

Technical training.
Product information.

G06 Complete Vehicle



BMW Service

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BMW Group University
Technical Training

ST1910

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General information

Symbols used

The following symbol is used in this document to facilitate better comprehension or to draw attention to very important information:



Contains important safety information and information that needs to be observed strictly in order to guarantee the smooth operation of the system.

Information status: July 2019

BMW Group vehicles meet the requirements of the highest safety and quality standards. Changes in requirements for environmental protection, customer benefits and design render necessary continuous development of systems and components. Consequently, there may be discrepancies between the contents of this document and the vehicles available in the training course.

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For changes/additions to the technical data, repair procedures, please refer to the current information issued by BMW of North America, LLC, Technical Service Department.

This information is available by accessing TIS at www.bmwcenternet.com.

Additional sources of information

Further information on the individual topics can be found in the following:

- Owner's Manual
- Integrated Service Technical Application
- Aftersales Information Research (AIR)

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G06 Complete Vehicle

1. Introduction

The new BMW X6 with the development code G06 will be launched in November 2019. It places the emphasis on power and athleticism. The G06 combines the presence of an X model with the sportiness of a Coupé. Based on the G05, the G06 has a sportier design without compromising on functionality.

Since the G05 forms the basis for the G06, this product information module only describes the particular features specific to the BMW X6. Details of all the shared features can be found in the product information modules for the G05 and G07.



BMW G06

TG19-0677

1.1. Further information

Detailed descriptions of the components that the G06 shares with the G05 and G07 and the powertrains can be found in the following product information modules:

Title	File name
G05 Body	ST1831 G05 Body
G05 Powertrain/Chassis	ST1831 G05 Powertrain/Chassis
G05 General Vehicle Electronics	ST1831 G05 General Vehicle Electronics
G05 Driver Assistance Systems	ST1831 G05 Driver Assistance Systems
G05 Infotainment	ST1831 G05 Infotainment
G05 Displays & Controls	ST1831 G05 Displays & Controls
G07 Complete Vehicle	ST1832 G07 Complete Vehicle
G12 LCI Complete Vehicle	ST1901 G12 LCI Complete Vehicle
N63TU3 Engine	ST1854 N63TU3 Engine
B58TU Engine	ST1853 B58TU Engine

G06 Complete Vehicle

1. Introduction

Title	File name
GA8HP Automatic Transmission	ST1831 G05 Powertrain/Chassis
Driver Assistance Systems 2018	ST1858 Driver Assistance Systems 2018
Electrical System 2018	ST1856 General Vehicle Electronics 2018

1.2. Models

The G06 will be available at market introduction with the following models:

Model	Engine	Cubic capacity [cm ³]	Power in kW (HP)	Torque in Nm
X6 M50i	N63B44T3	4395	390 (523)	750
X6 xDrive40i	B58B30M1	2998	250 (335)	450
X6 sDrive40i	B58B30M1	2998	250 (335)	450

1.3. Weights and payload

Models	Unit	Vehicle curb weight US	Payload
X6 M50i	lbs	5115	926
X6 xDrive40i	lbs	4784	893
X6 sDrive40i	lbs	4687	938

G06 Complete Vehicle

1. Introduction

1.4. Dimensions

The external dimensions of the G06 are listed below. For comparison, the table also shows the external dimensions of the G05.

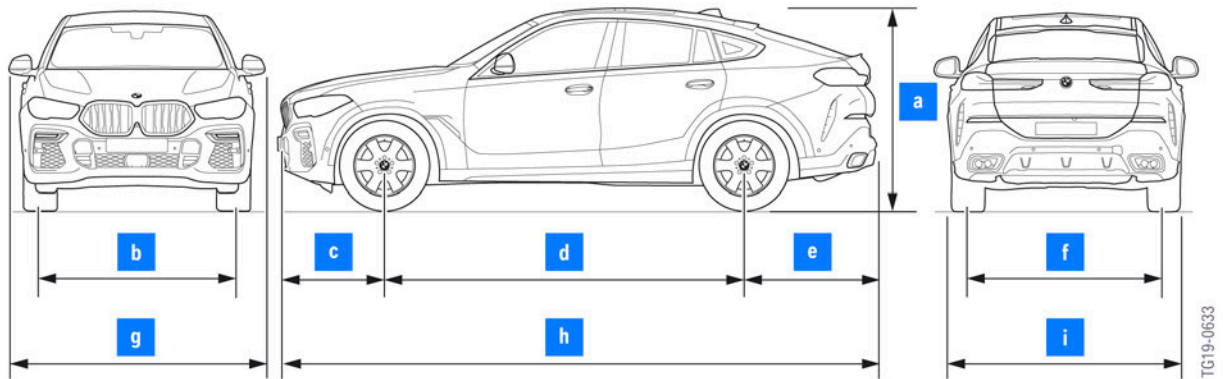


Diagram of G06

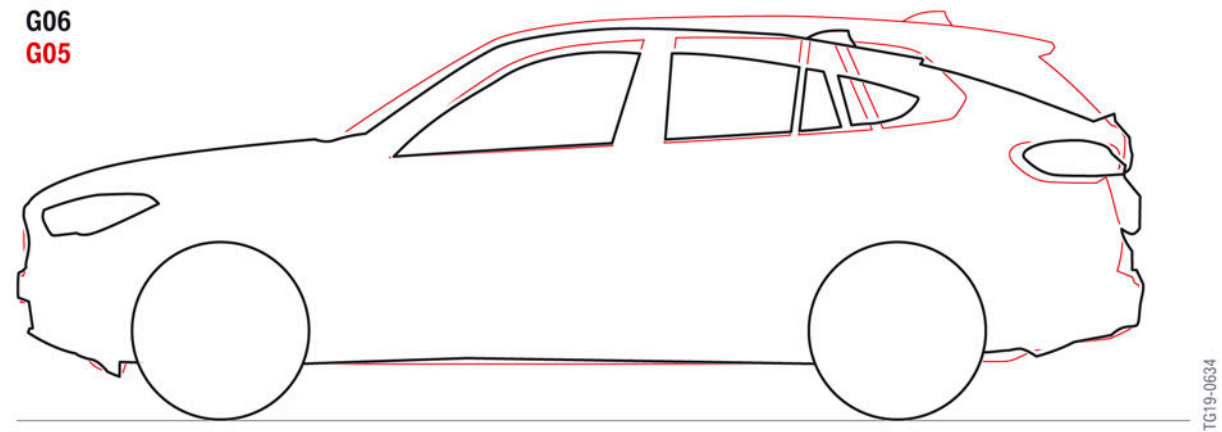
Index	Explanation	G06 [mm]	G05 [mm]
a	Vehicle height, empty	1696	1745
b	Front track width, basic wheels	1678	1666
c	Front overhang	890	874
d	Wheelbase	2975	2975
e	Rear overhang	1082	1073
f	Rear track width, basic wheels	1698	1686
g	Vehicle width including exterior mirrors	2212	2218
h	Vehicle length	4947	4936
i	Vehicle width excluding exterior mirrors	2004	2004

G06 Complete Vehicle

1. Introduction

1.5. Silhouette comparison

A silhouette (outline) comparison with the G05 shows the differences in the dimensions of the two vehicles.



