## **OWNER'S MANUAL**



PASSION ENGINEERED



### Foreword

We are pleased to welcome you to the family of Perodua owners. As you know, the performance and durability of a vehicle depends, to a large extent, upon the way it is maintained and driven. This manual will assist you to benefit most from your Perodua vehicle. Before you operate your vehicle, read this manual carefully and use it as a reference source whenever necessary.

If you have any questions, feel free to contact your authorised Perodua Service Centre. We are ready to provide qualified service and assistance.

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### PERODUA SALES SDN. BHD.

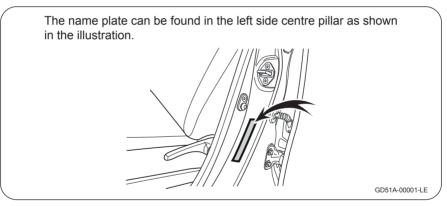
### About Your Vehicle

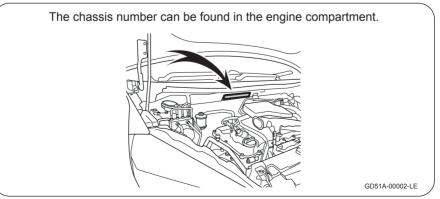
### Refer to the name plate and registration card for more information.

Vehicle Details			
	Model	M804RS	M806RS
Vehicle	Description	Type 1NR-VE engine (1,300 cc) mounted vehicle	Type 2NR-VE engine (1,500 cc) mounted vehicle
	Туре	1NR – VE	2NR – VE
Engine	Description	1,300 cc EFI*1 + DOHC*2 + Dual VVT-I*3 engine	1,500 cc EFI*1 + DOHC*2 + Dual VVT-I*3 engine

\*1 : Electronic Fuel Injection

- \*2 : Double Overhead Cam
- \*3 : Variable Valve Timing-Intelligent





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1	For safety and security	Information on safety and security before driving	
2	Instrument cluster	How to read the gauges and meters, the variety of warning lights and indicators, etc.	
3	Operation of each component	Opening and closing the doors and windows, adjustment before driving, etc.	
4	Driving	Operations and advices which are necessary for driving	
5	Interior features	Usage of the interior features, etc.	
6	Maintenance and care	Caring for your vehicle and maintenance procedures	
7	In case of emergency	What to do in case of a malfunction or emergency	
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#### Instrument cluster

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### For your information

### Your Owner's manual

Please note that this manual applies to all variants and explains all equipment, including options.

Therefore, you may find some explanations for equipment not installed in your vehicle. All information, illustrations and specifications in this manual may differ from the vehicle due to changes in vehicle specifications. We reserve the right to discontinue or change specifications or designs at any time without prior notice and without incurring any obligation.

Depending on the specifications, the vehicle shown in the illustrations may differ from your vehicle in terms of equipment.

### For your safety

We at Perodua want you to enjoy your new vehicle with all its capabilities. We also hope that you could consider your safety while driving which includes in learning about the capabilities and limitations of a vehicle, and realizing that vehicles designed for different purposes may handle differently.

Remember that while you rely on the manufacturer to make a good vehicle, the manufacturer and the motoring public rely on you to drive safely.

### **Unauthorized modifications**

- Using non-genuine spare parts and accessories for Perodua vehicles that are currently available in the market may adversely affect the safety of your vehicle, even though these parts may be approved by certain authorities in your country.
- This vehicle should not be modified with non-genuine Perodua products. Modification with non-genuine Perodua products could affect its performance, safety and durability, and may even violate governmental regulations. Vehicle modifications can also cause a loss of control, an accident, or serious bodily injury. In addition, damage or performance problems resulting from the modification may not be covered under warranty.
- The steering wheel should never be modified. The steering wheel is equipped with an SRS air bag. Handling it inappropriately may cause the air bag to stop functioning properly and deploy accidentally, causing serious injuries, and at worst, death.
- Please refer to an authorised Perodua Service Centre in the following cases:
  - Replacing the tyres, disc wheel, and wheel mounting nuts. Using different types of nuts or nuts other than those specified for this vehicle may have adverse effects on driving.
  - Installing and removing electrical equipment and wireless devices. Installing and removing electrical equipment and wireless devices is dangerous as it may badly affect electronic equipment and lead to accidents, including malfunctions and vehicle fire.

Please see Page x on installing RF transmitter.

Do not apply any tinted films (including transparent films) that exceeds the current regulation to the windshield, driver's window and front passenger's window. Not only will this interfere with visibility, it may also be considered as unauthorized modification.

### Connecting electrical equipment to malfunction diagnosis connector

Do not connect electrical equipment other than malfunction diagnosis device for inspection and maintenance to the malfunction diagnosis connector.

This may lead to unexpected problems, including dead battery and bad effects on electronic devices.



### Vehicle data recordings

Your vehicle is equipped with several computers to control your vehicle. They record data concerning the vehicle control and operations. The recorded data varies according to the vehicle grade level and options with which it is equipped. These computers do not record conversations, sounds or pictures.

Data usage

Perodua may use the data recorded in these computers to diagnose malfunctions, conduct research and development, and improve quality. Perodua will not disclose the recorded data to a third party except:

- With the consent of the vehicle owner or with the consent of the lessee if the vehicle is leased.
- In response to an official request by the police, a court of law or a government agency.
- For use by Perodua in a lawsuit.
- For research purposes where the data is not tied to a specific vehicle or vehicle owner.

### Event data recorder

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. However, data may not be recorded depending on the severity and type of a crash. The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur.

NOTE: EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed.

In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

• Disclosure of the EDR data

Perodua will not disclose the data recorded in an EDR to a third party except when:

- An agreement from the vehicle's owner (or the lessee for a leased vehicle) is obtained.
- In response to an official request by the police, a court of law or a government agency.
- For use by Perodua in a lawsuit.

However, if necessary, Perodua may:

- Use the data for research on vehicle safety performance.
- Disclose the data to a third party for research purposes without disclosing information about the specific vehicle or vehicle owner.

### Installing an RF transmitter

The installation of an Radio Frequency (RF)-transmitter system in your vehicle could affect electronic systems such as:

- EFI (Electronic Fuel Injection) system
- Anti-lock brake system
- SRS airbag system
- Seat belt pretensioner system
- Advanced Safety Assist
- VSC

Be sure to check with an authorised Perodua Service Centre for precautionary measures or special instructions regarding installation of an RF-transmitter system.

Further information regarding frequency bands, power levels, antenna positions and installation provisions for the installation of RF-transmitters, is available on request at an authorised Perodua Service Centre.

### Scrapping of your Perodua

The SRS airbag and seat belt pretensioner devices in your Perodua contain explosive chemicals. If the vehicle is scrapped with the air bags and seat belt pretensioners left as they are, this may cause an accident such as fire. Be sure to have the systems of SRS airbag and seat belt pretensioner removed and disposed of by a qualified service shop or by an authorised Perodua Service Centre before you scrap your vehicle.

If you sell your Perodua, it is advisable to inform the new owner to obtain this manual through Perodua Official Website or liaise with an Authorised Perodua Service Centre.

### Break-in period

The internal friction, which is high in a new vehicle, will decrease gradually as all moving parts adjust to each other.

We recommend observing the following precautions during the first 1,000 km to extend the future performance and economy of your vehicle.

- Do not drive over 90 km/h (55 mph)
- Do not drive for long periods at any one constant speed, either fast or slow.
- Avoid full throttle start.
- Avoid sudden stops except in case of an emergency, especially during the first 300 km.

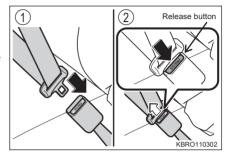
### **Reading this manual**

**A** WARNING Explains something that may cause death or serious injury to the vehicle owner or other people if not obeyed.

- $\underline{\mathbb{A}}_{\text{CAUTION}}$  Explains something that may cause damage to or a malfunction in the vehicle or its equipment if not obeyed.

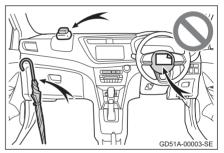
Indicates actions to perform or operate devices (pushing, turning, etc.). Indicates the outcome of

an action (e.g. the catch releases, a lid opens).



Indicates the component or location being explained.

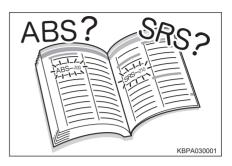
Means "Do not", "Do not do this" or "Do not let this happen".



### How to search

### Searching by name

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### Searching by symptom or sound

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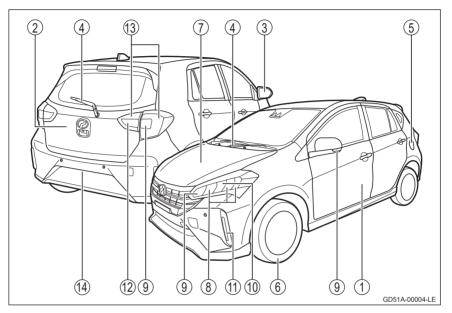
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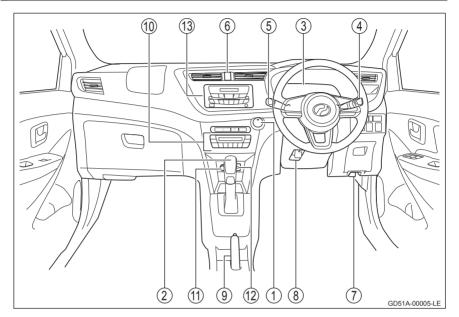
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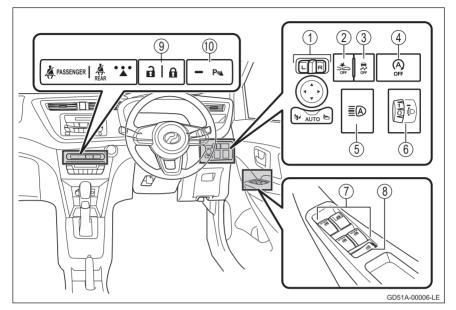
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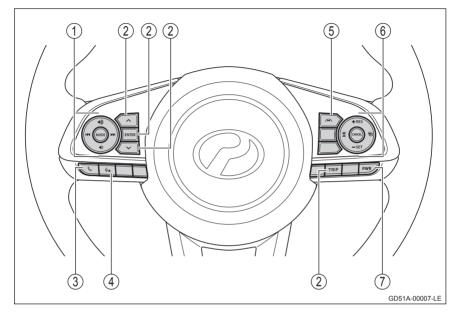
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### Steering wheel switches

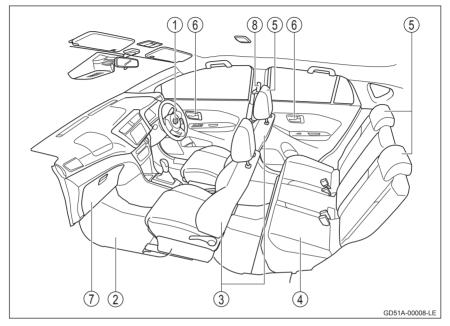


The layout of steering wheel switches varies according to vehicle grade.

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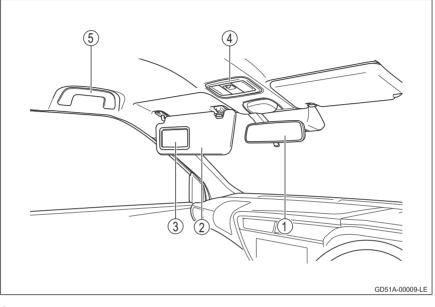
\* Please refer to the manual for multimedia system

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\*1: NEVER use a rearward facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it, DEATH or SERIOUS INJURY to the CHILD can occur. (→P. 1-28)



\*2 : The illustration shows the front, but they are also equipped in the rear.

For safety and security Please read this chapter carefully

# 1

### For safe use

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### **Before driving**

#### **Inspection and Maintenance**

Vehicle owners are responsible for carrying out routine inspection and regular maintenance at regular intervals to ensure that the vehicle is running smoothly.

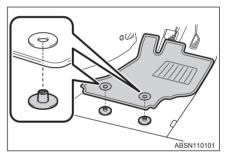
If there are any irregularities, please visit your nearest authorised Perodua Service Centre for proper inspection and maintenance.

### Floor Mat

Securely fix the floor mat designed specifically for the vehicle onto the carpet.

Insert the retaining pins into the floor mat eyelets to secure the floor mat in place.

The shape of the retaining pin may differ from that shown in the illustration.



### WARNING

The following warnings must be observed.

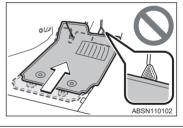
Failure to do so may cause the driver's floor mat to slip, possibly interfering with the pedals while driving, which may cause unexpected acceleration and difficulty in stopping the vehicle. This may lead to accidents, resulting in serious injuries, and at worst, death.

#### When installing the driver's floor mat

- Do not use floor mats designed for other models or different model year vehicles, even if it is a Perodua genuine product.
- Only use floor mats designed for driver's seat.
- Ensure that the floor mats are securely fixed in place at all time using the retaining pins provided.
- Do not use two or more floor mats on top of one another.
- Do not use the floor mats backwards or with the wrong side out.

### Before driving

- Regularly check that the floor mats are securely fixed in their correct places with the provided retaining pins. This check must be performed particularly after washing the vehicle.
- Check that the floor mat does not interfere with the pedals by fully pressing each pedal to the floor. Do this operation when the engine is switched off and the shift lever is in P.



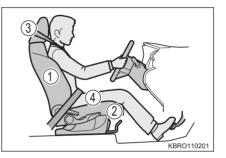
For safety and security

### For safety drive

For safe driving, adjust the seat and mirrors appropriately before driving.

### **Correct driving posture**

- Adjust the angle of the seatback so that you are sitting straight up and do not have to lean forward to steer. (→P. 3-27)
- (2) Adjust the seat so that you can depress the pedals fully with your arms slightly bent when gripping the steering wheel.  $(\rightarrow P. 3-27)$



- ③ Adjust the head restraint so that the centre should be at the top of your ears. (→P. 3-31)
- ④ Wear the seat belt properly. ( $\rightarrow$  P. 1-5)

### Wearing the seat belts correctly

All occupants must wear their seat belts correctly before driving and at all times. ( $\rightarrow$ P. 1-5)

Use appropriate child restraint systems for children who are unable to wear seat belts properly. ( $\rightarrow$ P. 1-23)

### Adjusting the mirrors

Properly adjust the rear view mirror and side mirrors so that you are able to see the rear of the vehicle clearly. ( $\rightarrow$ P. 3-36, 3-37)

### WARNING

The following warning must be observed.

Failure to do so may cause accidents, resulting in serious injuries, or at worst, death.

- Check the safety around the vehicle before entering it.
- Do not adjust the driver's seat while driving. This may cause the driver to lose control of the vehicle.
- Do not place a cushion between the driver and the seatback. Not only will it prevent the driver from achieving the correct posture, it may also reduce the effectiveness of the seat belts and head restraints during a crash.
- Do not place anything under the front seats.
   Objects stuck in the seat tracks may prevent the seats from locking in place.
   This may lead to an accident and damage to the adjustment mechanism.
- Wear appropriate footwear to operate pedals properly. Unable to operate pedals properly may lead to accidents.
- Check fuel gauge if fuel is enough to drive.
- Always observe the legal speed limit when driving on public roads.
- Practice defensive driving and pay attention to your surroundings at all time.
- Never drink and drive. Driving under influence may cause accidents as alcohol can obstruct your ability to focus and think. Do not drive if you are taking a medication that causes drowsiness.
- Do not use mobile phone or operating devices while driving. Doing so will cause you to lose focus on your surroundings and it is extremely dangerous. Using car phones and mobile phones other than hands-free phones while driving is prohibited by law.
- When driving long distant, take regular breaks before you feel tired. When you feel tired or sleepy while driving, do not force yourself to continue driving and take a break immediately.
- Avoid sharp turns, abrupt manevers or any unsafe actions. Failure to do may result in a loss of control, an accident, roll over of the vehicle and serious bodily injury.
- Do not attemp off-road use.

