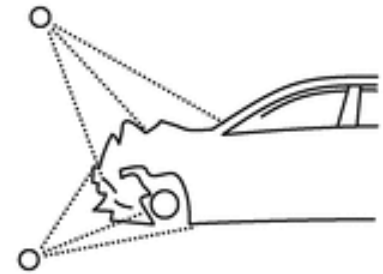
MB number 000 588 06 23 00

FG 60

Set B/K

Category Mercedes-Benz Passenger Cars Special Operation

Note Only the electronic measuring system and not beam trammel measurement is permitted for the specification of the damage scope with a measuring system due to the tight bodysell production tolerance. The post-accident alignment check and in particular the analysis of all aluminum structural parts of the body are solely realized by means of the repair method described in WIS.



000 588 06 23 00

Body measurement system (CAR BENCH)

Usage Body measurement system for measuring and evaluating the body structure according to the Mercedes-Benz standard before and after reforming work.

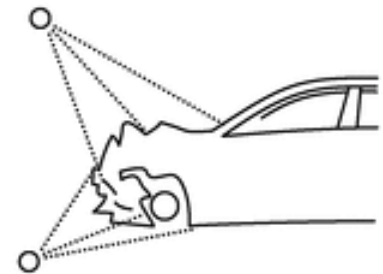
MB number 000 588 11 23 00

FG 60

Set B/K

Category Mercedes-Benz Passenger Cars Special Operation

Note Only the electronic measuring system and not beam trammel measurement is permitted for the specification of the damage scope with a measuring system due to the tight bodysell production tolerance. The post-accident alignment check and in particular the analysis of all aluminum structural parts of the body are solely realized by means of the repair method described in WIS.



000 588 11 23 00

Body measurement system (CAR-O-LINER)

Usage Body measurement system for measuring and evaluating the body structure according to the Mercedes-Benz standard before and after reforming work.

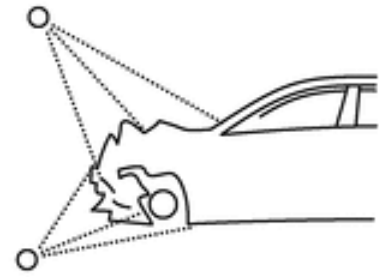
MB number 000 588 14 23 00

FG 60

Set B/K

Category Mercedes-Benz Passenger Cars Special Operation

Note Only the electronic measuring system and not beam trammel measurement is permitted for the specification of the damage scope with a measuring system due to the tight bodyshell production tolerance. The post-accident alignment check and in particular the analysis of all aluminum structural parts of the body are solely realized by means of the repair method described in WIS.



000 588 14 23 00

Body measurement system

Usage Body measurement system for measuring and evaluating the body structure according to the Mercedes-Benz standard before and after reforming work.

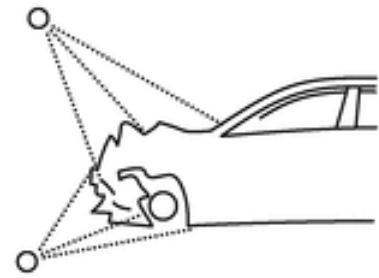
MB number 000 588 37 23 00

FG 60

Set B/K

Category Mercedes-Benz Passenger Cars Special Operation

Note Only the electronic measuring system and not beam trammel measurement is permitted for the specification of the damage scope with a measuring system due to the tight bodyshell production tolerance. The post-accident alignment check and in particular the analysis of all aluminum structural parts of the body are solely realized by means of the repair method described in WIS.



000 588 37 23 00

Data sheet (CAR-BENCH)

Usage	Vehicle-specific assembly plan for checking and securing the structural components during body repair work according to the Mercedes-Benz standard.
MB number	293 588 12 23 00
FG	60/61/62/63/64
Set	B/K
Category	Mercedes-Benz Passenger Cars Special Operation
Note	In combination with W000 588 02 23 00 body straightening system.



293 588 12 23 00

Data sheet (CAR-O-LINER)

Usage	Vehicle-specific assembly plan for checking and securing the structural components during body repair work according to the Mercedes-Benz standard.
MB number	293 588 13 23 00
FG	60/61/62/63/64
Set	B/K
Category	Mercedes-Benz Passenger Cars Special Operation
Note	In combination with W000 588 03 23 00 body straightening system.



293 588 13 23 00

Data sheet (CELETTE)

Usage	Vehicle-specific assembly plan for checking and securing the structural components during body repair work according to the Mercedes-Benz standard.
MB number	293 588 14 23 00
FG	60/61/62/63/64
Set	B/K
Category	Mercedes-Benz Passenger Cars Special Operation
Note	In combination with W000 588 04 23 00 body straightening system.



293 588 14 23 00

SN00.00-P-0080-14H

Assembly device

Usage Assembly device for removal/installation of the HV battery to the vehicle underbody. In addition, the assembly device can be inserted for the repair, transportation, and temporary storage of the batteries.

MB number 001 588 00 54 00

FG 54

Set B

Category Mercedes-Benz passenger cars Basic Operation mandatory/without exception – new standard for future Mercedes-Benz EQ service operations

Note -



001 588 00 54 00

Adaptation

Usage Adaptation for mounting the HV battery, to enable it to be raised using the vehicle lift.

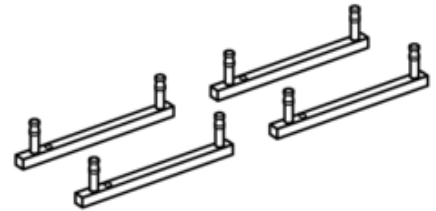
MB number 000 588 16 31 00

FG 54











Set B

Category Mercedes-Benz passenger cars Basic Operation mandatory/without exception – new standard for future Mercedes-Benz EQ service operations.

Note In combination with W001 588 00 54 00 assembly device (Mercedes-Benz passenger car Basic Operation mandatory/without exception and Mercedes-Benz Transporter Special Operation).



000 588 16 31 00

SN00.01-P-0003-01H	Overview of vehicle functions	Model 293	
 GF	Explanation of vehicle functions, telematics		GF00.00-P-1000-02LF
 GF	Explanation of vehicle functions, driving assistance systems		GF00.00-P-1000-03LF
 GF	Explanation of vehicle functions, parking systems		GF00.00-P-1000-04LF
 GF	Explanation of vehicle functions, instrument cluster		GF00.00-P-1000-05LF
 GF	Explanation of vehicle functions, body		GF00.00-P-1000-09LF
 GF	Explanation of vehicle functions, interior equipment		GF00.00-P-1000-10LF
 GF	Explanation of vehicle functions, equipment notes		GF00.00-P-1000-11LF
 GF	Explanation of vehicle functions, anti-theft and locking		GF00.00-P-1000-13LF
 GF	Explanation of vehicle functions, exterior lighting		GF00.00-P-1000-14LF
 GF	Explanation of vehicle functions, electric vehicle		GF00.00-P-1000-16LF

Model 293