Silhouette comparison of G06 and G05

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2. Body

2.1. Exterior equipment

2.1.1. Exterior design

Even though the G06 is based on the G05, the exterior design of the BMW X6 differs from that of the BMW X5. Particularly striking at the front is the kidney-shaped radiator grill with its distinct design. The individually fashioned front and rear bumpers and the roof and rear spoilers underline the emphatically sporty character of the G06.



G06 Exterior design highlights

TG19-0635

G06 Complete Vehicle

2. Body

Index	Explanation
1	Illuminated kidney grill, (option 3DN)
2	Distinct front bumper
3	Headlight not extending as far as the radiator grill
4	Roof spoiler
5	Unique rear light cluster
6	Distinct rear bumper
7	Rear spoiler

2.1.2. Illuminated Kidney Grill

The optional equipment Illuminated kidney grill (SA 3DN) is available directly on the market introduction of the G06.

The radiator grill is illuminated by white LEDs which are located at the top of the radiator grill. The sides and the lower area of the radiator grill are illuminated indirectly by means of fiber-optic conductors.



Illuminated kidney grill

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2. Body

The lighting can be set in the CID for the following applications:

- Opening/closing the vehicle
- Opening the doors or the tailgate
- Activating the ambient lighting.

It can also be used while driving by activating the ambient lighting.

2.1.3. Flow-optimized A-pillar and exterior mirror

The A-pillar and the exterior mirror are flow-optimized in the new BMW X6. These measures reduce the generation of noise at the front side windows and thereby enhance passenger comfort.



Flow-optimized A-pillar and exterior mirror

Index	Explanation
1	A-pillar, flow-optimized
2	Exterior mirror, flow-optimized
3	Side window

G06 Complete Vehicle

2. Body

2.1.4. Panorama glass roof

A panorama glass roof is standard for the G06. The design, function and operation are the same as for the panorama glass roof of the G05.



TG19-0638

G06 Panorama roof

Index	Explanation
1	Glass slide/tilt sunroof
2	Fixed glass roof panel

2.1.5. Electric tailgate

When compared with the G05 and G07, the tailgate of the G06 is designed as a single part. The standard equipment already includes electric opening and closing of the tailgate.

The tailgate can be actuated as follows:

- The tailgate can be opened or closed by pressing the button in the driver's door.
- The tailgate can be opened or closed by pressing the button on the ID transmitter.
- The tailgate can be opened by pressing the button on the outside of the tailgate.
- The tailgate can be opened or closed contactlessly with the corresponding foot movement.
- The tailgate closes automatically when the button on the tailgate is pressed.

G06 Complete Vehicle

2. Body

2.2. Interior equipment

2.2.1. Overview

Apart from a few minor details, the design of the G06 interior is the same as the G05 interior. Apart from the inside door handles, only some decorative trims have minor differences in design or materials.



G06 Interior

2.2.2. B-pillar

The coat hook is mounted on the B-pillar in the G06. The positioning on the B-pillar ensures better rearward visibility compared with a coat hook on the grab handle.



B-pillar with integrated coat hook

G06 Complete Vehicle

2. Body

2.2.3. Second-row seating

The second-row seating in the G06 is designed as a rear seat bench with the usual 40:20:40 split and mechanically folding backrests. The backrests are folded by means of the release mechanism on the respective backrest itself or via the release handle in the luggage compartment.

The outer seats have the same decor as the driver's and front passenger seats. The contour of the outer seats also adopt the design of the front seats and lend the rear seat bench a sporty character. The head restraints are integrated in the backrest and are non-adjustable. The center armrest with integrated cupholder familiar from the G05 is already included in the standard equipment.



TG19-0641

G06 Rear seat bench

Index	Explanation
1	Cupholder
2	Integrated head restraint
3	Release mechanism for folding the backrest (mechanical)
4	ISOFIX

Belt guide, second-row seating

An optimized belt guide is used in the G06 on the outer seats of the rear seat bench. When the backrest is folded down, the seat belt slides along a separate guide. This prevents the seat belt from being trapped when the backrest is returned to the upright position.

G06 Complete Vehicle

2. Body



Belt guide, second-row seating

Index	Explanation
A	Belt guide with backrest in upright position
B	Belt guide with folded-down backrest

2.3. Luggage compartment

The standard equipment features a folding parcel shelf and four lashing points. The parcel shelf can be stored in a separate storage compartment under the luggage compartment floor.

The optional equipment luggage-compartment package (SA 418) extends the luggage compartment floor to include automated slide & anti-slip rails. Storage nets and a lashing strap for securing the load are also included.

An emergency spare wheel option (SA 300) is also available for the G06. The spare tire is stored in the storage compartment under the luggage compartment floor.

Further information on the automated slide & anti-slip rail and the emergency spare wheel can be found in the product information ST1831 G05 Body.

2.3.1. Luggage compartment capacity

The luggage compartment capacity varies depending on the status of the second-row seating. The following table shows a comparison with the luggage compartment capacity of the G05.

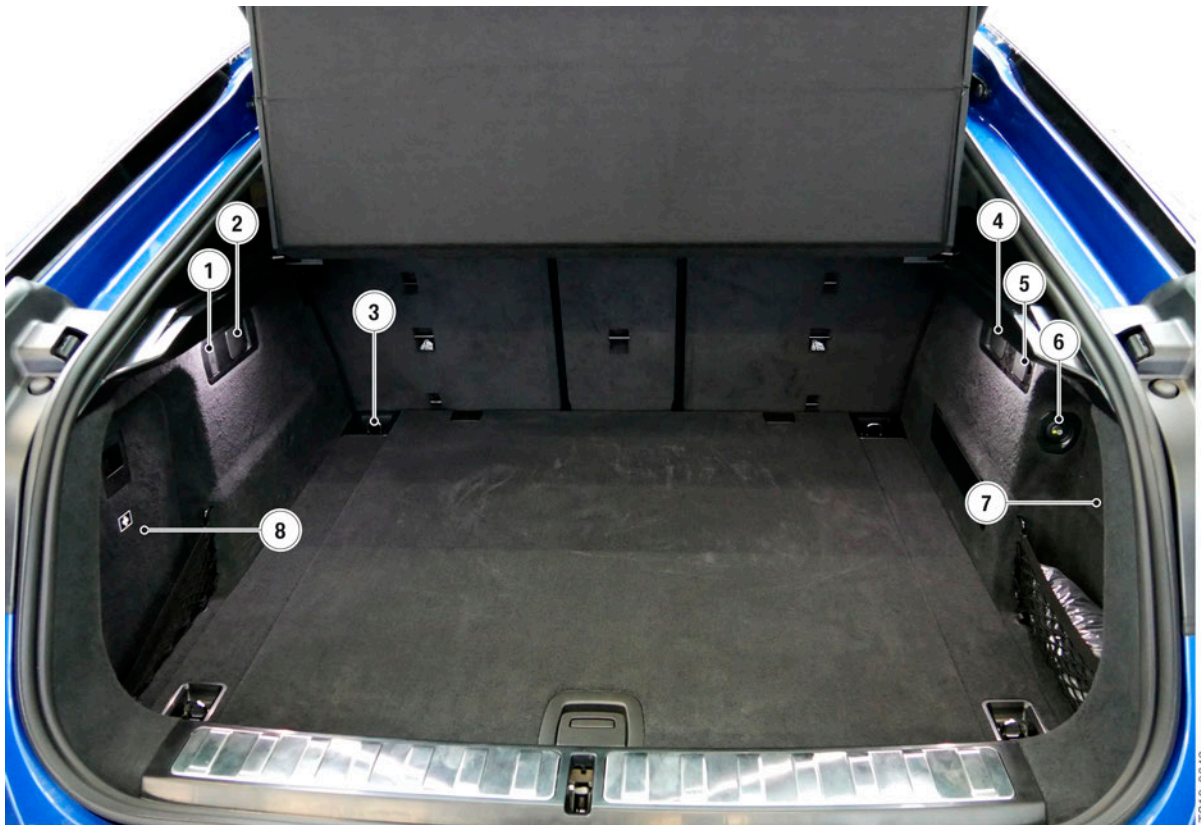
Variant	G06 [liters]	G05 [liters]
Second-row seating in upright position	580	650
Second-row seating folded down	1530	1870