### Seat belts

Make sure all occupants are wearing their seat belts correctly before driving the vehicle and at all times.

#### Wearing seat belts correctly

- Pull the shoulder part of the seat belt so that it comes fully over the shoulder but does not come into contact with the neck or slide off the shoulder.
- Position the lap belt as low as possible across the hips.
- Adjust the position of seatback. Sit up straight and well back in the seat.



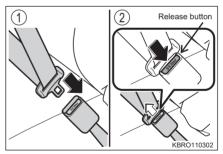
Do not twist the seat belt.

# Fastening and releasing seat belts (except the center seat belt of the rear seat)

- To fasten the seat belt, pull the seat belt into retractor and insert the plate into the buckle until you can hear a click sound.
- ② To release the seat belt, press the release button.

The seat belts retract automatically.

Please release it slowly while holding the plate and making sure that the belts do not twist or snag.



### Adjusting the seat belt shoulder anchor height (front seats)

To adjust the shoulder anchor height, move the height adjuster up or down while pulling out the knob until you hear a clicking sound.

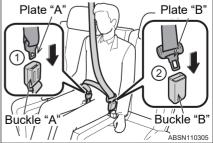


### Fastening the rear center seat belt

1 Take out the plates, and then pull the seat belt.

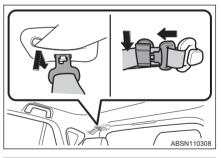


- Push the plate into buckle in the order of a plate "A" and plate "B" until a clicking sound is heard.
  - ① Plate "A", buckle "A"
  - 2 Plate "B", buckle "B"



### Releasing and stowing the rear center seat belt

- 1 To release the hooked plate "B", push the buckle release button.
- ABSN110306
- 2 To release the hooked plate "A", insert the plate "B" or the mechanical key (→P. 3-1) into the hole on the buckle. When releasing the seat belt, retract it slowly.
- 3 Stow the plates as shown in the illustration.



ABSN110307

4 Stow the rear seat belt buckles in the pockets.



### Seat belt pretensioners and force limiter (front seats)

### Pretensioner

The pretensioner ensures that the occupants are effectively restrained by retracting the seat belts when the vehicle is subjected to a strong frontal impact.

The pretensioners does not work when the frontal impact is weak, in a rear collision, or vehicle overturning.



### Force limiter

Force limiter is a mechanism that prevents any further load from being applied to the seat belts to reduce the impact to the occupant's chest when the vehicle is subjected to a strong frontal impact.

The force limiter does not work when the frontal impact is weak, in a rear collision, or vehicle overturning.

#### Releasing seat belt lock

The seat belts are locked during a sudden stop or upon impact. The seat belts may also lock if you suddenly lean forward or if you pull it too quickly. Locked and immobilized seat belts can be moved by tugging it once, then moving it in a slow, easy motion.

To move the locked passenger's seat belt, fold the seat back forward once.

#### Seat belt pretensioner and force limiter (Front seats)

Seat belt pretensioner and force limiter can only be activated once. Even when the vehicle is subjected to continuous impact, for example in a multiple collision, it will activate once for the first collision, but it will not activate for the second or subsequent collisions.

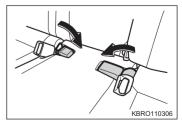
#### Centre seat belt

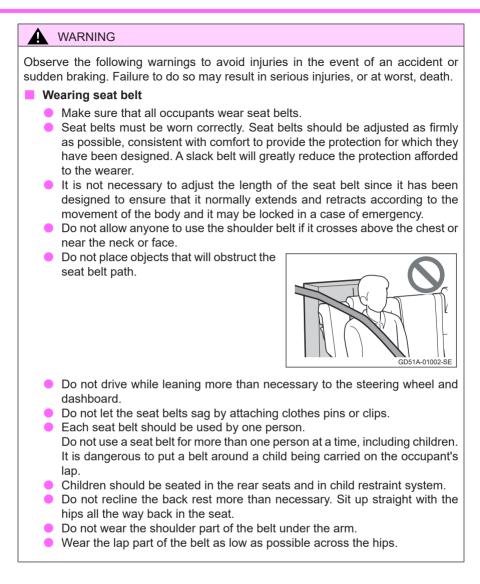
When using the rear centre seat belt, make sure to use the buckle with the CENTRE mark.

After wearing rear and centre seat belts Store the buckles neatly.

#### After wearing the seat belts

Arrange and store the seat belt neatly when they are not in use.





#### Seat belts for children

The seat belts in this vehicle is designed for adults.

- Please use child restraint systems that are suitable for small children who are unable to wear seat belts correctly. (→P. 1-23)
- Children who are able to wear seat belts correctly should wear seat belts. (→P. 1-5)
- Never let children play with the seat belt. The seat belt can get entangled around the child's neck and leads to choking or other serious injuries that could result in death. If this happen and the buckle of the seat belt cannot be unfastened, cut the seat belt with scissors or the like.

#### Pregnant women

Obtain medical advice and wear the seat belts correctly. ( $\rightarrow$ P. 1-5)

Pregnant women should wear their seat belts in the same manner as other occupants by placing the shoulder part of the belt over their chest and avoiding the abdomen and placing the lap part of the belt as low as possible across the hips below the abdomen. Not wearing the seat belts properly may lead to serious injuries, and at worst, death, not only for the mother, but also for the fetus.



#### People with illness

Obtain medical advice and wear the seat belts correctly.

#### When children are in the vehicle

→P. 1-22

#### Dirty seat belts

- Use neutral detergent to clean seat belts. Using organic solvents, such as benzene, may impair the seat belt performance and reduce its effectiveness. Similarly, do not bleach or dye the seat belts. Make sure to store the seat belts neatly after cleaning.
- Do not remove the belt when cleaning. Retract the belt after drying throughly.

#### Seat belt pretensioner and force limiter

- Once the seat belt pretensioner is activated, the SRS airbags/pretensioner warning light will flash. When this happens, the seat belts cannot be used again and must be replaced at an authorised Perodua Service Centre.
- Consult with an authorized Perodua Service Centre before the following operations are carried out.
  - When your vehicle is scrapped
  - · When removal of the front seat belt is required
  - When electric welding is conducted
  - When body repairs are conducted
  - When paint repairs are conducted
  - When the front end structure is changed
  - When any equipment is installed to the front end, such as grill guard.
- When you sell your vehicle, be sure to inform the buyer about the pre-tensioner equipment.

#### Seat belt damage and wear

- Do not damage the seat belts by letting the belts, plates, or buckles to be jammed in the door.
- Do not use damaged seat belts until it is replaced.
- Do not insert any foreign objects into the buckle or retracting mechanism.
- Check to make sure that the plate is properly inserted into the buckle and that the seat belt is not twisted. Immediately contact an authorised Perodua Service Centre if the plate cannot be inserted into the buckle.
- Replace the seats and seat belts after a serious accident even if there are no clear visible damages.
- Do not install, remove or modify seat belts. This may cause the seat belts to be ineffective in a collision.
- Installation, removal, modification, disassembly, and disposal of seat belts with pretensioner and force limiter must be done by an authorised Perodua Service Centre. Inappropriate handling may cause the seat belts to cease working properly.

#### When using the rear center seat belt

 Do not use the rear center seat belt with either buckle released.

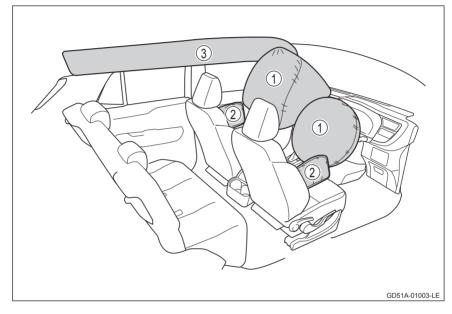
Fastening only one of the buckles may result in serious injury or even death in case of sudden braking or a collision.



Do not allow anyone sit on the rear center seat if the rear left seat is folded down, as the seat belt buckle for the rear center seat belt is then concealed under the folded seat and cannot be used.

# SRS airbags

SRS airbags inflate when the vehicle is subjected to a strong impact that may cause significant injury to the occupants. They work together with the seat belts that restraint the body to help reduce the impact.



## SRS front airbags

- SRS driver airbag/front passenger airbag (Assist to reduce the impact to the head and chest of the driver and front passenger)
- SRS side and curtain shield airbags
- 2 SRS side airbags

   (Assist to reduce the impact to the chest of front seat passenger)
   3 SRS curtain shield airbags
  - (Assist to reduce the impact mainly to the head of passengers in the front and rear seats)

#### SRS airbags

The following warning must be observed.

- Failure to do so may result in serious injuries, or at worst, death.
- The driver and all passengers in the vehicle must wear their seat belts properly. SRS airbags are meant to support seat belt functions.
- The SRS airbag for the front passenger seat deploys with a considerable force. Therefore, please adjust the seatback, place the seat as far away from the SRS airbag as possible, and sit up straight.
- Children who are too small to use the seat belts should be properly secured using a child restraint system. Perodua strongly recommends that all children be placed in the rear seats and properly secured using a child restraint system or seat belts. (→P. 1-23)
- Do not sit on the edge of the seat or lean against the dashboard.



- Do not let children stand in front of the front passenger seat SRS airbags, or hold them in your lap.
- The driver and the front passenger should not place anything on their laps.
- Do not lean against the door, the roof side rail or the front, side and rear pillars.





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# WARNING

- Do not allow anyone to kneel on the front and rear passenger seats facing the door or put their head or hands outside the vehicle.
- Do not place or attach anything to the dashboard and steering wheel pad.

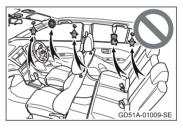
Do not attach anything to areas, such as doors, windshield, windows, front and rear pillars, roof side rail and hand grips.

- Do not use seat accessories that cover the areas where the SRS side airbags deploy. Such accessories may interfere when the airbags deploy. Such accessories may also prevent the airbags from working properly, disable the system, or deploy the airbags by mistake.
- Do not apply excessive force to the area of the SRS airbag system components, for example by hitting it strongly.

Doing so may cause the SRS airbags to cease working properly.

- Do not touch any of the SRS airbag components immediately after it deploys because these components may be hot. If you get injured or blister, consult with your doctor immediately.
- If breathing becomes difficult after the SRS airbags deployed, open the doors or windows to allow fresh air in, or leave the vehicle if it is safe to do so. Rinse off the residue as quickly as possible to prevent skin irritation. If the irritation continues, consult with your doctor immediately.
- If the steering wheel pad and the front pillar garnishes where the SRS airbags are stored are scratched or cracked, have them replaced by an Authorised Perodua Service Centre.







#### When the SRS airbags deploy

 The SRS airbags are deployed at an extremely high speed using high temperature gas, which may cause injuries, such as bruises, abrasions, and burns.

#### Modification and disposal

Do not dispose or perform any of the following modifications to your SRS airbag system without consulting an authorised Perodua Service Centre. The SRS airbags may malfunction or deploy accidentally, causing serious injuries, or at worst, death.

- Install, remove, disassemble and repair the SRS airbags.
- Repair, remove and modify the steering wheel, instrument panel, dashboard, seats and seat upholstery, front, side and rear pillars, or roof side rails.
- Repair or modify the front fenders, front bumper, or the vehicle interior.
- Installing grille guard (bull bars, kangaroo bars, etc.)
- Modifying the suspension system.
- Installing electronic devices, such as CD players and wireless radio.

#### When the SRS airbags deploy

- White powder will be released, together with a loud noise.
- Parts of the airbag components, such as steering wheel hub, airbag cover, and inflator, as well as the front seats, parts of the front, centre and rear pillars, and roof side rails may be hot for several minutes. The airbags itself is also hot.
- The windshield may be damaged.

#### SRS airbag deployment condition (SRS front airbags)

- The SRS front airbags will deploy in the event of an impact that exceeds the set threshold level (the level of force corresponding to an approximately 20~30 km/h frontal collision with a fixed wall that does not move or deform). However, in these following situations the vehicle speed that deploys the airbags will be higher
  - When the vehicle collides head-on with an object at about 30° degree or more, such as a concrete wall or guard rail.
  - When the vehicle collides with an object that can move or deform upon impact, such as a parked vehicle or a sign board.
  - When the vehicle is involved in a dive-in crash (for example, the front of the vehicle slips or goes under the bed of a truck).
- Depending on the collision, it is possible that only the seat belt pretensioner will activate.

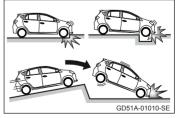
#### SRS airbag deployment condition (SRS side and curtain shield airbags)

- The SRS side and curtain shield airbags will deploy in the event of an impact that exceeds the set threshold level (the level of force corresponding to the impact force produced by an approximately 1,500 kg vehicle colliding with the vehicle cabin from a direction perpendicular to the vehicle orientation at an approximate speed of 50 km/h)
- The SRS side and curtain shield airbags may also deploy in a frontal collision, particularly if the impact is severe.

#### SRS airbags deployment other than in a collision

The front SRS airbags, SRS side and curtain shield airbags may also deploy if the underside of the vehicle is subjected to a strong impact. Some examples are shown in the illustrations.

- When the vehicle hits a hard surface, such as the curb or edge of pavement.
- Falling into or jumping over a deep hole or ditch.
- Landing hard or falling off the road.

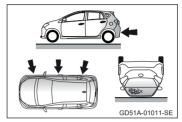


#### Conditions where the SRS airbags will not deploy

The SRS airbags will not deploy if the collision occurs when the engine is switched off, or when ACC is activated.

Conditions where the SRS airbags will not deploy (SRS front airbags) The front SRS airbags do not usually deploy if the vehicle is involved in a side or rear collision, if it rolls over, or if it is involved in a low-speed frontal collision. However, the front SRS airbags may still deploy if the impact from these collisions causes sufficient deceleration of the vehicle.

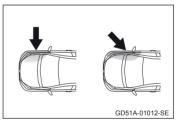
- Collision from the side
- Collision from the rear
- Vehicle roll-over



# Conditions where the SRS airbags will not deployed (SRS side airbags and curtain shield airbags)

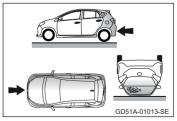
The SRS side and curtain shield airbags may not deploy if the vehicle is subjected to an impact to the side at certain angles, or an impact to the side of the vehicle other than the passenger compartment.

- Impact to the side other than the passenger compartment
- Impact to the side at certain angles



The SRS side and curtain shield airbags do not usually deploy if the vehicle is involved in a rear collision, it rolls over, or it involves in a low-speed frontal or.side collisions.

- Collision from the front
- Collision from the rear
- Vehicle roll-over

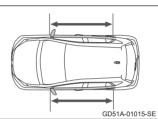


For safety and security

#### When to contact an authorised Perodua Service Centre

The vehicle requires inspection and/or repair in the following cases. Please contact an authorised Perodua Service Centre as soon as possible.

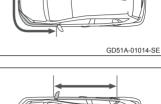
- When any of the SRS airbags have been deployed.
- The front SRS airbags did not deploy, but the vehicle was involved in a frontal collision, or the vehicle front is damaged or deformed in an accident.
- SRS side and curtain shield airbags did not deploy, but the door and the surrounding parts were subjected to an impact, or damaged and/or deformed in an accident.
- When the areas that store the front SRS airbags, such as steering wheel pad and the dashboard, are scratched, cracked or otherwise damaged.
- When the seat upholstery housing the SRS side airbags is scratched, cracked, or otherwise damaged.



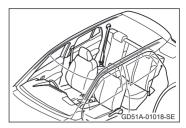


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 When the front and rear pillars, and the roof side rails that store the SRS curtain shield airbags are scratched, cracked, or otherwise damaged.



# **Exhaust fumes precautions**

# Inhaling exhaust fumes may harm the human body.

# WARNING

Exhaust fumes contain colourless and odourless carbon monoxide (CO) that is harmful. The following warnings must be observed.

Failure to do so may cause exhaust fumes to enter the vehicle. In large amount, exhaust fumes may cause drowsiness that may lead to accidents, as well as serious health disorders, and at worst, death.

#### Things to keep in mind while driving

Keep the back door closed.

If you smell exhaust fumes in the vehicle even when the back door is closed, open the windows to let in fresh air and have the vehicle inspected at an authorised Perodua Service Centre immediately.

#### When parking

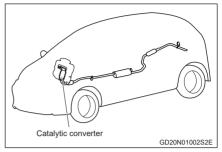
- Shut down the engine when parked in a place with bad ventilation or in an enclosed space, such as a garage.
- Do not park and leave the engine running over a long period.
   If necessary, stop the vehicle in an open space and make sure that exhaust fumes do not enter the vehicle.

#### Exhaust system

- The exhaust system must be inspected regularly. If there is a hole or crack caused by corrosion, damage to a joint or abnormal exhaust noise, have the vehicle inspected at an authorised Perodua Service Centre.
- To allow the ventilation system of your vehicle to operate properly at all times, make sure that the air inlet ducts in front of the windshield are always free from dust, leaves and other obstructions.

# **Catalytic converter**

 The catalytic converter is an emission control device installed in the exhaust system to reduce pollutants in exhaust gas.



• Follow the periodic inspections

specified in the Perodua maintenance schedule to ensure that the engine itself, catalytic converter and entire emission control system are operating properly.

 If the engine cannot starts, stalls frequently, or pings or knocks during acceleration, have your vehicle checked as soon as possible by an authorised Perodua Service Centre.

#### WARNING

- The exhaust system becomes hot and hot exhaust gas is emitted while the engine is running.
- Be sure to keep the rear end of your vehicle at least 30 cm away from combustibles such as wood or plywood when parking. Less space may cause discoloration or deformation of the combustibles or even fire by the exhaust gas.
- Do not drive or park your vehicle over anything combustible, such as grass, leaves, paper, or rags etc.
- Also, keep people or combustible objects away from the exhaust system.

## 

A large amount of unburned gas introduced into the catalytic converter may overheat the converter, which may cause a fire and damage to the connector.

- To prevent this and other damages, observe the followings:
- Do not drive with an extremely low fuel level.
- Do not run the engine at fast idle speed for more than 10 minutes or at idle speed for more than 20 minutes.
- Do not turn off the engine while the vehicle is moving.
- In your attempt to start the engine, never push or pull the vehicle.
- Avoid racing the engine.
- Use only unleaded fuel.

# When children are in the vehicle

# Observe the following precautions when children are in the vehicle.

- Make sure the children wear seat belts. Use appropriate child restraint systems for children who are unable to wear seat belts properly. (→P. 1-23)
- It is recommended that children sit in the rear seats to prevent them touching driving instruments.
- Use the child lock (→P. 3-16) and activate power window lock (→P. 3-41) to prevent them from opening doors while driving or accidentally operating the power window.
- Do not let small children operate the vehicle components where they may get caught, such as the power windows, the hood, doors and seats.

# WARNING

- Never leave children unattended in the vehicle. Temperature inside the vehicle can rise very high, which may lead to serious health consequences, such as heatstroke or dehydration, even death. It is also dangerous to leave children unattended in a vehicle as they may operate the instruments inside the vehicle, get caught in the windows or operate driving instruments, which may lead to unwanted accidents.
- To ensure children safety when driving with them in the vehicle, please refer to page 1-23 that summarizes the precautions and how to install child restraint systems.

# **Child restraint systems**

This chapter explains the types of child restraint systems and how to install them, as well as the precautions that must be observed prior to installing child restraint systems in the vehicle.

 Use a child restraint system for small children who are unable to wear seat belts properly. Please install a child restraint system for children's safety.

Be sure to follow the instructions in the operation manual enclosed with the child restraint system during installation.

#### Points to remember

- If child restraint system regulations exist in the country where you reside, please contact an authorised Perodua Service Centre for the child restraint system installation
- Use a child restraint system until the child has grown and able to wear seat belts properly.
- Choose a child restraint system that is appropriate to the child's age and size.
- Not all child restraint systems can fit in all vehicles. Make sure that the child restraint system is compatible with the seat positions before using or buying it. (→ P. 1-30)

# Child restraint systems compatibility

### Mass group

Child restraint systems that are compliant with the UN (ECE) R44  $\times$  standard are categorised into the following 5 groups based on the child's weight.

Mass group	Child weight	Reference age	
Group 0	up to 10 kg	0 - 9 months	
Group 0+	up to 13 kg	0 - 2 years	
Group I	9 - 18 kg	9 months - 4 years	
Group II	15 - 25 kg	4 years - 7 years	
Group III	22 - 36 kg	6 years - 12 years	

× UN (ECE) R44 is the UN regulation for child restraint systems.





Child restraint system for toddlers

Equivalent to Group 0+, I of the UN (ECE) R44 standard



#### Junior seat

Equivalent to Group II, III of the UN (ECE) R44 standard



Observe the following warnings when children are in the vehicle. Failure to do so may result in serious injuries or death.

- To effectively protect children in an accident or sudden stop, they must be securely restrained using a child restraint system that is correctly installed. Please consult the child restraint systems manufacturer or distributor on a child restraint system that is suitable for your child.
- Perodua recommends installing a child restraint system that is appropriate to your child's age and size. According to vehicle accident statistics, it is safer to properly install a child restraint system in the rear seat than in the front seat.
- Holding your child in your arms is not a substitute for a child restraint system. During an accident, the child may be crushed against the windshield, or between the holder and the interior of the vehicle.

#### Using child restraint systems

If the following warnings are not followed, the child restraint system may break loose in the event of sudden braking or a collision and cause serious injuries, even death.

- Strong impact on the vehicle such as during an accident may cause damage to the child restraint system that is not visible to the naked eye. Do not use the child restraint again.
- There are child restraint systems that are difficult or impossible to install. In this case, please make sure that the child restraint system is suitable for the vehicle (→ P. 1-30). Please properly install and observe the correct way of using the child restraint system after carefully reading the installation manual enclosed with the child restraint system.
- Keep the child restraint system properly secured on the seat even when not in use. Avoid leaving the child restraint system unsecured in the passenger compartment.
- If it is necessary to remove the child restraint system, remove it from the vehicle and store it or place it securely in the luggage compartment.

# When using a child restraint system

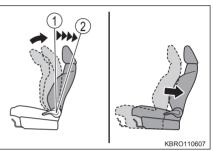
# When installing the child restraint system in the front passenger seat

For the child safety, please install the child restraint system in the rear seat.

When installing the child restraint system in the front passenger seat is unavoidable, adjust the seat as follows and install the child restraint system facing forward.

- Seat back shall be adjusted to the most upright position

   then adjust it until it reaches the fourth notched position 2.
- If the child restraint system cannot be installed due to interference between the head restraint and the child restraint system, set the head restraint to the upper most position or remove it (→P. 3-31)
- Seat slide position shall be adjusted to the rear most position



# The following warnings must be observed when installing a child restraint system

Failure to do so may result in serious injuries or death.

If installing a child restraint system on the front passenger seat is unavoidable, never use a rearward-facing child restraint system. Installing a rearward-facing child restraint system on the front passenger seat may lead to serious injuries or death when the SRS airbag for front passenger deploys in an accident. This warning label can be found on the front passenger sun visor. Please read it.



If the child restraint system is installed forward-facing on the front passenger seat, adjust the seat to the rear most position.

Failure to do so may result in serious injuries or death as the SRS airbag for front passenger deploys at a high speed and strength.



#### When using a child restraint system

 Do not allow the child to lean any part of the child's body and head on areas surrounding the doors, seats, front pillar, and roof side rail.

It is extremely dangerous if the SRS airbags deploy and may result in serious injuries or death.



- When using a junior seat, make sure the shoulder part of the seat belt is positioned across the centre of the child's shoulder at all times. The belt should be kept away from the child's neck but does not slip off the shoulder.
- Use a child restraint system that is appropriate to the child's age and size and install it in the rear seat.
- If the driver seat gets in the way and the child restraint system cannot be installed correctly, install the child restraint system in the rear seat behind the front passenger seat.
- Make sure that the front passenger seat does not interfere with the child restraint system by adjusting the front passenger seat.



# Child restraint system compatibility based on seat positions

Child restraint system compatibility based on seat positions ( $\rightarrow$ P. 1-31) is describes by using symbols on the types of child restraint systems and the seat positions it can be installed in. Vehicle owners can also choose the recommended child restraint system that best fit the child.

Please read it together with 'Checking the child restraint system compatibility based on seat positions' described below.

- Checking the child restraint system compatibility based on seat positions
  - 1 Check the child restraint system standards.

Please use UN (ECE)  $R44^{\times1}$  compliant child restraint systems. Compliant child restraint systems display the following certification marks. Please check the certification mark on the child restraint system.

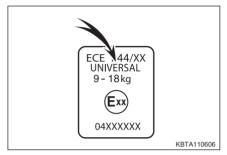
Examples of regulation number display:

1 UN (ECE) R44 certification mark <sup>\*2</sup> includes the range of child weight it can support.

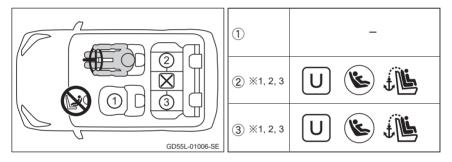


- <sup>×1</sup> UN (ECE) R44 is the UN regulations for child restraint systems.
- <sup>\*\*2</sup> The displayed mark may vary depending on the product.

- Check the certification mark on the child restraint system to confirm which category the child restraint system belongs. If it is unclear, either check the operation manual enclosed with the child restraint system or consult the distributor.
  - Universal 'Universal (generic)'
  - Semi-universal
     'Semi-universal
     (semi-generic)'
  - Restricted 'Restricted'
  - Vehicle specific 'Vehicle specific'



# Child restraint system compatibility based on the seat positions



Suitable position for 'universal' category child restraint system fixed by seat belts.



Suitable for ISOFIX child restraint system.



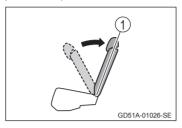
Equipped with a top tether anchorage position.



Not suitable position for any child restraint systems.



If installing a child restraint system on the front passenger seat is unavoidable, never use a rearward-facing child restraint system \*1 If the child restraint system cannot be installed due to interference between the head restraint and the child restraint system, set the head restraint to the upper most position or remove it.



- $\times^2$  Seat back shall be adjusted to the most upright position ①.
- \*<sup>3</sup> When installing a child restraint system in the second seat, adjust the front seat so that it does not interfere with the child or child restraint system.

# Detailed information on installing Child Restraint Systems (CRS)

Seating position				
Seat position number	1	2	3	
Suitable positions for 'universal' category CRS fixed by seat belts (Yes/No)	No	Yes	Yes	
Suitable position for i-size and ISO-FIX CRS (Yes/No)	No	No	No	
Suitable position for sideward facing CRS fixture (L1/L2)	Х	Х	Х	
Suitable position for rearward facing CRS fixture (R1/R2X/R2/R3)	Х	Х	Х	
Suitable position for forward facing CRS fixture (F2X/F2/F3)	Х	IUF	IUF	
Suitable position for junior seat fixture (B2/B3)	Х	Х	Х	

Key of letters in the above table;

IUF = Suitable for ISO FIX forward child restraints systems of universal category approved for use in the mass group.

X = Seat position not suitable for children in this mass group

Child safety

ISOFIX child seats are divided into several "jigs" and "size classes". You can use the CRS in the seating position of the "jig" shown in the table above. See the table below for the relationship between "jigs" and "size classes". To check the "size class" of the CRS, refer to the instruction manual that comes together with the CRS and check the "size class". If there is no information (or the information you need is not in the table).

Jigs	Size, shape and direction
F3	Full-height forward facing toddler CRS
F2	Reduced-height forward facing toddler CRS
F2X	Reduced-height forward facing toddler CRS
R3	Full-size rearward facing toddler CRS
R2	Reduced-size rearward facing toddler CRS
R2X	Reduced-size rearward facing toddler CRS
R1	Rearward facing infant CRS
L1	Left lateral facing position CRS (carry-cot)
L2	Right lateral facing position CRS (carry-cot)
B2	Junior seat
B3	Junior seat

When installing the child restraint system in the rear seat, please adjust the front seat so that it will not interfere with the child or the child restraint system.

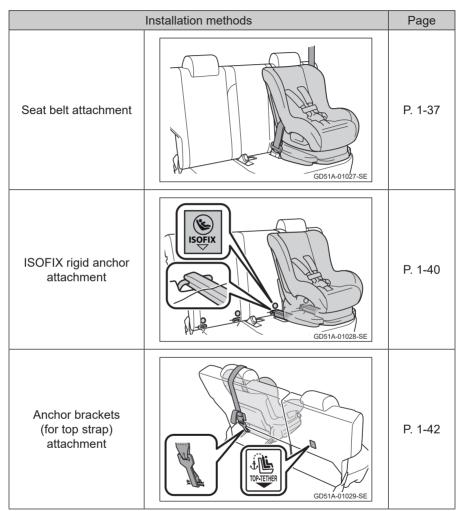


#### WARNING

When using the seat next to the child restraint system, make sure that the shoulder part of the belt comes across the shoulder properly and the lap part of the belt is pulled securely and as low as possible across the hips. Depending on the type of the child restraint system, the person sitting in the seat next to the child restraint system may not be able to wear the seat belt properly as the child restraint system may interfere with the passenger or the seat belt. In this case, this passenger may not be fully and effectively protected by the seat belt. Please sit in other seats. Failure to do so may result in serious injuries or death.

# Types of child restraint systems installation method

Please read the operation manual enclosed with the child restraint system on how to use the child restraint.



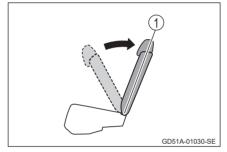
# Installation of child restraint system using seat belts

# Install using seat belts

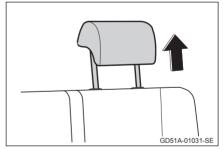
Please install the child restraint system by following the instructions in the operation manual enclosed with the child restraint system.

If the child restraint system does not have a 'universal' category (or the necessary information is not in the table), please see the child restraint system compatibility list for each car model provided by the child restraint system manufacturer, or check the child restraint system compatibility by contacting the distributor. ( $\rightarrow$ P. 1-30)

- 1 If installing the child restraint system on the front passenger seat is unavoidable, correctly adjust the front passenger seat. ( $\rightarrow$ P. 1-27)
- Seat back shall be adjusted to the most upright position
   ①.