G06 Complete Vehicle

2. Body

2.3.2. Operating facilities

Each side of the luggage compartment features a mechanical release mechanism for the respective backrest. The left side of the cargo area accommodates the cover for a storage compartment. The right side accommodates a power socket (12 V), and the cover for the fuse holder.



Operating facilities in the luggage compartment

Index	Explanation
1	Bag holder
2	Lever for releasing the left backrest, second-row seating
3	Lashing eyes
4	Lever for releasing the right backrest, second-row seating
5	Power socket (12 V)
6	Button for retracting/extending the trailer tow hitch (Not for the US)
7	Cover, fuse holder
8	Cover, storage compartment

G06 Complete Vehicle

2. Body

2.3.3. Stowage

Under the luggage compartment floor is a storage compartment for the onboard vehicle tool kit and the parcel shelf. As in the G05, with the appropriate optional equipment, the spare tire (SA 300) is stowed in the storage compartment.



Stowage compartments in the luggage compartment

Index	Explanation
1	Towing hook
2	Adapter for locking wheel bolts
3	Storage compartment for the parcel shelf

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3. Drive

3.1. Engines

The powertrain for the G06 are the same as those for the G05. Information on the different powertrains can be found in the following product information:

- ST1831 G05 Powertrain/Chassis
- ST1854 N63TU3 Engine
- ST1853 B58TU Engine

3.2. Transmission

To remain in keeping with the sporty character of the G06, the Steptronic Sport transmission familiar from the G05 is available directly in the standard equipment. The Steptronic transmission is not offered on the G06.

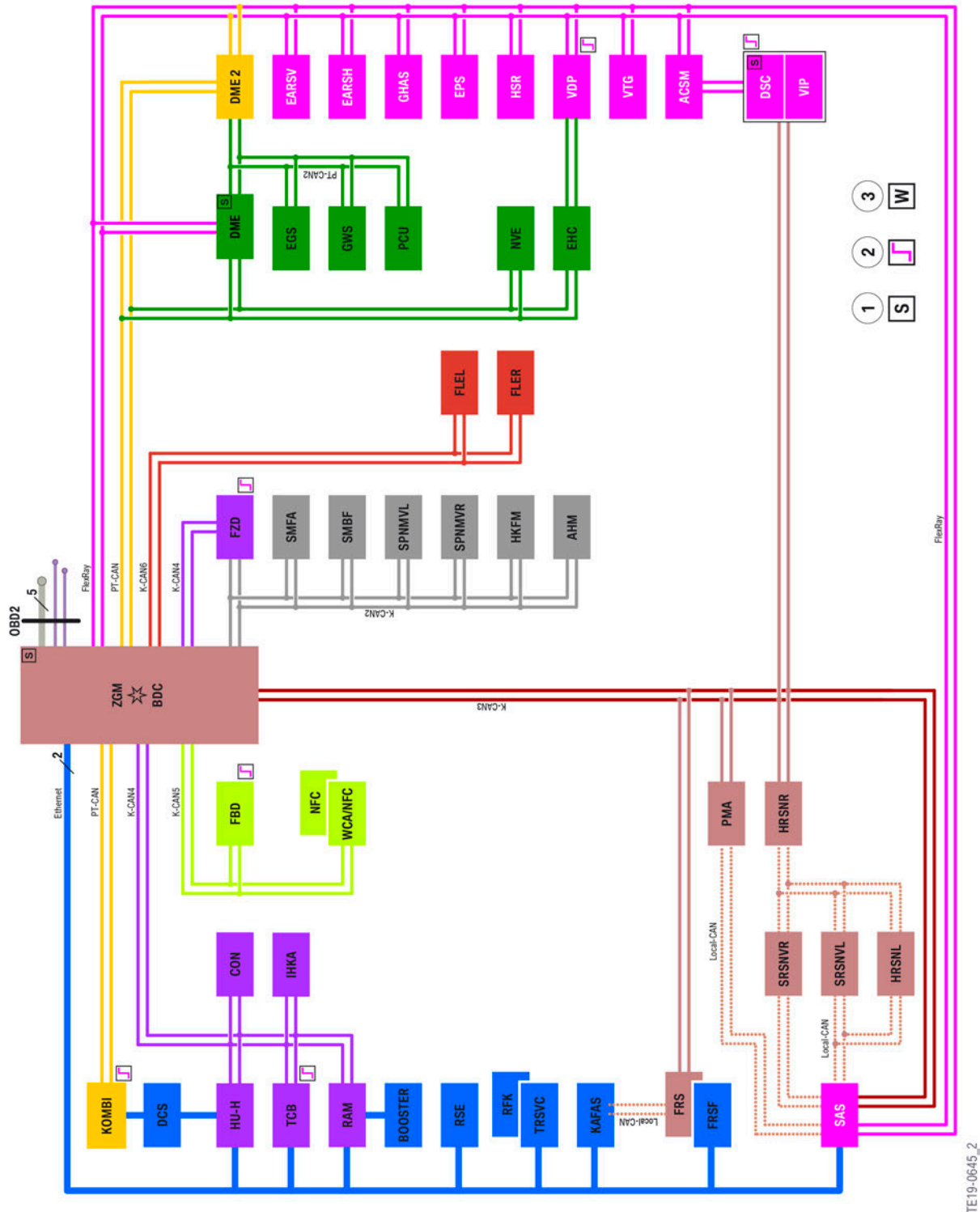
3.3. Chassis

The chassis of the G06 is the same as that of the G05. Information on the chassis can be found in the product information ST1831 G05 Powertrain/Chassis.