3 Raise the head restraint\* to the highest position. If the head restraint interferes with the child restraint system and it cannot be installed correctly, remove the head restraint. (→P. 3-31)



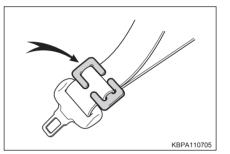
\* : The equipment may vary according to the vehicle grade and options.

Secure the child restraint system with the seat belt. Make sure that the plate is pushed fully into the buckle until it clicked, and the belt is not twisted.

Firmly secure the child restraint system using the seat belt following the instructions in the operation manual enclosed with the child restraint system.

- If the child restraint system is not equipped with the securing device for seat belts, use a locking clip (sold separately) to secure it.
- 6 After installing, shake the child restraint system in all directions to make sure that it is firmly secured.





## Removing child restraint systems

Press the buckle release button and remove the child restraint system from the seat belt.

The child restraint system may bounce due to the reaction from the seat cushion when the buckle is released. Hold down the child restraint system while releasing the buckle.

The seat belt is automatically rolled, slowly return it to the stowing position.

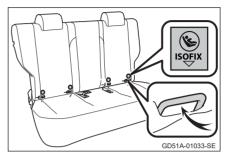
The following warnings must be observed when installing a child restraint system. Failure to do so may lead to serious injuries or death.

- Never let your child play with the seat belts. If by any chance, your child's neck got caught in the belt, it may lead to serious injuries, such as choking or other serious injuries that could result in death. If this happens and the buckle cannot be released, use scissors to cut the seat belts.
- Make sure that the seat belt plate and the buckle are firmly secured and the belt is not twisted.
- Make sure that the child restraint system is firmly secured by shaking the restraint in all directions.
- Do not adjust the seat after securing the child restraint system
- When using a junior seat, make sure that the shoulder part of the seat belt is positioned across the centre of the child's shoulder at all times. The seat belt should be kept away from the child's neck but does not slip off the shoulder.
- Please properly install and observe the correct way of using the restraint after carefully reading the operation manual enclosed with the child restraint system.

## Installation of child restraint system using ISOFIX rigid anchor

### ■ ISOFIX rigid anchors (ISOFIX child restraint systems)

This vehicle is equipped with dedicated bars to install the ISOFIX child restraint systems on the outer rear seats. (Labels displaying the location of the anchors are attached to the seats).

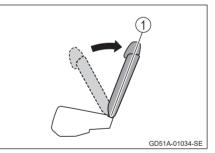


# Install with ISOFIX rigid anchor (ISOFIX child restraint system)

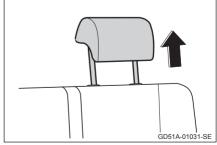
Install the child restraint system by following the instructions in the operation manual enclosed with the child restraint system.

If your child restraint system do not have a 'universal' category (or the necessary information is not in the table), please refer to the child restraint system compatibility list for each car model provided by the child restraint system manufacturer, or check the child restraint system compatibility by contacting the distributor. ( $\rightarrow$ P. 1-31)

 Seat back shall be adjusted to the most upright position ①.



2 Raise the head restraint\* to the upper position. If the head restraint interferes with the child restraint system and the child restraint system cannot be installed correctly, remove the head restraint.  $(\rightarrow P. 3-31)$ 



\* : The equipment may vary according to the vehicle grade and options.

Check the position of the fixing bar and install the child restraint system to the seat.

The fixing bars are located in the clearance between the seat cushion and seat back. Attach the metal fittings for installing the child restraint system to the fixing bars for securing child restraint systems. To remove the child restraint system, follow the instructions in the operation manual enclosed with every child restraint system.



4 Shake the installed child restraint system in all directions to make sure that it is firmly secured.

#### WARNING

#### When installing child restraint systems

The following warnings must be observed. Failure to do so may result in serious injuries or death.

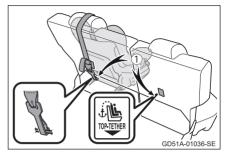
- Make sure that the child restraint system is firmly secured by shaking the child restraint system in all directions.
- Do not adjust the seat after securing the child restraint system.
- When using the fixing bars for securing ISOFIX child restraint systems, make sure that there are no obstacles nearby and that the seat belt is not stuck.
- Please properly install and observe the correct way of using the child restraint system after carefully reading the operation manual enclosed with the child restraint system.

# Installation of child restraint system using an anchor bracket (for top strap)

#### Anchor bracket for top strap

This vehicle is equipped with anchor brackets for top strap in the rear outer seats. It is used to secure the top strap.

① Anchor bracket location



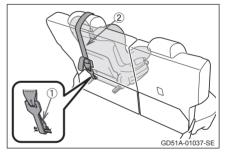
## Secure the top strap to the anchor bracket

Please install the child restraint system by following the instructions in the operation manual enclosed with the system.

Secure the hook to the anchor bracket and fasten the top strap.

Tighten the strap with the pin to make sure that the hook is firmly secured.

- 1 Hook
- ② Top strap



2 Shake the installed child restraint system in all directions to make sure that it is firmly secured.

The following warnings must be observed when installing a child restraint system. Failure to do so may result in serious injuries or death.

- Make sure that the top strap is firmly secured, and the belt is not twisted.
- Hook the top strap only to the anchor bracket.
- Make sure that the child restraint system is firmly secured by shaking the restraint in all directions.
- Do not adjust the seat after securing the child restraint system.
- Properly install and observe the correct way of using the child restraint system after carefully reading the operation manual enclosed with the child restraint system.

#### Rear head restraint\*

- When installing the child restraint system with the head restraint raised, the top strap must always come through under the head restraint. If the top strap is hooked over the head restraint, the child restraint system cannot be firmly secured. This is dangerous as it may cause life threatening injuries in the event of an accident.
- When installing the child restraint system with the head restraint raised, do not lower the head restraint after securing the top strap to the anchor bracket. If the head restraint is lowered, the top strap may hit the head restraint and sag, causing the child restraint to move during a collision resulting in serious injuries or death.
- If it is necessary to remove the head restraint, please keep it firmly secured in a safe place.

\* : The equipment may vary according to the vehicle grade and options.

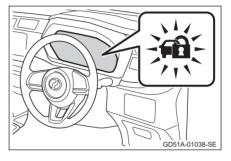
# Engine immobilizer system

The vehicle's keys have built-in transponder chips and only keys that have been previously registered in the vehicle's electronic control unit can ignite the engine.

Never leave your car keys inside the vehicle when leaving your vehicle.

• This system is design to help prevent vehicle theft but does not guarantee absolute security against all vehicle thefts.

When the engine switch is turned OFF, the security indicator will flash to show that the system is activated. Turning the engine switch to "ACC" or "ON" with a registered key will deactivate the system and the security indicator will stop flashing.



#### Service

Engine immobilizer system is maintenance free and does not require service.

#### Conditions that may cause the system to malfunction

- The key is in contact with or covered by metallic object.
- The key is in contact with or on top of another key (with built-in transponder chip) for other vehicle security system.



#### WARNING

To ensure the engine immobilizer system works properly, do not modify or remove the system. This may cause the system to malfunction.

# Alarm

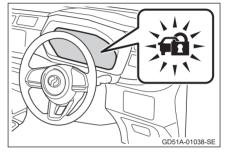
# The alarm

Alarm is a function that sets off sound and lights to give an alert when intrusion is detected. Once the alarm is set, it will trigger when any locked doors are unlocked and opened without using the key-free system or remote control.

### Setting the alarm

Close and lock all doors using the key-free system or remote control. The alarm will be set automatically after 30 seconds have passed.

When the alarm is set, the indicator will flash.



# Cancelling the alarm setting

Please do any of the following:

- Unlock the doors using the key-free system or remote control
- Turn on the engine switch

#### Stopping the alarm

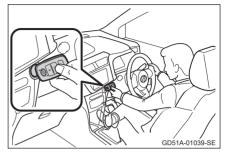
Please do any of the following:

- Press the lock/unlock button on the remote control
- Lock/unlock using the key-free system
- Get in the car carrying the smart keys
- Turn on the engine switch

## When the smart keys do not operate properly

When the smart keys do not operate properly due to reasons such as low battery, the alarm can be stopped with the following procedures.

- 1 Firmly press the brake pedal
- 2 Touch the smart keys to the engine switch as shown in the diagram



#### System maintenance

The alarm system is maintenance free and does not require service.

- Check before locking the doors. The following items must be checked in order to prevent unexpected alarm activation and theft
  - Nobody is in the vehicle
  - The windows are closed before the alarm is set
  - No valuable or other personal items are left in the vehicle

#### If the alarm setting is interrupted

The alarm setting will be interrupted if the following operations are carried out within 30 seconds from the security indicator begin flashing.

- The driver's door is unlocked
- The doors are opened
- The engine switch is turned ON

#### The security indicator

Since the indicator also functions for engine immobilizer system, it will keep on flashing after the alarm setting is cancelled until the engine switch is turned to ACC.

The indicator will also flash when the engine switch is turned from ignition ON to OFF.

#### When the battery is disconnected

Be sure to deactivate the alarm system.

If the battery is discharged before deactivating the alarm system, the alarm may be triggered when the battery is reconnected.



#### WARNING

To ensure that the alarm activates properly, do not modify or remove the system. This may cause the system to malfunction.

# Instrument cluster

2

#### Instrument cluster

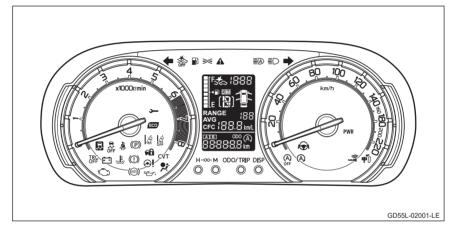
Warning lights and indicators	. 2-1
Gauges and meters	. 2-10
Multi-information display*	. 2-12
TFT colour multi-information	
display*	. 2-24

# Warning lights and indicators

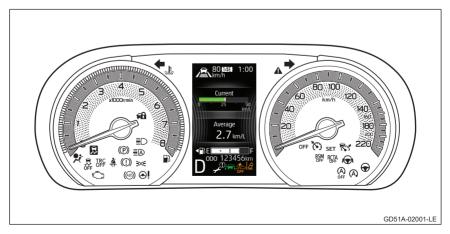
The warning lights and indicators on the instrument cluster are to inform the driver of the status of the vehicle's various systems. All warning lights and indicators shown in the following illustrations will be explained.

## Instrument cluster

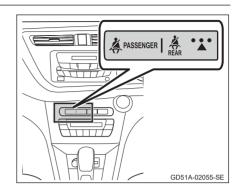
Vehicle not equipped with a TFT colour multi-information display



Vehicle equipped with a TFT colour multi-information display



# • Center panel



# Warning lights

Alerting the driver should any system malfunction occurs.

Warning lights			
×1		Brake system warning light	
×1	<b>—</b>	Battery charge warning light	7-12
<sub>**</sub> 1		Low engine oil pressure warning light	7-12
×1	<del>}</del>	High engine coolant temperature warning light (red)	7-12
×1		Engine malfunction warning light	7-12
×1	CVT	CVT warning light	7-13
×1	×	SRS airbags/pretensioner warning light	7-13
<sub>**</sub> 1	(ABS)	ABS warning light	7-13
×1	<b>@!</b>	Electric power steering warning light (red/yellow)	7-13
<sub>※</sub> 1,2	<b>L</b>	Key-free system warning light	7-13
<sub>**</sub> 1		AHB warning light (yellow)*	7-13
<sub>※</sub> 1,3	्र OFF	Advanced Safety Assist OFF indicator (light up or flashing)	7-14

	Warning lights		
<sub>※</sub> 1,4	OFF	Lane Departure Warning OFF indicator (light up or flashing)	7-14
<sub>※</sub> 1,5		Master warning light*	7-14
×1	<b>R</b>	ACC warning light (yellow)*	7-14
×1	/₽\	LKC warning light (yellow)*	7-14
<sub>※</sub> 1,6	Ę	Slip indicator	7-15
×7	(A) OFF	eco IDLE OFF indicator (flashing)	7-15
×1	(A)	eco IDLE ready indicator (flashing rapidly)	7-19
×1	BSM OFF	BSM OFF indicator* (flashing)	7-16
<sub>**</sub> 1	RCTA OFF	RCTA OFF indicator* (flashing)	7-16
×1	<b>.</b>	Brake override system warning light	7-16

	Warning lights		
× <sup>1</sup>		Hands-free driving warning light*	7-16
		Door ajar warning light	7-16
		Low fuel warning light	7-16
	Å	Driver seat belts reminder light	7-16
×8	A PASSENGER	Front passenger seat belt reminder light	7-16
×8	REAR ••••	Rear seat passenger seat belts reminder light	7-16
		Parking brake warning light	7-16
×1	<b>)</b>	Service information reminder	2-15

- \*1 These lights are turned on when the engine switch is turned on to indicate system checking. They will turn off after a few seconds or after the engine is started. There may be a malfunction in a system if a light does not light up or continues to light up. Please have your vehicle inspected at an authorised Perodua Service Centre.
- x<sup>2</sup> There may be a malfunction if this light is on. This light will flash to indicate that the smart keys are out of range, or that the smart keys are almost out of battery. (→P. 7-18)
- $\times^3$  This light is also turned on when the Advanced Safety Assist function is cancelled.
- \*<sup>4</sup> This light is also turned on when the Lane Departure Warning is cancelled.
- \*<sup>5</sup> This light will also turned on when the Advanced Safety Assist is activated.
- \*<sup>6</sup> This light flashes to indicate the system is in operation and it lights up if there is a system malfunction.
- \*7 This light will also light up when eco IDLE is deactivated.
- $\times^8$  This light illuminates on the center panel.

# Indicators

Indicators inform the driver of the operating status of the vehicle's various systems.

	Indicators		
	<b>++</b>	Turn signal indicator	4-19
	≣D	Headlights high beam indicator	4-23
×1	<u>الج</u>	Low engine coolant temperature indicator (blue)	_
	FD	Security indicator	1-44, 1-45
		Tail lights indicator	4-22, 4-23
<sub>※</sub> 2	<b>F</b>	Slip indicator (flashing)	4-136
<sub>※</sub> 2	OFF	VSC OFF indicator	4-137
<sub>※</sub> 2	TRC OFF	TRC OFF indicator	4-136
×2	ECO	Eco driving indicator*	4-3
<sub>※</sub> 2	(A)	eco IDLE indicator	4-106
×3	(A) OFF	eco IDLE OFF indicator	4-107

		Indicators	Page
<sub>※</sub> 2	BSM OFF	BSM OFF indicator*	4-114
<sub>※</sub> 2	RCTA OFF	RCTA OFF indicator*	4-114
<sub>※</sub> 2,4	□ <sub>″</sub>	Side-view mirrors indicator*	4-114
×2	300	Advanced Safety Assist operation indicator	4-45
<sub>※</sub> 2,5	J OFF	Advanced Safety Assist OFF indicator	4-44
<sub>**</sub> 2	L.	Lane Departure Warning activated light	4-46
	$\mathbf{Z}$	Lane recognition indicator*	4-74, 4-99
<sub>**</sub> 2		Steering operation support activated light*	4-99
<sub>※</sub> 2,5	OFF	Lane Departure Warning OFF indicator	4-44
	<b>*</b> *	ACC indicator (green)*	4-87
<sub>※</sub> 2	(*) <sup>*</sup>	Cruise Control indicator*	4-91
×2	SET	ACC SET indicator*	4-81
		Leading vehicle indicator*	4-81

Indicators		
OFF	ACC OFF indicator*	4-81
/₽\	LKC indicator (green)*	4-99, 4-101
OFF	LKC OFF indicator*	4-99
	AHB activated light (green)*	4-27
PWR	Power mode indicator*	4-17

- \*1 This light is turned on when the engine coolant temperature is low. If the light remains blue even after the engine is continuously warmed up, please have your vehicle inspected at an Authorised Perodua Service Centre.
- \*<sup>2</sup> These lights are turned on when the engine switch is turned on to indicate system checking. They will turn off after a few seconds or after the engine is started. There may be a malfunction in a system if a light does not light up or continues to light up. Please have your vehicle inspected at an Authorised Perodua Service Centre.
- $\times^3$  This light flashes when there is a malfunction in the eco IDLE system.
- \*\*<sup>4</sup> This light is displayed on side-view mirrors.
- \*<sup>5</sup> These lights flash when Advanced Safety Assist malfunctions.

### WARNING

#### If a safety system warning light does not light up

Should a safety system light such as the ABS or SRS warning light do not light up even when the engine is switched on, or if it continues to light up even after a few seconds or after the engine has started running, these systems may not operate properly in an accident, which could result in serious injuries or even death.

Please have your vehicle inspected at an authorised Perodua Service Centre

## CAUTION

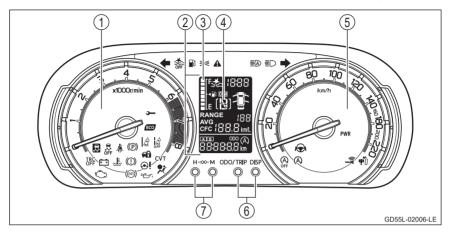
#### To prevent damage to the engine and its components

This vehicle is equipped with a high engine coolant temperature warning light ( $\rightarrow$ P. 7-12) instead of an engine coolant temperature gauge. The engine may be overheating if the high engine coolant temperature warning light flashes or lights up in red. Stop your vehicle immediately in a safe place. ( $\rightarrow$ P. 7-61)

Vehicles equipped with a TFT colour multi-information display will also display a message (→P. 7-21) simultaneously.

# Gauges and meters

Vehicle not equipped with a TFT colour multi-information display

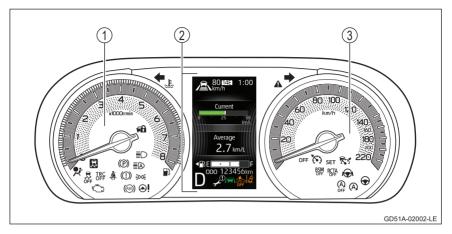


① Tachometer

Displays the engine revolutions per minute. The red zone indicates over-revving.

- ② Multi-information display Displays and sets various information related to the vehicle. (→P. 2-10)
- ③ Fuel gauge Indicates how much fuel is in the tank.
- ④ Shift position display Displays the selected shift position. (→P. 4-16)
- Speedometer Displays the vehicle speed.
- ⑥ Display change button For changing the multi-information display. (→P. 2-13)
- ⑦ Clock adjustment button (→P. 2-13)

Vehicle equipped with a TFT colour multi-information display



- ① Tachometer Display the engine revolutions per minute.
- ② TFT colour multi-information display
  - Displays and sets various information related to the vehicle. ( $\rightarrow$ P. 2-24)
- Speedometer Shows the vehicle speed.

#### Activating the meter display

Turn on the engine.

#### Liquid crystal display

Small spots or light spots may appear on the display. This phenomenon is unique to liquid crystal display and there is no problem using the display as it is.

#### Tachometer

Do not over-rev the engine to prevent engine damage.

# Multi-information display\*

# **Display contents**

The multi-information display shows various information related to the driving.

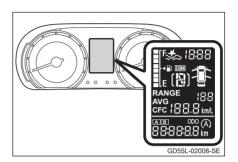
- Trip information (→P. 2-14) Displays the following items:
  - Odometer
  - Trip meter A/B
  - Idling stop time
  - Idling stop cumulative time
  - Meter brightness
- Driving information (→P. 2-16) Displays the following items:
  - Current fuel consumption
  - Average fuel consumption
  - Driving range
- Fuel gauge

Indicates how much fuel is in the tank.

- Shift position display ( $\rightarrow$ P. 4-16)
- Clock (→P. 2-13)
- Advanced Safety Assist Function OFF Code display (→P. 7-38)
- Door ajar

Display condition of each door (open/close).

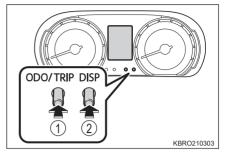
\* : The equipment may vary according to the vehicle grade and options.



Instrument cluster

# Changing the display

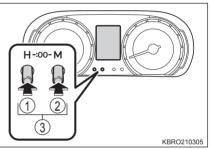
- Trip information (→P. 2-14) The display can be changed by pressing the ODO/TRIP button ①.
- Driving information (→P. 2-16) The display can be changed by pressing the DISP button ②.



# Clock

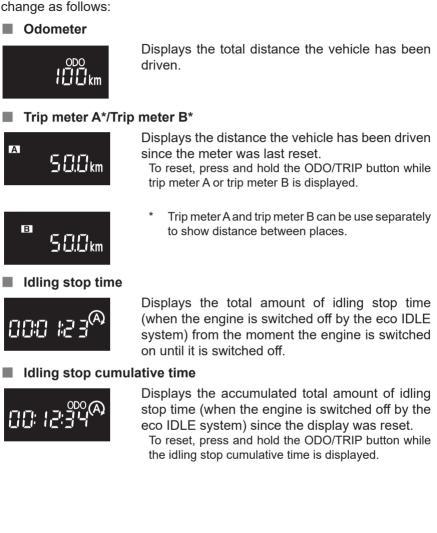
Time can be set by pressing the clock adjustment button.

- ① Set the hour (H)
- ② Set the minutes (M)
- ③ Set the minute to '00'\* Press and hold the clock adjustment button ① and ② together at the same time.
  - (Example) For 1:00 to 1:29, 1:00 is set For 1:30 to 1:59, 2:00 is set



## **Trip information**

Every time the ODO/TRIP button is pressed, the information displayed will change as follows:



### Meter brightness



Displays the meter brightness in daylight and at night. ( $\rightarrow$ P. 2-51).

- The meter brightness can be adjusted in 5 stages by pressing and holding the ODO/TRIP button while the meter brightness is displayed.
- Adjust the brightness for daylight when the surroundings are bright or when the front position lights are turned off.
- Adjust the brightness for night time when the surroundings are dark and the front position lights are turned on.

## Service information reminder

When cumulative driving distance from the last reset reaches 10,000 km, service information reminder indicator ' **>** ' appears on the meter and remains displayed to remind the driver that the service interval (every 10,000 km) has reached. To reset the reminder, please follow the sequences given below:

■ 0.0 km
-------------

- 1 Step 1
  - With the engine is running, press the ODO/ TRIP button until trip meter A is displayed and turn OFF the ignition switch.
- 2 Step 2
  - After the engine is OFF, press and hold ODO/ TRIP button and turn ON the ignition switch while continue pressing the ODO/TRIP button for 3 seconds.
  - The service information reminder indicator
     'will flashing (slow then increase to rapid mode) and turned OFF after a few seconds.

# **Driving information**

Every time the DISP button is pressed, the information displayed will change as follows:

## Current fuel consumption



Shows the current rate of fuel consumption.

## Average fuel consumption



Displays the average rate of fuel consumption since the function was last reset.

- To reset, press and hold the DISP button while the average fuel consumption is displayed.
- Use the displayed average fuel consumption as a reference.



Displays the estimated maximum distance the vehicle can travel with the remaining quantity of fuel.

- This distance is calculated based on past average fuel consumption and it is not the actual distance the vehicle can travel.
- Pressing the DISP button for more than 5 seconds while driving range is displayed may delete past average fuel consumption data and update the display.
- The display may not be updated when the fuel is low.

# **Customize settings screen**

Meter displays and function settings can be changed by switching to customize settings screen.

Never customize settings while driving. Always customize settings after stopping the vehicle in a safe place.

#### Changing the settings

- Switch to customize settings screen by pressing and holding the ODO/TRIP button while the odometer is displayed.
   If there is no operation for about 10 seconds, the display will revert to odometer.
- To change the settings of a function, press the ODO/TRIP button until the function is displayed.

The function displayed changes every time the button is pressed.

Change the settings by pressing and holding the ODO/TRIP button. The display changes every time the button is pressed and hold. To close the custom settings screen, press the ODO/TRIP button until Ene is displayed on the screen, and then press and hold the button.

#### Functions with configurable settings

Functions	Settings	Display (initial settings)	
AVG Fuel Reset after Refuel	ON	km/L	
Avg ruei Reset aller Reluei	OFF	0 : OFF	
Trip A Depart offer Defuel	ON		
Trip A Reset after Refuel	OFF	02: OFF	

Functions	Settings	Display (initial settings)	
ECO Idle Time Auto Display	ON		
	OFF	83	[]n <sup>(A)</sup>
Front Vehicle Departure Alert Buzzer	High 봄 指		
Volume	Low	<u>[]</u> 4:	H 1
	High 봄 {		
LDW Warning Buzzer Volume	Low	0S:	H
	ON		
ECO Indicator Display	OFF	86:	On
Front Vehicle Deporture Alert	ON		
Front Vehicle Departure Alert	OFF	1 #	On
	Late		
Front Vehicle Departure Alert Timing	Standard	. –	
	Early	12:	50

Functions	Settings	Display (initial settings)
	Late	
Pre-Collision Warning Timing	Normal	
	Early	13: 02
	03	
	Normal	
LDW Warning Timing	Early	14: 01
	ON	
Steering Assist	OFF	15: On
Vehicle Speed Linked Door Locking	ON	
Function	OFF	21 On
Shift Position Linked Door Locking	ON	
Function	OFF	22: OFF
Shift Position Linked Door Unlocking	ON	
Function	OFF	23: On
Unlocking when IG OFF	ON	
	OFF	24 OFF

Functions	Settings	Display (initial settings)
Answer Back Buzzer Volume	(Mute) From (low) (high)	25: 05
Answer Back Signal	ON OFF	26: On
Speed Linked Intermittent Wiper	ON	
	OFF	3: On
Shift R Linked Rear Wiper	ON OFF	32: On
3 Times Flashing Function	ON	
	OFF	41 On
Room Lamp Linked	ON	
	OFF	8† On
Leaving Home	ON	
	OFF	84 On

#### Initializing the settings

- Switch to customize settings screen by pressing and holding the ODO/TRIP button while the odometer is displayed.
- 2 **FFRIM** Press the ODO/TRIP button until 'dEFAUL' is displayed.

While 'dEFAUL' is displayed, press and hold the ODO/TRIP button.



After 'cLEAr' is displayed, press and hold the button again.



The screen will display the odometer again after 'cLEAr' flashes and the following functions are initialized

Functions	Initial settings
AVG Fuel Reset after Refuel	OFF
Trip A Reset after Refuel	OFF
ECO Idle Time Auto Display	ON
Front Vehicle Departure Alert Volume	НІ
LDW Warning Buzzer Volume	НІ
ECO Indicator Display	ON

#### Average fuel consumption

- Right after the engine is switched on, the function will display the average fuel consumption when the engine is last switched off.
- The average fuel consumption will not be displayed if data cannot be transmitted or invalid data is transmitted during display update.

#### Driving range

- The time the display is updated depends on driving conditions, such as whether the vehicle is running or stopping.
- When picking up your new vehicle, it may not display the correct driving range.
- Driving range may not be displayed for a while when detecting malfunction.

#### Meter brightness (daylight and night time)

- Meter brightness is switched between daylight and night time brightness in the following situations:
  - Daylight: when the surroundings are bright or when the front position lights are switched off
  - Night time: when the surroundings are dark and the front position lights are switched on
- Meter lighting is dimmed in night time. However, the lighting will not be dimmed if the night time is set at the brightest setting.

# Service information reminder indicator display

Do not reset the display between service intervals to avoid incorrect data counting on the display.

#### When disconnecting and reconnecting battery terminals

Disconnecting and reconnecting battery terminals will reset the clock and its data.

#### Custom settings screen

'FAIL' will be displayed when the settings cannot be changed even when configuration is done in the customize settings screen.



## WARNING

#### When you are driving

For safety, do not use the meter control buttons to switch displays or to adjust the clock while driving. Doing so may lead to steering wheel operation error resulting in unexpected accidents.

Stop the vehicle and operate the buttons. Do not look continuously at the display while driving.

#### When changing the settings

Changing the settings must be done while the engine is running. Therefore, make sure adequate ventilation when the vehicle is parked in an enclosed area, such as in a garage. Without adequate ventilation, exhaust fumes containing carbon monoxide will accumulate and may cause a serious health hazard, even death.

#### CAUTION

#### When changing the display settings

Changing the display settings must be done while the engine is running to avoid the possibility of the battery running out.

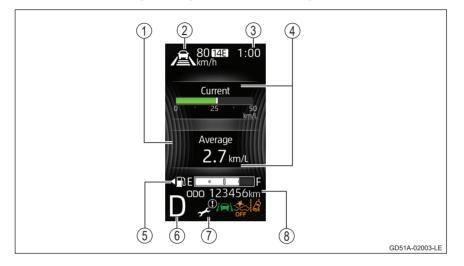
#### Driving range

Please refuel as quickly as possible when the fuel gauge is almost at 'E' or when the low fuel warning lights up even when driving range indicates sufficient travelling distance.

# TFT colour multi-information display\*

## **Display contents**

TFT colour multi-information display shows various information related to the vehicle and driving. Settings can also be changed in this screen.



- Eco Drive assist lighting The lighting colour will turn green in three stages by determining the degree of environment-friendly driving. (→P. 4-3)
  - The display colour will turn yellow when in power mode. ( $\rightarrow$ P. 4-17)
  - The lighting colour does not change when using ACC. ( $\rightarrow$ P. 4-81)
- ② Driving assist display (→P. 4-81) This icon will not be displayed when the driving assist display screen (→P. 2-29) is displayed.
- ③ Clock

Date is displayed when using analogue clock ( $\rightarrow$ P. 2-29) display.

(4) Content display

Various information can be displayed by switching between menu icons. Depending on the situation, the display is also interrupted with alert triggers and advices.

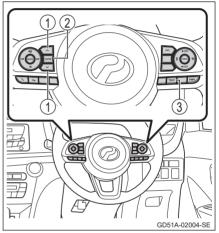
5 Fuel gauge Indicates how much fuel is in the tank.

- 6 Shift position display
   Displays the selected shift position. (→P. 4-16)
- ⑦ Service information reminder icon The icon will be displayed when there is a reminder. When this icon is displayed, please check the reminder and reset after servicing your vehicle. (→P. 2-32)
- 8 ODO/TRIP information ( $\rightarrow$ P. 2-26)

# Changing the display

Change the settings and switch between screen displays by pressing the control button.

- 1  $\wedge \vee$  buttons
  - Switching between menus.
  - Switching between contents, skipping, moving the cursor.
- ENTER button
  - Changes the display to "Settings". (→P. 2-34)
  - Determines or selects the item in "Settings". (→P. 2-34)
- ③ TRIP button Switching between trip information displays. (→P. 2-26)



# **ODO/TRIP** information

Every time the TRIP button is pressed, the information displayed will change as follows:

① Odometer Displays the total distance the

vehicle has travelled.