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4. General Vehicle Electronics

4.1. Bus overview



G06 Bus overview

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4. General Vehicle Electronics

Index	Explanation
ACSM	Advanced Crash Safety Module
AHM	Trailer module
BDC	Body Domain Controller
Booster	Booster
CON	Controller
DCS	Driver Camera System
DME	Digital Motor Electronics
DME2	Digital Engine Electronics 2
DSC	Dynamic Stability Control
EARSH	Electric active roll stabilization rear
EARSV	Electrical dynamic drive, front
EGS	Electronic transmission control
EHC	Electronic ride height control
EPS	Electromechanical Power Steering
FBD	Remote control receiver
FLEL	Frontal Light Electronics Left
FLER	Frontal Light Electronics Right
FRS	Front radar sensor
FRSF	Front radar sensor long range
FZD	Roof function center
GHAS	Regulated rear axle differential lock
GWS	Gear selector switch
HU-H	Head Unit High
HKFM	Tailgate function module
HRSNL	Rear radar sensor short range left
HRSNR	Rear radar sensor short range right
HSR	Rear axle slip angle control
IHKA	Integrated automatic heating / air conditioning
KAFAS	Camera-based driver assistance systems
KOMBI	Instrument panel
NFC	Near Field Communication
NVE	Night Vision Electronics
PCU	Power Control Unit
PMA	Parking Manoeuvring Assistant
RAM	Receiver Audio Module

G06 Complete Vehicle

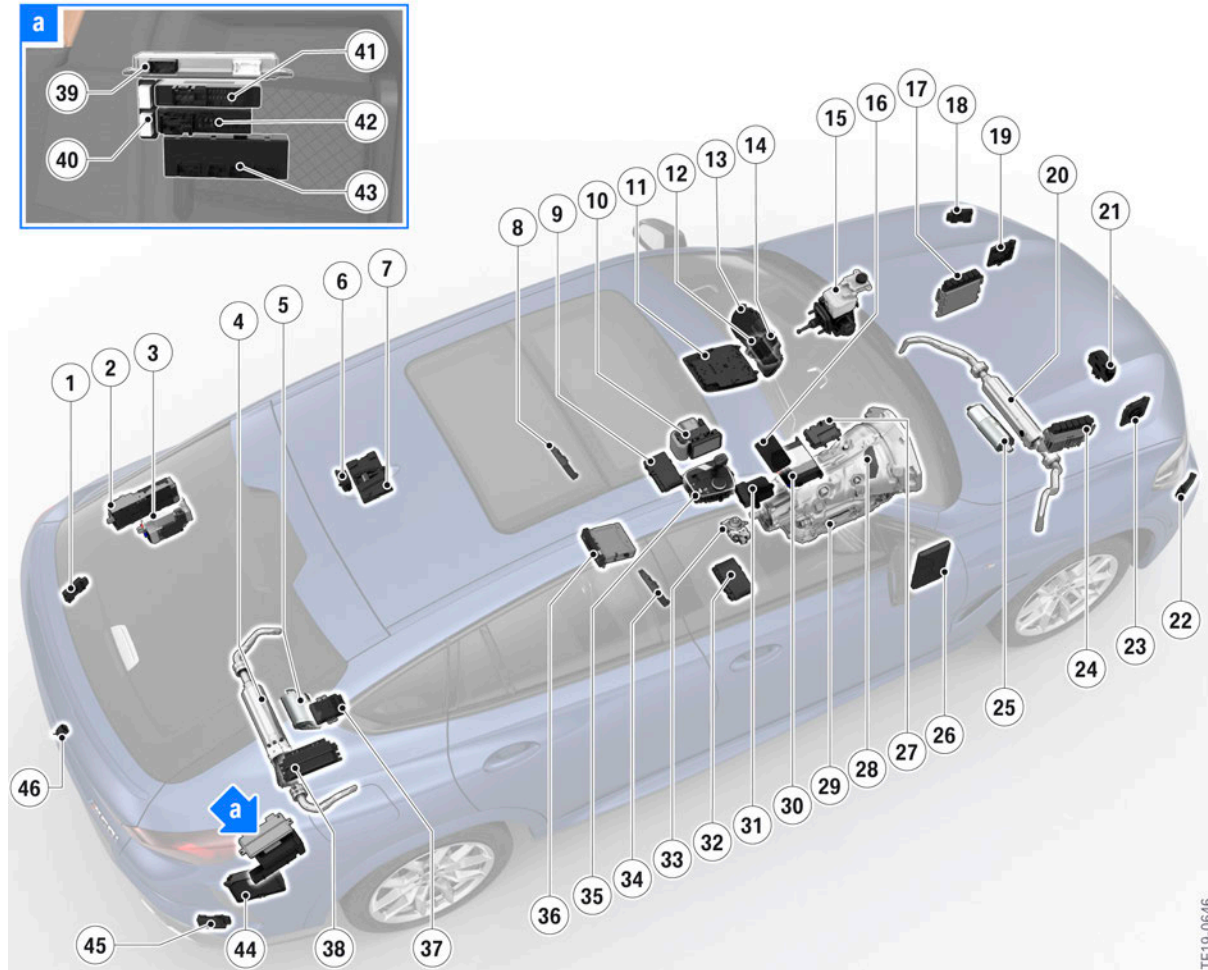
4. General Vehicle Electronics

Index	Explanation
RFK	Rear view camera
RSE	Rear Seat Entertainment
SAS	Optional equipment system
SMBF	Front passenger seat module
SMFA	Driver's seat module
SPNMVL	Seat pneumatics module front left
SPNMVR	Seat pneumatics module front right
SRSNVL	Side radar sensor short range front left
SRSNVR	Side radar sensor short range front right
TCB	Telematic Communication Box
TR SVC	Top rear side view camera
VDP	Vertical Dynamic Platform
VIP	Virtual Integration Platform
VTG	Transfer box
WCA/NFC	Wireless charging station with control electronics for Near Field Communication
ZGM	Central Gateway Module
1	Start-up node control units for starting and synchronizing the FlexRay bus system
2	Control units authorized to perform wake-up function
3	Control units also connected at terminal 15WUP

G06 Complete Vehicle

4. General Vehicle Electronics

4.2. Installation locations of control units



G06 Installation locations of control units

Index	Explanation
1	Rear radar sensor short range left (HRSNL)
2	Booster
3	Receiver Audio Module (RAM)
4	Electric active roll stabilization rear (EARSH)
5	Rear axle slip angle control (HSR)
6	Remote control receiver (FBD)
7	Telematic Communication Box (TCB)
8	Seat pneumatics module front left (SPNMVL)
9	Driver's seat module (SMFA)
10	Electronic ride height control (EHC)
11	Roof function center (FZD)

G06 Complete Vehicle

4. General Vehicle Electronics

Index	Explanation
12	Camera-based driver support systems (KAFAS)
13	Instrument cluster (KOMBI)
14	Optional equipment system (SAS)
15	Dynamic Stability Control (DSC/VIP)
16	Wireless charging station (WCA/NFC)
17	Digital Motor Electronics (DME)
18	Side radar sensor short range front left (SRSNVL)
19	Frontal Light Electronics Left (FLEL)
20	Electric active roll stabilization front (EARSV)
21	Front radar sensor (FRS)/Front radar sensor long range (FRSF)
22	Side radar sensor short range front right (SRSNVR)
23	Frontal Light Electronics Right (FLER)
24	Digital Engine Electronics 2 (DME2)
25	Electronic Power Steering (EPS)
26	Body Domain Controller (BDC)/Central Gateway Module (ZGM)
27	Night Vision Electronics (NVE)
28	Integrated automatic heating/air conditioning (IHKA)
29	Electronic transmission control (EGS)
30	Head unit (HU-H)
31	Advanced Crash Safety Module (ACSM)
32	Front passenger seat module (SMBF)
33	Transfer box (VTG)
34	Seat pneumatics module front right (SPNMVR)
35	Controller (CON)/Gear selector switch (GWS)
36	Rear Seat Entertainment (RSE)
37	Regulated rear axle differential lock (GHAS)
38	Vertical Dynamic Platform (VDP)
39	Top Rear Side View Camera (TRSVC)
40	Parking manoeuvring assistant (PMA)
41	Selective Catalytic Reduction (SCR) (Not for US)
42	Trailer module (AHM)
43	Tailgate function module (HKFM)
44	Power Control Unit (PCU)
45	Rear radar sensor short range right (HRSNR)
46	Rear view camera (RFK)

G06 Complete Vehicle

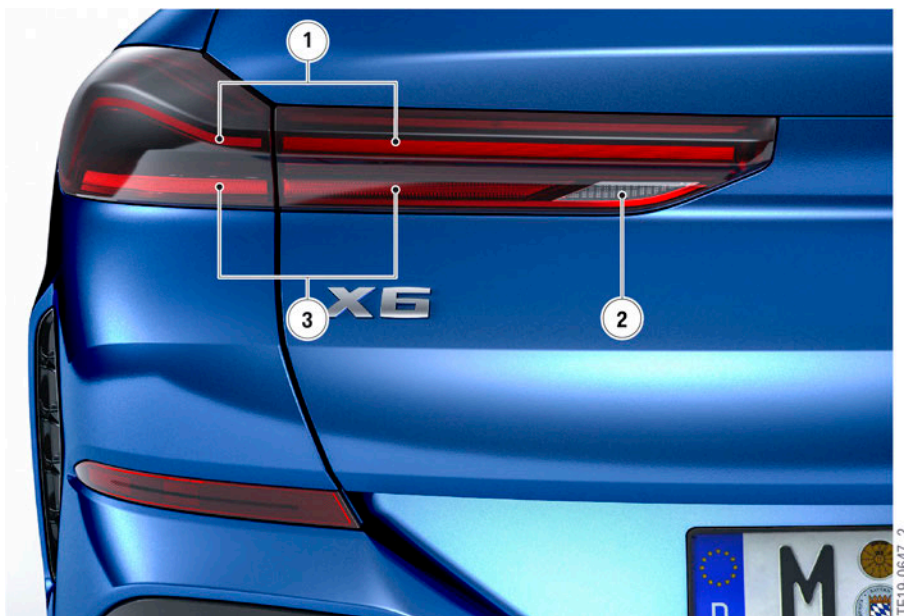
4. General Vehicle Electronics

4.3. Headlight

Two headlight variants are available for the G06. Adaptive Full LED lights are standard. The Icon Adaptive LED headlights with Laserlight are optional (SA 5AZ) are equivalent in terms of design and technology to the variants of the G05. Further information on the headlights can be found in the product information ST1831 G05 General Vehicle Electronics.

4.4. Rear lights

The rear light clusters of the G06 are equipped entirely with LED modules.



Rear light

Index	Explanation
1	Tail light and brake light
2	Reversing light
3	Turn indicator

G06 Complete Vehicle

5. Infotainment

In the G06, 3 speaker systems are offered. Depending on the model, a hi-fi system is installed as standard. The following equipment options are available:

	Hi-fi system	Harman Kardon surround sound System (SA 688)	Bowers & Wilkins Diamond surround sound system (SA 6F1)
Overall power	205 W	464 W	1500 W
Number of diamond tweeters	—	—	2
Number of tweeters	3	7	5
Number of mid-range speakers	5	7	7
Number of bass loudspeakers	2	2	2
3D speakers	—	—	4
Amplifier	Receiver audio module, booster ³	Receiver audio module and booster	Receiver audio module and booster
Bus connection	—	Ethernet	Ethernet

The systems offered are the same as those of the G05 and G07. Further information is available in the corresponding product information:

- ST1831 G05 Infotainment
- ST1832 G07 Complete Vehicle.

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6. Displays and Controls

6.1. BMW Live Cockpit Professional

In the G06 the BMW Live Cockpit Professional (SA 6U3) familiar from the G05 is also included in the standard equipment. BMW gesture control (SA 6U8) must be ordered separately. Further information can be found in the product information ST1831 G05 Displays & Controls.

G06 Complete Vehicle

7. Driver Assistance Systems

7.1. Driving assistance structure

The Driving assistance structure is similar to the G05. The following deviations from the G05 exist for the G06:

Optional equipment	Change in comparison with the G05
Active Driving Assistant Professional (OE 5AU) included in the Driver Assistance Professional Package (ZDY)	The Traffic Jam Assistant is no longer part of the Driving Assistant Professional. Assisted Driving View is included.
Extended Traffic Jam Assistant for limited access highways (SA 5AR) included in the Driver Assistance Professional Package (ZDY)	The Extended Traffic Jam Assistant for limited access highways now has extended features .

Further information on the Driving Assistance structure can be found in the product information ST1831 G05 Driver Assistance Systems.

Details on the individual assistance systems can be found in the product information ST1858 Driver Assistance Systems 2018.

7.2. Parking assistance

The Parking assistance systems are identical to the G05. Further information can be found in the product information ST1831 G05 Driver Assistance Systems.

7.3. BMW Drive Recorder

7.3.1. Introduction

The optional equipment BMW Drive Recorder (OE 6DR) is available directly for the market introduction of the G06. The BMW Drive Recorder is linked to the following standard/optional equipment packages:

- Teleservices (OE 6AE)
- BMW Live Cockpit Professional (OE 6U3)
- Parking Assistant Plus (OE 5DN).

7.3.2. Function

Short videos of the vehicle environment can be recorded with the BMW Drive Recorder.

The cameras at the front, the exterior mirrors and the rear record continuously. The recording is overwritten over and over again. The duration of the recording can be configured in 5 second increments. The maximum duration of the recording is 20 seconds before and 20 seconds after permanent storage has been triggered.