(2) Trip meter A\* Displays the distance the vehicle has been driven since the meter was last reset.

To reset, press and hold the TRIP button for more than 1 second while trip meter A is displayed.

③ Trip meter B\*

Displays the distance the vehicle has been driven since the meter was last reset.

To reset, press and hold the TRIP button for more than 1 second while trip meter B is displayed.

ODO 123456km
 TRIPA 6.0km
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\* : Trip meter A and trip meter B can be use separately to show distance between places.

## **Basic screen**

Press the  $\wedge$   $\vee$  buttons to switch between display contents.

- Current fuel consumption/Average fuel consumption
- Current fuel consumption Shows the current rate of fuel consumption.
- Average fuel consumption Displays the average rate of fuel consumption since the function was last reset.
  - To reset, press and hold ENTER button while the average fuel consumption is displayed.
  - Please use the displayed average fuel consumption as a reference.



#### Average fuel consumption/Driving range

- Average fuel consumption (→P. 2-27)
- Driving range

Displays the estimated maximum distance the vehicle can be driven with the remaining quantity of fuel.

- This distance is calculated based on past average fuel consumption and not the actual distance the vehicle can be driven.
- Pressing the ENTER button for more than 5 seconds while driving range is displayed may delete past average fuel consumption data and update the display.
- The display may not be updated when the fuel is low.



# Trip average speed/Trip time

- Trip average speed Shows the average speed in km/h since last IG ON.
- Trip time Shows the time elapsed since last IG ON.



# Idling stop time/Idling stop cumulative time

• Idling stop time

Displays the total amount of idling stop time (when the engine is switched off by the eco IDLE system) from the moment the engine is ignited until it is switched off.

- Idling stop cumulative time Displays the total amount of idling stop time (when the engine is switched off by the eco IDLE system) since the display was reset.
  - To reset, press and hold ENTER button while the total idling stop time is displayed.



Instrument cluster

# Clock

Changing clock display type ( $\rightarrow$ P. 2-39)

Analogue clock
 Displays the time in analogue.



 Digital clock Displays the time in digital.



# Driving assist display

The following system operation status can be checked.

- ACC\* (→P. 4-81)
- LKC\* (→P. 4-99)
- Lane Departure Warning / Lane Departure Prevention (→P. 4-73)



# Warning messages

When the vehicle malfunctions, the message describing the malfunction and steps to take is be displayed. If several messages are displayed, press the  $\land$   $\checkmark$  buttons to switch from one message to another.

Messages' is displayed.





Messages

Instrument cluster

# **Driving display**

In the following events, the screen is switched to driving display and return to the previous screen after a while.

- When driving assist function is activated ( $\rightarrow$ P. 4-81)
- When driving assist function is activated (including when ACC main button is pressed)

Displays the following system operation status.

- ACC\* (→P. 4-81)
- LKC\* (→P. 4-99)
- Lane Departure Warning / Lane Departure Prevention (→P. 4-73)



# Steering wheel position monitor

This function displays the direction of front wheel tyres when the shift position is in reverse.



# **Opening screen**

When the engine is switched on, a performance screen will be displayed. Then the date and message screen is displayed for several seconds. The following reminders can be displayed.

- New Year greetings
- Birthdays
- Anniversaries
- Vehicle inspection date
- Maintenance date

- Change engine oil reminder
- Change oil filter reminder
- Tyre rotation reminder
- Driving distance

New Year greetings

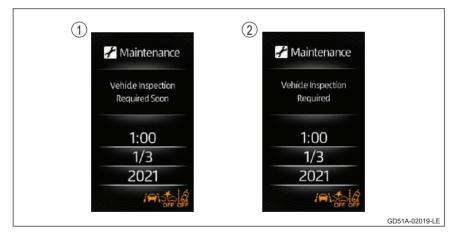
This message will be displayed on 1 January.

# Birthdays and anniversaries

This message will be displayed on the preset dates.

## Vehicle inspection date, maintenance date

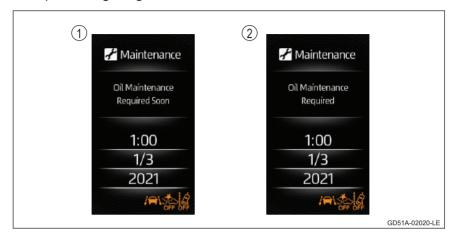
The message will be displayed once daily when less than one month remains until the preset date and after the preset date has passed. Example: Inspection date



- ① When less than one month remains until the preset date.
- ② After the preset date.

# Change engine oil, change oil filter, tyre rotation reminders

The message will be displayed once daily when less than 500 km remains until the preset distance and after the preset distance is reached. Example: Change engine oil reminder



- 1 When less than 500 km remains until the preset distance.
- ② After the preset distance is reached.

# **Ending screen**

The performance screen is displayed when the engine is switched off.

# Driving record and score (fuel consumption)

Displays driving record and score for the degree of environmentfriendly driving from the moment the engine is switched on until it is switched off when the ending conversion is set to 'Eco'  $(\rightarrow P. 2-38)$ .



# Settings

Display settings, adjustments, and functions settings can be configured by pressing the ENTER button and switching the setting menu by pressing  $\checkmark$  buttons when the vehicle is stationary with the engine running.

1st screen	2nd screen	3rd screen
Settings Display Brightness	Settings Notification Date Settings	Settings Reset Settings
Time and Date Display Settings	Vehicle Settings Maintenance Settings	
Buzzer	Oil Warning Reset	
		GD51A-02022-LE

Never customize settings while driving. Always customize settings after stopping the vehicle in a safe place.



The following items can be set and adjusted.

- Adjusting meter display brightness (→P. 2-36)
- Time and date ( $\rightarrow$ P. 2-37)
- Display settings ( $\rightarrow$ P. 2-38)
- Buzzer (→P. 2-40)
- Reminder date (Notification date) (→P. 2-41)
- Advanced Safety Assist (→P. 2-42)
- BSM/ RCTA\* (→P. 2-44)

- Door lock (→P. 2-45)
- Wipers (→P. 2-46)
- Turn signal ( $\rightarrow$ P. 2-46)
- Welcome lamp setting (→P. 2-47)
- Service maintenance (→P. 2-48)
- Oil deteriorate warning setting (→P. 2-50)
- Initialize display settings (→P. 2-51)
- \* : The equipment may vary according to the vehicle grade and options.

# Meter display brightness

The meter brightness can be adjusted to daylight or night time ( $\rightarrow$ P. 2-52). (Initial setting:  $\rightarrow$ P. 2-51)

- 1 Press ENTER button to switch to Setting menu.
- 2 ∧ ∨ Select 'Display brightness' by pressing the up and down arrow buttons and press ENTER button.
- 3 After pressing the ENTER button, press the ∧ ∨ buttons to adjust the brightness.

- is displayed, then adjust the brightness by pressing
   buttons and pressing ENTER button again.
- Adjust the brightness for daylight when the surroundings are bright or when the front position lights are turned off.
- Adjust the brightness for night time when the surroundings are dark and the front position lights are turned on.
- Adjustment can be made in 10 stages.



# Time and date

Time and date can be set.

- Press the ENTER button to switch to Setting menu.
- 2 ∧ ∨ Press these buttons to go to 'Time and Date' and press ENTER button.
  - The clock will stop working when the 'Time and Date' is displayed. The clock activates with the seconds reset to '0' after pressing the RETURN button.

1st screen	2nd screen
Time & Date	Time & Date
	Sort by Date D/M/Y
Minute 00	Day 1
Hour 1	Month 3
12H <b>≥</b> 24H 24H	Year 2021
	GD51A-02025-LE

- 3 Select the items to be configured by pressing the  $\land \lor$  buttons, then press ENTER button.
  - For Hour/minutes, after ▼ is displayed, hour and minute are set by pressing the ∧ ∨ buttons and pressing the ENTER button again.
  - For 12H/24H will switch between '12H' (12 hour display) and '24H' (24 hour display) every time the ENTER button is pressed.
  - Regardless of 12H/24H settings, the clock will be displayed in a 24-hour format during adjustment.
  - For "Sort by Date', after is displayed, press the ∧ ∨ buttons to select the display order of the date and pressing the ENTER button again.
  - For "Day", "Month", and "Year", after **▼** is displayed, push the ∧ ∨ buttons to set the value and pressing the ENTER button again.

## Display settings

The following settings can be changed.

- Set the eco indicator light to ON/OFF
- Set the average fuel consumption reset after refuel to ON/OFF
- Set the trip A reset after refuel to ON/OFF
- Set the idling stop time auto display to ON/OFF
- Set the opening screen display to ON/OFF
- Set the ending display type (Eco, standard, OFF)
- Set the steering angle (steering wheel position display) to ON/OFF
- Set the ACC auto display to ON/OFF
- Set the clock display type ( $\rightarrow$ P. 2-39)
- 1 Press the ENTER button to switch to Setting menu.
- Press the V buttons to select 'Display setting', then press ENTER button.
- Switch between the 'Display setting' screens by either pressing and holding ∧ ∨ buttons or by pressing the buttons several times.

1st screen	2nd screen
Display Settings Eco Indicator Light AVG Fuel Reset after Refuel Trip A Reset after Refuel (A) Time Auto Disp. Opening Display (A) Time	Display Settings Ending Display Type STD Steering Angle ACC Auto Disp. Clock Display Type
	GD51A-02026-LE

- - The settings displayed change every time the ENTER button is pressed. (Lamp illuminated : ON, Lamp Off : OFF)
  - After pressing the ENTER button, ▼ button is displayed. Press the
     ∧ ∨ buttons to choose the settings and press the ENTER button again.

# Clock display type

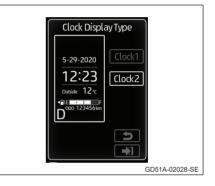
The clock display type can be changed.

- 1 Press the ENTER button to switch to Setting menu.
- Press the ∧ ∨ buttons to select 'Display setting' then press ENTER button.
- Switch between the screens in 'Display setting' either by pressing and holding or pressing the buttons several times. Select 'Clock display type' and press ENTER button.
- Image: Press the ∧ ∨ buttons to select 'Clock 1' or 'Clock 2' then press ENTER button.

Clock 1-Analogue clock



Clock 2-Digital clock



## Buzzer settings

The following settings can be changed.

- Front Vehicle Departure Alert buzzer volume ( $\rightarrow$ P. 4-79)
- Lane Departure Warning buzzer volume ( $\rightarrow$ P. 4-73)
- Turn signal buzzer tone type
- Opening sound volume
- Setting front vehicle recognition buzzer for ACC to ON/OFF\*  $(\rightarrow P. 4-81)$
- BSM buzzer volume\*( $\rightarrow$ P. 4-114)
- RCTA buzzer volume\*(→P. 4-114) (Initial setting: →P. 2-52)
- Press the ENTER button to switch to Setting menu.
- Switch between the screens in 'Settings screen' either by pressing and holding or pressing the ∧ ∨ buttons several times. Select 'Buzzer settings' and press ENTER button.
- Switch between the 'Buzzer settings' screens by pressing and holding, or pressing the ∧ ∨ buttons several time.

1st screen		2nd screen		
Buzze Fr Vehicle Depart Volume LDW Warning Bu		Buzzer Set BSM Buzzer Volume RCTA Buzzer Volume	tings	
Volume Turn Signal Tone Opening Sound V		KCIA BUZZEI VOLUTIE	<u> </u>	
ACC Fr Vehicle Re	ragnition		5	
				GD51A-02029-LE

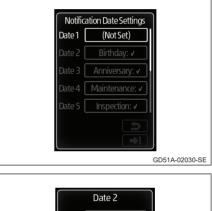
- Press the V buttons to select the function to set and press ENTER button
  - The settings displayed change every time ENTER button is pressed.
  - After pressing the ENTER button, button is displayed. Press the
     buttons to choose the settings and press the ENTER button again.
    - \* : The equipment may vary according to the vehicle grade and options

# Notification date setting

Birthdays, anniversaries, vehicle inspection date, inspection maintenance date reminders that are displayed on the opening screen can be configured with this menu.

(Initial setting:  $\rightarrow$  P. 2-51)

- 1 Press the ENTER button to switch to Setting menu.
- Switch between the screens in the 'Settings screen' by either pressing and holding down, or pressing the buttons several times to choose 'Notification date setting', then press ENTER button.
- 3 Press the ∧ ∨ buttons to choose 'Notification date' from 1 to 10 and press ENTER button. Reminders from 6 to 10 can be displayed by pressing and holding, or by pressing the ∧ ∨ buttons a few times.



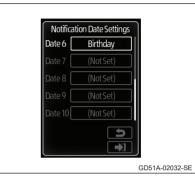
Press ENTER button at Type

and after  $\checkmark$  is displayed, press the  $\land \checkmark$  buttons to choose the item.

Select either birthday, anniversary, vehicle inspection date, or inspection date, and press ENTER button again.



- Press the V buttons to choose 'Day', 'Month', and 'Year' for the date and press ENTER button.
  - After I is displayed, set the numbers by pressing the ∧ ∨ buttons, and press ENTER button again.
  - There is no setting for 'Year' for birthdays and anniversaries.
- After the settings are complete, press RETURN button. The selected category and the set settings are displayed.

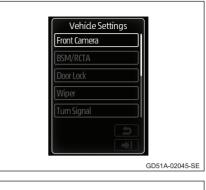


## Advanced Safety Assist settings

The following settings can be changed.

- Turning on or off for Front Departure Alert ( $\rightarrow$ P. 4-79)
- The timing for Front Departure Alert ( $\rightarrow$ P. 4-79)
- The timing for Pre-Collision Warning ( $\rightarrow$ P. 4-58)
- The timing for Lane Departure Warning ( $\rightarrow$ P. 4-73)
- Turning on or off steering wheel assist (Lane Departure Prevention, LKC\*) (→P. 4-73, 4-99)
- 1 Press the ENTER button to switch to Setting menu.
- Switch between the screens in 'Settings screen' either by pressing and holding or pressing the buttons several times. Select 'Vehicle settings' and press ENTER button.
  - \* : The equipment may vary according to the vehicle grade and options.

Image Press the ∧ ∨ buttons to go to 'Front camera' setting and press ENTER button.



- ▲ Switch the 'Front camera' setting screens by pressing and holding, or pressing ∧ ∨ buttons a few times.
- 5 Press the ∧ ∨ buttons to select the function to set and press ENTER button
  - The settings displayed change every time ENTER button is pressed. (Lamp illuminated : ON, Lamp Off : OFF)



# BSM/RCTA settings\*

The following settings can be changed.

- Turning BSM ON/OFF ( $\rightarrow$ P. 4-114)
- Turning RCTA ON/OFF ( $\rightarrow$ P. 4-114)
- Mirror indicator luminance ( $\rightarrow$ P. 4-114)
- 1 Press the ENTER button to switch to Setting menu.
- Switch between the screens in 'Settings screen' either by pressing and holding, or pressing the buttons several times. Select 'Vehicle settings' and press ENTER button.
- 3 Press the ∧ ∨ buttons to go to 'BSM/RCTA settings' and press ENTER button.
- Image A Press the ∧ ∨ buttons to select the function to set and press ENTER button
  - The settings displayed change every time ENTER button is pressed.

(Lamp illuminated : ON, Lamp Off : OFF)

BSM/F	RCTA	
BSM		
RCTA		
Mirror Indicator Luminance	*	
Carrinoitee		
		J
		GD51A-02034-9

\* : The equipment may vary according to the vehicle grade and options.