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7. Driver Assistance Systems

A permanent recording can either be activated by the customer or triggered automatically by a crash signal from the vehicle sensors. The video is saved on the hard disk of the head unit. A maximum of 10 videos can be stored on the hard disk. In addition, important data is stored in a separate file synchronously with the video. The separate file contains the following data:

- Date
- Time
- GPS position
- Speed

The recordings stored in the vehicle can be played back in an onboard app, deleted or exported to a USB stick.

Before being used for the first time, the BMW Drive Recorder must be activated and set up.

Limits of the system



Serious accidents resulting in damage to the hard disk or the cameras can cause the function to be limited or even to fail.

It is recommended that the recordings be regularly backed up by exporting them, as they could be deleted automatically during a software update.

Further information on the BMW Drive Recorder can be found in the product information ST1901 G12 LCI Complete Vehicle.

7.4. Assisted Driving View

7.4.1. Target and customer benefit

A new display is available in the instrument cluster with the name Assisted Driving View at the market launch of the G06. Assisted Driving View is included in Driving Assistance professional package (SA ZDY).

The Assisted Driving View visualizes the behavior of the individual driver assistance systems. This enables the customer to identify the status and the limits of the driver assistance systems more easily. The new transparent display increases confidence in the driver assistance systems. The upshot of increased confidence is that the customer uses the assisted and semi-automated driving systems more frequently.

The fundamental principles here are:

- View – See what the vehicle actually sees.
- Intention – See what coming action the vehicle is planning.

G06 Complete Vehicle

7. Driver Assistance Systems

Too many details in a display can distract from the actual function. In addition, the customer's expectations with regard to the performance of the driver assistance systems increase. Too high a degree of detail can lead to the miscalculation that the vehicle offers a higher level of automation. The representation of the Assisted Driving View is kept abstract for this reason. The degree of detail is chosen in such a way that the current status of the driver assistance systems is shown appropriately.

The display of information on the surroundings may be accompanied by errors caused by sensors and their limits.



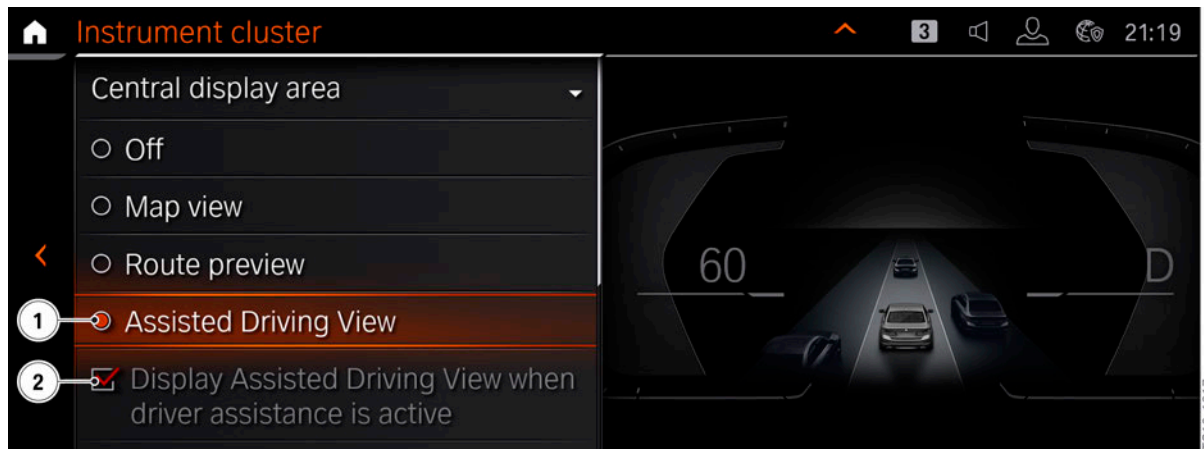
The general view of the Assisted Driving View is not trouble-free. The driver remains responsible for controlling and directing the vehicle.

The emphasis of the Assisted Driving View is not on showing all the data acquired by the sensors, but instead on supporting the driver. Therefore objects that are not relevant to the driving situation are filtered out.

7.4.2. System activation

The Assisted Driving View can be activated in iDrive by means of the following settings:

- "Display settings"
- "Instrument cluster"
- "Central display area"



Assisted Driving View setting

Index	Explanation
1	Display Assisted Driving View permanently
2	Display Assisted Driving View when driver assistance systems are active (default setting for alternative display "Off", "Map view" or "Route preview")

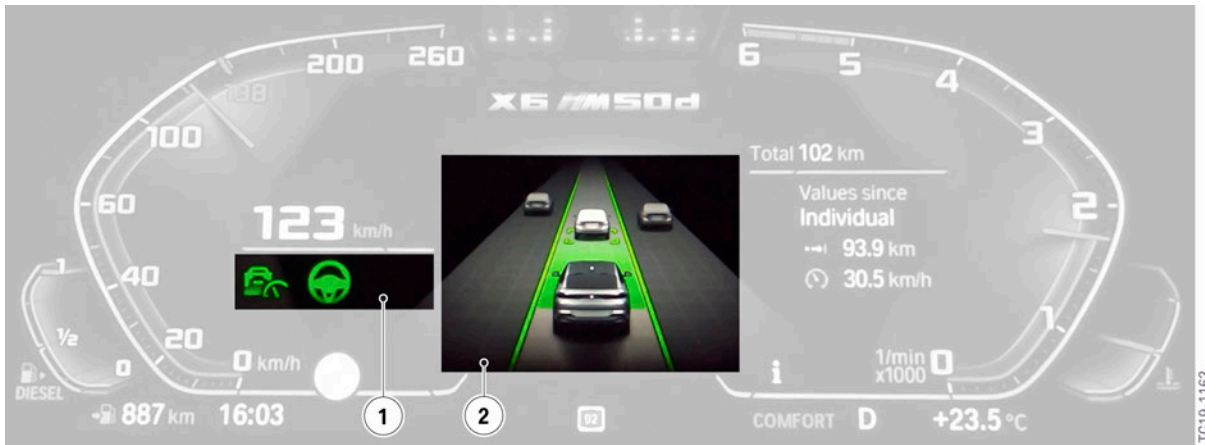
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7. Driver Assistance Systems

7.4.3. Graphic implementation

The Assisted Driving View is displayed only in the central display area of the instrument cluster. There is no display in the CID or the BMW Head-Up Display.

The Assisted Driving View is complemented by the Minimal status.



Minimal status and Assisted Driving View display

Index	Explanation
1	Minimal status
2	Assisted Driving View

Minimal status

The status of up to 3 driver assistance systems is visualized in the Minimal status. The display can vary depending on activation.



Minimum status display

G06 Complete Vehicle

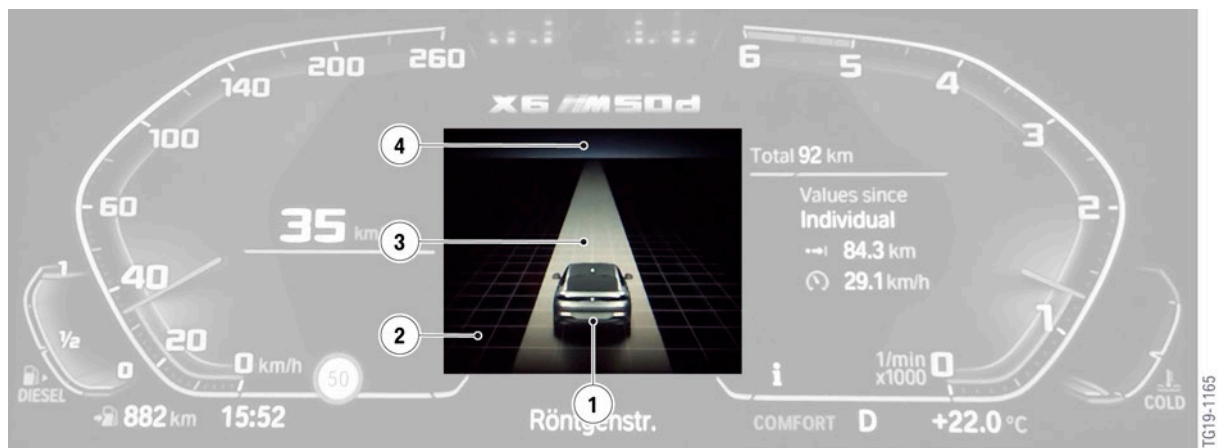
7. Driver Assistance Systems

Index	Explanation
1	Active Cruise Control with Stop&Go function
2	Steering and lane control assistant
3	Extended Traffic Jam Assistant (SA 5AR)

The display of the symbol and the color may vary, depending on the status of the assistance system.

Assisted Driving View

The Assisted Driving View consists of a basic scene, animations and additional elements. The basic scene is always shown when Assisted Driving View is activated.



Assisted Driving View basic scene

Index	Explanation
1	Own vehicle (3D model)
2	Surface grid
3	Own lane
4	Horizon

The horizon serves to provide a perspective view.

The driver's own (subject) vehicle is shown statically in the display. The surface grid is moved to simulate vehicle movement. This enables both fast and slow movements (forward and reverse) of the subject vehicle to be shown.

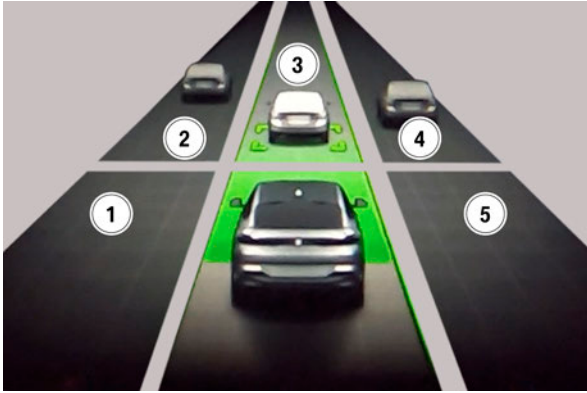
The neighboring lanes to the left and right of the actual lane are superimposed in and removed from the display on the basis of their relevance. A time offset may be experienced in the display at the beginning/end of a neighboring lane. The aim is to superimpose the neighboring lanes only if the lanes are required for the current driving situation. Hard shoulders are only displayed if the hard shoulders are used for a limited time in heavy traffic. In all other driving situations the hard shoulders are not shown.

Oncoming lanes are not shown apart from display errors. Road junctions, curves and intersecting roads are not shown either.

G06 Complete Vehicle

7. Driver Assistance Systems

A selection of other road users can be shown in the Assisted Driving View. The selection is based on the relevance to acceleration/deceleration and the lane change of the subject vehicle. The scenario is subdivided into 5 sectors for this purpose. Each sector can contain one road user.



Assisted Driving View sectors

Index	Explanation
1	Sector 1
2	Sector 2
3	Sector 3
4	Sector 4
5	Sector 5

More than 5 road users may be depicted briefly in the event of overlapping animations. The display is basically limited to 5 road users. Apart from lane changes, road users are always shown in the middle of their lane.

Other road users are subdivided into 3 object types so as to be able to tell them apart on the basis of their size. The object types are:

- Car
- Truck
- Motorcycle

The displayed size of the objects does not correspond to their actual size. Car and motorcycle models are displayed irrespective of the real size of the actual road users. Due to the great differences in length of trucks, an approximated representation of truck models to the real length of the road users is provided. Appropriate distances can thereby be visualized.

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7. Driver Assistance Systems

Like the road users in sectors 1 to 5, the subject vehicle is shown in the middle of its lane. In the following driving situations the real transverse position of the subject vehicle in relation to the actual lane is displayed:

- When assisted (lane change assistant) or manual lane changes are performed on roads with lane markings.
- When the driver consciously deviates from the middle of the lane while the steering and lane control assistant is activated.
- When the lane departure warning with lane return responds and the subject vehicle is returned to a safe position.

Limits of the system

The depiction of other road users and lanes is restricted by the limits of the sensors. Incorrect displays may therefore occur (incorrect lanes, incorrect objects or placements, missing elements). The neighboring lanes are blanked in the low speed range to reduce incorrect displays. This reduces implausible displays. When the vehicle is being driven with the Active Cruise Control with Stop&Go function only the subject lane with the vehicle travelling in front is then visible. To facilitate understanding the blanking always relates to the driver's own speed. The same blanking of neighboring lanes is also displayed when driving with Park Distance Control (PDC) or in reverse gear since Assisted Driving View is not designed to visualize the parking manoeuvre.

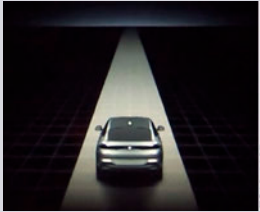







In the Assisted Driving View any depictions of collisions between the subject vehicle and other road users are avoided since this can lead to driver irritation. Sensor limits could lead to the incorrect display of collisions which in reality do not happen. To prevent this from happening, other road users close to the subject vehicle are first displayed transparently and then removed. Transparent display and removal from the display are performed on the basis of the relative speed to the subject vehicle. This logic can give rise, for example in tight overtaking manoeuvres, to transparent road users in the Assisted Driving View. The target object of the Active Cruise Control with Stop&Go function is excluded from this logic.