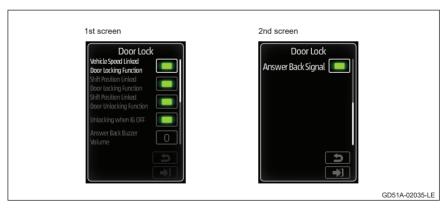
# Door lock settings

The following settings can be changed.

- Turning the vehicle speed linked auto lock ON/OFF (→P. 3-17) Turning on this setting will turn off the setting for vehicle speed linked auto lock.
- Turning the shift position linked auto lock ON/OFF (→P. 3-17)
   Turning on this setting will turn off the setting for shift position linked auto lock.
- Turning ON/OFF the shift position linked auto unlock (→P. 3-17) Turning on this setting will turn off the setting for shift position linked auto unlock.
- Turning ON/OFF the auto unlock during IG OFF (when the engine is switched off) (→P. 3-17)

Turning on this setting will turn off the setting for auto unlock during IG OFF (when the engine is switched off).

- Response buzzer volume (key-free system activation signal) (→P. 3-4)
- Turning on or off the response hazard lights (key-free system activation signal) (→P. 3-4)
- 1 Press the ENTER button to switch to Setting menu
- 2 Switch between the screens in 'Settings screen' either by pressing and holding, or pressing the ∧ ∨ buttons several times. Select 'Vehicle settings' and press ENTER button
- Press the V buttons to go to 'Door lock settings' and press ENTER button
- ▲ Switch between the 'Door lock settings' screens by pressing and holding, or pressing the ∧ ∨ buttons several times



- Press the V buttons to select the function to set and press ENTER button
  - The settings displayed change every time ENTER button is pressed. (Lamp illuminated : ON, Lamp Off : OFF)
  - After pressing the ENTER button, ▼ button is displayed. Press the
     ∧ ∨ buttons to choose the settings and press the ENTER button again.

# Wiper settings

The following settings can be changed.

- Turning on or off vehicle speed linked intermittent wiper ( $\rightarrow$ P. 4-32)
- Turning on or off reverse (shift R) linked rear wiper ( $\rightarrow$ P. 4-35)
- Press the ENTER button to switch to Setting menu.
- Switch between the screens in 'Settings screen' either by pressing and holding, or pressing the buttons several times. Select 'Vehicle settings' and press ENTER button.
- Press the V buttons to go to 'Wiper settings' and press ENTER button.
- Switch between the settings by pressing ENTER button.

The lamp changes between illuminated (ON) and off (OFF) every time the ENTER button is pressed.



# Turn signal settings

One-touch turn signal (turn signal indicator flashing 3 times when pushing the turn signal lever halfway) can be turned on or off.

- Press the ENTER button to switch to Setting menu.
- Switch between the screens in 'Settings screen' either by pressing and holding, or pressing the buttons several times. Select 'Vehicle settings' and press ENTER button.
- 3 Switch between the screens in 'Vehicle settings' either by pressing and holding, or pressing the ∧ ∨ buttons several times. Select 'Turn signal' and press ENTER button.

4 Switch between the settings by pressing ENTER button.

The lamp changes between illuminated (ON) and off (OFF) every time the ENTER button is pressed.



# Welcome lamp settings

The following settings can be changed.

- Turn on or off room lamp linked ( $\rightarrow$ P. 5-25)
- Turning on or off leaving home ( $\rightarrow$ P. 4-24)
- 1 Press the ENTER button to switch to Setting menu.
- Switch between the screens in 'Settings screen' either by pressing and holding, or pressing the buttons several times. Select 'Vehicle settings' and press ENTER button.
- Switch between the screens in 'Vehicle setting' either by pressing and holding or pressing the buttons several times. Select 'Welcome lamp setting' and press ENTER button.
- Image A Press the ∧ ∨ buttons to select the function to set and press ENTER button
  - The settings displayed change every time ENTER button is pressed. (Lamp illuminated : ON, Lamp Off : OFF)



## Service maintenance settings

The timing for engine oil change reminder, oil filter change, and tyre rotation displayed on the opening screen can be set by distance.

(Initial setting:  $\rightarrow$  P. 2-51)

- 1 Press the ENTER button to switch to Setting menu.
- 2 Switch between the screens in 'Settings screen' either by pressing and holding or pressing the ∧ ∨ buttons several times. Select 'Maintenance settings' and press ENTER button.
- 3 To turn the function on or off, press the ∧ ∨ buttons and set each service item to 'ON' or 'OFF', then press ENTER button.

Press the  $\wedge$  V buttons several times or press and hold it to display oil filter change and tyre rotation.

If the function is 'OFF' with distance not set

Go to step 5 to set the next reminder  $(\rightarrow P. 2-49)$ 



If the distance is already set

The lamp changes between illuminated (ON) and off (OFF) every time the ENTER button is pressed.



▲ To set the distance or to reset, press the ∧ ∨ buttons to select settings of notification timing for each service item, then press ENTER button. Press the ∧ ∨ buttons several times to display oil filter change and tyre rotation.



- Fress the v buttons to select distance, then press ENTER button.
  - After is displayed, set the distance by pressing the
     buttons, and press ENTER button again.
  - If the distance is already set, the distance until next reminder is displayed.
  - To reset, press the buttons and select reset, then press ENTER button.



## Oil deteriorate warning reset

Perform this operation once you have changed the engine oil

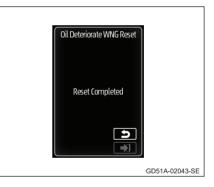
When the engine oil has deteriorate or the engine oil is about to be changed, a warning message will appear ( $\rightarrow$ P. 7-23)

- 1 Press the ENTER button to switch to Setting menu.
- Select 'Oil Deteriorate WNG Reset' by pressing the buttons and press ENTER button.



Image Select 'Yes' and then press Image Select 'Yes' and then press Image Select 'Reset 'Reset

Make sure that 'Reset Completed' is displayed.



Instrument cluster

# Initial settings

Display settings can be reset (return to factory settings).

- 1 Press the ENTER button to switch to Setting menu.
- Switch between the screens in 'Settings screen' either by pressing and holding or pressing the buttons several times. Select 'Reset settings' and press ENTER button.
- Image: Select 'Yes', then press ENTER button.

The following items will be initialized.



GD51A-02044-SE

	Functions	Initial settings
Meter	Day light	Level 10
brightness	Night time	Level 6
Time and date	12H/24H	24H
	Eco indicator light	ON
Display settings	Average fuel consumption reset	OFF
	Trip A reset	OFF
	Idling stop time auto-display	ON
	Opening display	ON
	Ending display	Standard
	Steering angle	ON
	ACC auto display	ON
	Clock display type	Clock 1

Functions		Initial settings
	Front vehicle departure alert	<b>⊲</b> ))
	Lane Departure Warning buzzer volume	۹))
	Turn signal buzzer tone	1
Buzzer settings	Opening sound volume	<b>⊲</b> ))
	ACC front vehicle recognition buzzer*	ON
	BSM buzzer volume*	<b>⊲</b> ))
	RCTA buzzer volume*	<b>⊲</b> ))
Notification date settings	Notification date 1 - 10	Not set
	Oil change reminder	OFF
Service settings	Oil filter change reminder	OFF
	Tyre rotation reminder	OFF

#### Meter brightness (daylight and night time)

- Meter brightness is switched between daylight and night time brightness in the following situations:
  - Daylight: when the surroundings are bright or when the front position lights are switched off
  - Night time: when the surroundings are dark and the front position lights are switched on
- Meter lighting is dimmed in night time. However, the lighting will not be dimmed if the night time is set at the brightest setting.

\* : The equipment may vary according to the vehicle grade and options.

#### Operating 'Settings screen'

- When the basic screen of the message check display (→P. 2-27) is selected and it shows "Messages Press ENTER", "Settings" cannot be displayed. (→P. 2-34)
- The operation will be suspended temporarily if the following situation occurs when you are in the 'Settings screen'.
  - When a warning message is displayed
  - When you start driving
- To return to the previous "Settings", press the ∧ ∨ button to select ⊃, and press the ENTER button.
- To finish "Settings", press the ∧ ∨ button to select , and press the ENTER button.
- A 'setting failed' message will be displayed when attempting to change a setting that cannot be changed.
- When disconnecting and reconnecting battery terminals Disconnecting and reconnecting battery terminals will reset the clock and its data.

## Liquid crystal display

→P. 2-11

#### Reminder screen

- The reminder screen is displayed once a day.
- For birthdays and anniversaries that fall on 29th February, other than the leap year, the display will show 1st March.

## WARNING

#### When you are driving

For safety, avoid operating the buttons while driving. Doing so may lead to steering wheel operation error resulting in unexpected accidents.

Stop the vehicle and operate the buttons. Do not look continuously at the display while driving.

#### When changing the settings

→P. 2-23

### 

#### When changing the display settings

→P. 2-23

#### Driving range

→P. 2**-**23

# Operation of each component

3

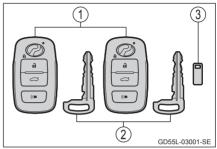
Key information	
Key	. 3-1
Opening, closing and locking the doors	e
Smart entry system / Key-free	
system	. 3-4
Doors	
(front and rear side doors)	. 3-14
Back door	3-21
Adjusting the seats	
Front seats	. 3-27
Rear seats	. 3-28
Head restraints	. 3-31
Adjusting the steering wheel an mirrors	d
Steering wheel	. 3-34
Rear view mirror	. 3-36
Side view mirrors	. 3-37
Opening and closing the windows	
Power windows	. 3-40

# Key

# The key

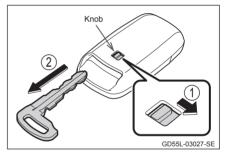
The following key are provided with the vehicle.

- ① Smart key
  - Operating the key-free system (→P. 3-4)
  - Using the remote control functions (→P. 3-14)
- ② Emergency key
- ③ Key number plate



# Using the emergency key

- ① Push the release knob.
- ② Take the key out. After using the emergency key, put it back into the smart key. Carry the emergency key together with the smart key. The emergency key will be needed if the smart key runs out of battery or the key-free system does not function properly. (→P. 7-55)



# If you lose your emergency keys

New emergency key can be made by an authorised Perodua Service Centre using the remaining emergency key and the key number stamped on the key number plate.

Please keep the key number plate in a safe place, such as in the wallet, but not in the vehicle.

# When in the aircraft

If you are taking the key with you when travelling by air, make sure that you do not press any of the key buttons in the aircraft. If you store the keys in your bag, make sure that the buttons will not be easily pressed. The smart key emits radio waves when any of its buttons are pressed, which may interfere with the aircraft operation.

## Battery consumption

→ P. 3-12

## If a warning message\* related to the smart key status, or engine switch mode is displayed

A message prompting you to check the smart key and engine switch mode will be displayed on the TFT colour multi-information screen. This message is to prevent you from leaving the smart key inside the vehicle, to avoid the smart key from being taken out by fellow passengers, and to remind you about the smart key battery status. When such messages are displayed, please check and address the warning immediately. ( $\rightarrow$ P. 7-35)

If 'The key battery is almost out' message is displayed on the TFT colour multi-information screen\*

The smart key is almost out of battery. Please replace the battery. ( $\rightarrow$ P. 6-66)

**Replacing the battery**  $\rightarrow P. 6-66$ 

### Purchasing the key

The smart key can be configured up to 4 units. Please contact an authorised Perodua Service Centre about purchasing and using smart keys.

## CAUTION

#### To prevent damages to the key

- Keep the key away from direct sunlight and high temperatures.
- Do not carry the smart key in your back pocket, such as trousers back pocket.
- Do not drop the keys, subject them to strong impact, or bend them.
- Do not leave them in a damp place for a long time.
- Do not let the keys get wet or wash them, for example in an ultrasonic washer.
- Do not attach metallic or magnetic materials to the key, or let the key near such materials.
- Do not disassemble the key.
- Do not apply stickers or anything else to the surface of the smart key.
- Do not leave the key near objects that produce magnetic fields, such as TVs, audio systems and induction cookers, or electronic medical equipment, such as low-frequency therapy equipment.

### Precautions when handling the key

The smart key are Wireless Telegraphy Act certified. The following precautions must be observed.

- Other than replacing the battery, do not disassemble the keys carelessly. Using disassembled and modified key is prohibited by law.
- Do not use outside of the country.

\* : The equipment may vary according to the vehicle grade and options.

# 

## Carrying the smart key

Carry the smart keys 10 cm or more away from electric appliances that are turned on. Radio waves emitted by electric appliances may interfere with the key if they are within 10 cm of such appliances, which may cause the key to stop functioning normally.

## When taking your vehicle to a Perodua Service Centre for key-free system malfunction or other key-related problems

Please bring all the smart keys provided for your vehicle.

## If you lost a smart key

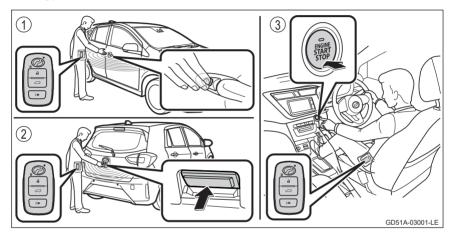
The risk of theft will be extremely high when you lost a smart key. Please consult an authorised Perodua Service Centre immediately and bring all the remaining smart key provided for your vehicle.

# Smart entry system / Key-free system

## **Function overview**

Smart entry system/Key-free system is a system where all the doors can be locked or unlocked while carrying the smart key by pressing the request switch.

The following operations can be performed by carrying the smart key on your person, for example in your pocket. (The driver should always carry the key)



- 1 Lock and unlock all doors ( $\rightarrow$ P. 3-14)
- ② Unlock the back door ( $\rightarrow$ P. 3-21)
- ③ Start the engine ( $\rightarrow$ P. 4-11)

#### Signals upon activation

Buzzer and flashing hazard lights indicate the doors being locked or unlocked. (Locked: once; Unlocked : twice)

Security features when unlocking doors  $\rightarrow P. 3-19.$ 

### Panic button

When button 4 is pressed for more than 1 second, horn will sound, room light will turn on, hazard lights will blink and security indicator will turn on. To stop, press button 1, 2 or 4.

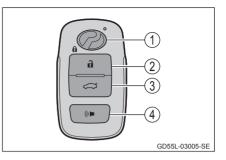
Horn will sound for 45 seconds if no button (1), (2) or (4) is pressed.

This panic button can be activated within a distance around 10 meters (provided no obstruction, interference and battery of the smart key transmitter is in normal working condition) to deter/ discourage thieves, robbers or trouble makers near your vehicle.

This system also can help you locate your vehicle in a large can park. You may also use it to ensure that the doors are locked.

# Security feature

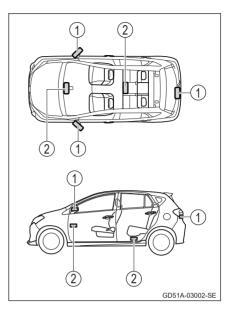
If a door is not opened within approximately 30 seconds after the vehicle is unlocked, the security feature automatically locks the vehicle again.



# Antenna locations and effective range

# Antenna locations

- ① Exterior antennas
- Interior antennas



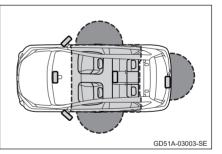
# Effective range (the range where smart keys can be detected)

When locking and unlocking the doors

The doors can be locked or unlocked when the smart key is within 80 cm from the door handles.

(Only the doors detecting the smart key will be locked or unlocked.)