G06 Complete Vehicle

7. Driver Assistance Systems






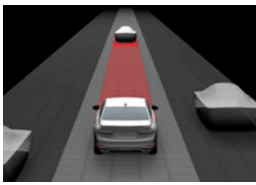
7.4.4. Active Cruise Control with Stop&Go function

The following displays of the Assisted Driving View are possible with the Active Cruise Control with Stop&Go function:

System status	Minimal status	Assisted Driving View	Explanation
Standby	—	 <small>TG19-1167</small>	—
Distance display		 <small>TG19-1169</small>	Desired target distance shown in green
Object marking		 <small>TG19-1171</small>	Target object for longitudinal control marked in green
Setting of desired distance	—	 <small>TG19-1185</small>	Setting of desired distance by concentric bars
Start request		 <small>TG19-1171</small>	Minimal status pulses, object marking flashes







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7. Driver Assistance Systems

System status	Minimal status	Assisted Driving View	Explanation
Distance display deactivated		 TG19-1187	Distance control overruled by pressing accelerator pedal, depiction without target object
Object marking deactivated		 TG19-1189	Distance control overruled by pressing accelerator pedal, depiction with target object
Warning: Brake intervention necessary		 TG19-1191	Minimal status flashes, manual brake intervention necessary






7.4.5. Steering and lane control assistant

The following displays of the Assisted Driving View are possible with the steering and lane control assistant active:

System status	Minimal status	Assisted Driving View	Explanation
Lane keep assistant		 TG19-1193	Lane framed in green
Lane keep assistant temporarily inactive		 TG19-1195	System limits exceeded (lane detection, torque limitation)
Lane keep assistant deactivated		 TG19-1195	Turn signal/high beam lever operated or heavy manual steering

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7. Driver Assistance Systems










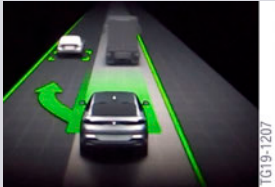
System status	Minimal status	Assisted Driving View	Explanation
Note: Lane keep assistant with lane return		 <small>IG19-119/</small>	Minimal status flashes, lane marked in yellow
Note: Touch detection		—	Only Minimal status Animation: Take over steering wheel
Warning: Take-over request		 <small>IG19-120/</small>	Animations: Take over steering wheel

G06 Complete Vehicle

7. Driver Assistance Systems

7.4.6. Automatic Lane Change

The following displays of the Assisted Driving View are possible with the lane change assistant active:



System status	Minimal status	Assisted Driving View	Explanation
Automatic Lane Change requested (search phase)			Turn signal/high beam lever operated (without engaging), automatic lane change requested, sensor shown
Automatic Lane Change currently not possible			Lane change not possible, lane blocked, search phase continues to run
Automatic Lane Change currently not possible			Lane change not possible, clearance too small/vehicle in the rear space, search phase continues to run
Automatic Lane Change currently not possible			Lane change not possible, lane restriction
Automatic Lane Change with lane change assistant			Lane change initiated

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7. Driver Assistance Systems






7.4.7. Lane change warning/lane departure warning with lane return

The following displays of the Assisted Driving View are possible with an output lane change warning/ lane departure warning with lane return:

System status	Minimal status	Assisted Driving View	Explanation
Lane change warning	—		Turn signal/high beam lever operated, lane change not possible, lane blocked/clearance too small/vehicle in the rear space
Lane departure warning with lane return	—		Lane marked in yellow

7.4.8. Traffic Jam Assistant

The following displays of the Assisted Driving View are possible with the Traffic Jam Assistant (SA 5AR) active:

System status	Minimal status	Assisted Driving View	Explanation
Standby			Reduced grey depiction behind vehicle
Readiness		—	Only Minimal status depiction
Assisted Driving Plus			Complete subject lane shown in green, object markings remain

G06 Complete Vehicle

7. Driver Assistance Systems

Due to statutory provisions the Assisted Driving Plus function is for the time being only available in the USA, Canada, China and Japan. Accordingly, its depiction via the Assisted Driving View function is only available in these national-market versions.

7.4.9. Latency monitoring

Delays (so-called latency) may be encountered in the signal chain from the sensor to visualization in the Assisted Driving View; for example, when the head unit is subject to extremely high load such as during a software update. For legal reasons the latency must not exceed a defined threshold value. This prevents the risk of inaccurate visualizations which suggest an incorrect status on the part of the driver assistance systems. The latency is monitored in order to comply with the legal provisions.

The Assisted Driving View is removed from the display if the latency exceeds the predefined threshold value. The central display area initially remains black. The visualization is continued only when the latency drops below the threshold value under stable conditions. If there is no stabilization over a defined period, the content of the central display area switches to the set alternative display. The alternative display is found in the "Central display area" settings.

7.4.10. Navigation

When the Assisted Driving View is activated, the large navigation display in the central display area of the instrument cluster is omitted. Direction arrows continued to be displayed in the Assisted Driving View. When navigation mode is active the navigation display can be provided via the CID or optionally via the BMW Head-Up Display (SA 610).

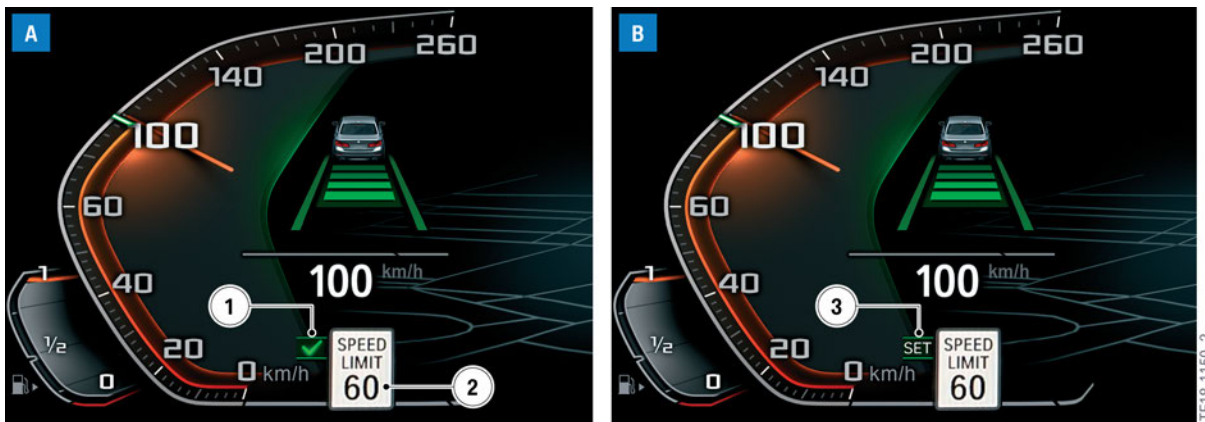
G06 Complete Vehicle

7. Driver Assistance Systems

7.4.11. Speed Limit Assistant

The Speed Limit Assistant function supports the driver by adopting the speed limits. This was first introduced on the G05

Manual adoption of the speed limit is executed via the SET button.



Displays in the instrument cluster when Speed Limit Assistant is activated

Index	Explanation
A	Speed Limit Assistant suggested speed adopted
B	Speed Limit Assistant suggested speed available
1	Speed limit is confirmed by pressing the SET button on the MFL
2	Speed limit
3	Speed limit available to be adopted by pressing the SET button on the MFL

With Speed Limit Assistant the speed limit can be adopted, after driver confirmation, as the new set speed when the cruise control is activated.

Manual adoption of the upcoming speed limit must be activated in the iDrive menu and can also be configured and deactivated in the same place. Manual adoption is executed by pressing the "SET button" on the multifunction steering wheel (MFL). **Automatic** adoption of the upcoming speed limit is not available for the US market.