When starting the engine or switching the engine modes The system can be operated when the smart key is inside the vehicle.



#### Alarms and warning indicators

Alarms may sound or warning lights may light up, or alerts\* may be displayed to prevent theft and unexpected accidents caused by incorrect operation. When warning lights light up or when alerts are displayed, please take appropriate measures according to the situation.

(→P. 7-13, 7-21)

The following table describes the circumstances and steps to take when alarms are sounded.

Alarm	Situation	Steps to take
The interior alarm sounds long beeps continuously	The engine is in 'ACC' mode while the driver's door is open (the engine is in 'ACC' mode when opening the driver's door)	Turn the engine switch to 'OFF' and close the door
	Trying to lock front doors using door request switch when the engine switch is in 'ACC' or 'ON' mode	Turn the engine switch to 'OFF' and lock the doors
The exterior alarm sounds a beep	Trying to lock front doors using door request switch while leaving the smart key in the vehicle	Take the smart key and lock the vehicle
	Trying to lock front doors using door request switch or remote control button when one of the doors is open	Close all the doors before locking
The exterior alarm sounds a short beep and all the doors are unlocked	Closing the driver's door with its door handle pulled and its lock knob set to lock while the smart key is left in the vehicle and the engine switch is in 'OFF' mode	Take the smart key and lock the vehicle

\* : The equipment may vary according to the vehicle grade and option

Alarm	Situation	Steps to take
The exterior alarm sounds a short beep and all the doors are unlocked	Opening and closing any door except the driver's door with its lock knob set to lock and all the doors locked while the smart key is left in the vehicle and the engine switch is in 'OFF' mode	Take the smart key and lock the vehicle
The interior alarm sounds three (3) short beeps	Turning the engine switch to 'OFF' when the smart key is almost out of battery*	Replace the battery $(\rightarrow P. 6-66)$
The interior alarm sounds long beeps continuously	Turning the engine switch from 'ON' to 'OFF' when the driver's door is open	Close the driver's door

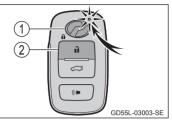
\* The warning buzzer will sound when turning the engine switch to 'ACC' or 'ON' if the key battery continue to be low.

#### The smart key power saving mode

 Setting the smart key on power saving mode will disable the key's radio wave reception standby function, which can reduce the key's battery consumption.

To set the power saving mode, press the key's unlock button ② twice while pressing the lock button ①. Make sure that the key's indicator flashes four (4) times.

The key-free system cannot be used when in power saving mode (request switch does not function in this situation). To disable power saving mode, press any of the smart key buttons.



- It is recommended to set smart keys that will not be used for an extended period of time in power saving mode.
- When setting the smart keys in power saving mode right after replacing the batteries, please wait until about 10 seconds have passed.

#### The key-free system functions

The key-free system utilizes weak radio waves. The following situations may interfere the communications between the smart key and vehicle, causing the key-free system, remote control and immobilizer system not to work properly. (Troubleshooting:  $\rightarrow$ P. 7-55)

- When the smart key battery is depleted.
- Being near or at a place that generates strong radio waves or noise, such as television towers, power plants, petrol stations, broadcasting stations, large displays, parking payment machines, and airports.
- When the smart keys come into contact with, or underneath the following metal products.
  - Cards applied with metals, such as aluminium foil
  - Cigarette case made with aluminium foil
  - Metallic wallet or bags
  - Coins
  - Hand warmer made of metal
  - Media, such as CD and DVD
- When using other radio wave-based remote control nearby.

- When carrying the smart keys together with products transmitting radio waves, such as:
  - Wireless telecommunication devices for example cordless phones, mobile phones, wireless radios etc.
  - · Other vehicles' smart keys and radio wave-based remote controls
  - Computers and personal digital assistants (PDAs)
  - Digital audio players
  - Portable game players
- When applying rear window with films containing metallic content.
- The smart keys are placed near electrical equipment, such as a charger.

#### Please keep in mind that:

- Even though the smart keys are within its effective range (the range where they can be detected), they may not function properly if:
  - The smart keys are too close to a window or door handle, or they are close to the ground or in a high place when locking or unlocking doors
  - The smart keys are on the instrument panel or floor, or in the door pocket or glove compartment when starting the engine or switching modes
- The smart keys may not function properly even when they are in your pocket depending on the pocket location and shape. (Effective range:→P. 3-6)
- Be careful. You may be locked out of your vehicle with the smart keys inside if you leave the vehicle with the keys on the instrument panel or in the door pocket because depending on the radio wave strength, the keys may be detected by the exterior antennas and lock the doors.
- Other people besides the person carrying the smart keys can lock and unlock the doors if they are within the key's effective range. However, they cannot unlock all doors except the doors detecting the smart keys.
   Depending on the situation, if the smart keys are near the door opposite to

door being unlocked, the opposite door may detect the keys and unlock.

- It is possible to start the engine from outside the vehicle if the smart keys are close to the windows.
- The doors may repeatedly lock and unlock when the vehicle is within the key effective range and the door handle request switch is wet, such as during heavy rain or when washing the vehicle. In this case, please take the following measures. (The doors will automatically be locked after approximately 30 seconds if the doors are not opened and closed)
  - Place the keys 2 meters or more away from the vehicle (please be careful of theft)
  - Set the keys in power saving mode and disable the key-free system operation (→P. 3-9)

Operation of each component

- If there is a clothing coming into contact with the front doors request switch can lock and unlock the doors when the smart keys are in its effective range.
- If the remote control is used to lock the doors when the smart key is near the vehicle, there is a possibility that the door may not be unlocked by the key-free function. (Use the remote control to unlock the doors)
- There are times when the switch cannot be pressed due to mud attached on the request switch at the door handle. If the switch cannot be pressed, repeat the operation after removing the mud attached on the surface. If the door still cannot lock/unlock, please press the request switch with your palm.
- Be sure to firmly press the switch on the door handle to confirm that the doors are locked/unlocked. The doors may not be locked/unlocked if the switch is pressed quickly.
- Do not press the request switch on the door handle with a great force nor use a sharp object to press. The switch may be damaged.
- When operating the request switch at the door handle, your fingernails may come into contact with the door. Please be careful not to crack your nails or scratch the door.
- When operating the front door request switch wearing gloves, locking and unlocking may be slow, or the doors may not be locked or unlocked.
- Sometimes the doors cannot be locked or unlocked even after operating the front door request switch. Please use the wireless function, or emergency keys to lock or unlock. (→P. 3-14, 7-55)
- In the following situations, the power saving function activates to reduce the smart key battery consumption and prevent the vehicle battery from running out. As a result, locking and unlocking using the key-free system may take time.
  - Leaving the smart keys for about 2 minutes or longer within 3 meters from the vehicle
  - The key-free system is not used for more than five days

### Please keep in mind when locking

The alarm may sound if the request switch at the door handle is wet, for example when washing the vehicle using a machine while the smart keys are in the vehicle.

## Please keep in mind when unlocking

- The door may remain locked when pulling the door handle while operating the request switch at the handle. In this case, release the door handle to its original position, operate the request switch again (except the back door), and pull the handle after confirming that the door is unlocked.
- When there are other smart keys within the effective range, it may take a slightly longer time to unlock the door after operating the request switch at the door handle.

## When the vehicle is not driven for an extended period of time

- To prevent theft, store the smart keys 2 meters or further away from the vehicle.
- The key-free system can be disabled in advance.
   For details, please contact an authorised Perodua Service Centre.

### For the system to operate properly

Always carry the smart key to operate the system. Do not let the smart key get too close to the vehicle when operating from outside the vehicle.

Depending on the smart key position and how it is carried, the key may not be detected correctly, and the system may not operate correctly. (The alarm may go off accidentally, or the key locked-in prevention function may not work properly:  $\rightarrow$ P. 3-19)

### If the key-free system does not operate properly

- Lock and unlock doors:  $\rightarrow$  P. 7-55
- Starting the engine:  $\rightarrow$  P. 7-55

### Battery consumption

- The standard battery life is 1 to 2 years.
- The battery will be depleted even if the remote control is not used. The battery will also be depleted as the smart key always receive radio waves even when not in used. The battery is likely depleted under the following circumstances please replace the battery.
  - · The key-free system and remote control are not working
  - The effective range becomes smaller
  - The LED on the smart key no longer lights up
- When the battery is low, a warning buzzer will sound inside the vehicle when the engine stops. (→P. 7-36)
- To avoid considerable battery consumption, do not store the smart keys within 1 meter of electrical appliances that generate magnetic field, such as:
  - TVs
  - Audio systems
  - PCs
  - AC adapters
  - · Mobile phones, cordless phones, and chargers
  - Desk lamps
  - · Medical equipment, such as low frequency therapy devices
  - Liquid crystal displays
  - Motors
  - Induction cooker
- It is possible to control battery depletion in smart key that are not used for an extended period of time by putting the keys in power saving mode. (→P. 3-9)

Operation of each component

- When the battery is depleted  $\rightarrow$  P. 6-66
- When disabling the key-free system at an authorised Perodua Service Centre
  - The doors can be locked and unlocked using the remote control or emergency keys. (→P. 3-14, 7-55)
  - Starting the engine and changing the engine switch mode:  $\rightarrow$  P. 7-55
  - Stopping the engine:  $\rightarrow$  P. 4-11

## WARNING

#### Effects of radio waves

- People with cardiac pacemaker implants, bilateral pacing pulse generator implants, and defibrillator implants should not come within 22 cm of the antennas (→P. 3-6). The radio waves may interfere with the operation of such devices.
- People using electrical medical device other than cardiac pacemaker implant, bilateral pacing pulse generator implant, and defibrillator implant should check with the manufacturer of their devices for information on how radio waves can affect their devices. The radio waves may interfere with the operations of such devices.

The key-free system can be disabled. For details, please contact an authorised Perodua Service Centre.

## CAUTION

Do not push the door handle request switch with a strong force, or with a sharp object. The switch may be damaged.

# Doors (front and rear side doors)

# Locking and unlocking doors

The vehicle can be locked or unlocked using the key-free system, wireless remote control, or door lock switch.

# Key-free system

All the doors can be locked or unlocked using the key-free system while carrying the smart key by pressing the request switch

Be certain to press the switch. Please make sure that the doors are locked when locking.

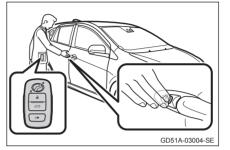
The doors cannot be unlocked within 3 seconds after locking.

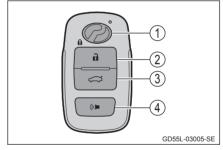
## Wireless remote control

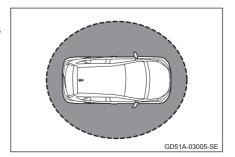
- Locks all doors
   Please make sure that the doors
   are locked
- Unlocks all doors
  - Driver door unlock (1st press)
  - All doors and back door unlock (2nd press)

Press within 5 seconds after 1st press

- ③ Opening the back door Press button for more than 1 second to open back door
- ④ Activates the panic button (→P. 3-5)
   Effective range
- Within 3 meters in all directions from the centre of the vehicle.







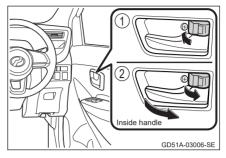
3

# Keys

The doors can also be locked and unlocked using the emergency keys. ( $\rightarrow$ P. 7-55)

# Inside Lock knob

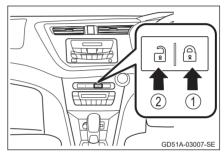
- ① Locks the door
- 2 Unlocks the door
  - Driver door
     Pull the inside handle lever
  - Passengers door Release locking knob and pull the inside handle lever



# Central doors lock switch

Push the switch to lock or unlock all doors.

- 1 Lock all doors
- Unlock all doors



# Locking the driver's door from outside without using the keys

- 1 Set the inside lock knob to lock position.
- 2 Close the door while pulling the door handle.

The door cannot be locked when the engine switch is set to 'ACC' or 'ON', or when the smart key is left in the vehicle.

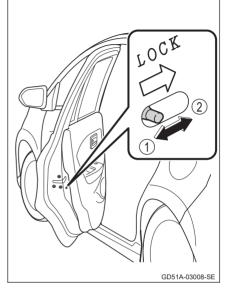
Depending on the position of the smart key, the key may not be detected correctly and the door may be locked.

# Child lock

The rear doors cannot be opened from inside the vehicle when the lock is set.

- ① Unlock
- 2 Lock

These locks can prevent children from opening the rear doors. Please set them in both rear doors.



# Door auto lock function

These functions automatically lock all the doors depending on the situation of the vehicle. The following functions can be set or cancelled. Auto-lock functions

Function	How it works
Vehicle speed linked (initial settings)	All doors are locked when the vehicle speed is more than 20 km/h.
Shift position linked auto-lock	All doors are locked when the shift lever is moved from P while the engine is running.

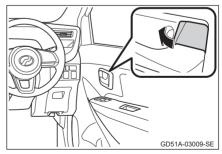
#### Auto-unlock functions

Function	How it works
Engine switch off-linked auto-unlock (initial settings)	All doors are unlocked when the engine switch is set to 'ACC' or 'OFF' after running at a speed of 20 km/h or more.
Shift position linked auto-unlock	All doors are unlocked when the shift lever is in P.

## Switching between auto-lock functions

The auto-lock functions can be switched between (1), (2) and (3) in this order after completing the following steps.

- (1) Vehicle speed linked auto-lock
- (2) Shift operation-linked auto-lock
- (3) Function disabled
- 1 First, make sure that:
  - The light switch is in ON
     position
  - The engine switch is 'OFF'
  - All the doors are closed
  - The driver's door lock switch is set to lock



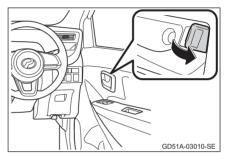
Turn the engine switch to 'ACC' and then do step 3 within the next 5 second.

- 3 Move the light switch to O position and leave it there. (Proceed to step 4 within the next 5 seconds)
- Set the driver's door lock switch to unlock.
   Once all the steps are completed, all the doors will be locked within 3 seconds after setting the driver's door lock switch to unlock.
   Please redo the steps from the beginning if the operation is interrupted.

## Switching between auto-unlock functions

The auto-unlock functions can be switched between (1), (2) and (3) in this order after completing the following steps.

- (1) Shift position-linked auto-unlock
- (2) Engine switch off-linked auto-unlock
- (3) Function disabled
- 1 First, make sure that:
  - The lights switch is in ON position
  - The engine switch is 'OFF'
  - All the doors are closed
  - Set the driver's door lock switch to unlock



- Turn the engine switch to 'ACC' and then do step 3 within the next 5 seconds.
- Move the light switch to O position and leave it there. (Proceed to step 4 within the next 5 seconds)
- Set the driver's door lock switch to lock.
   Once all the steps are completed, all the doors will be unlocked within 3 seconds after setting the driver's door lock switch to lock.
   Please redo the steps from the beginning if the operation is interrupted.

3

#### When the security alarm is set

Opening the doors without using the key-free system or wireless remote control will activate the alarm. If the alarm activates, disable it immediately. ( $\rightarrow$ P. 1-45)

#### Impact sensing door lock release system

All the doors will be unlocked when the vehicle is under strong impact from the front, back, left and right. This system may not activate depending on the strength of the impact and the form of the accident.

#### Security feature

If a door is not opened within 30 seconds after the vehicle is unlocked using either the key-free system or wireless remote control, the vehicle will be locked automatically to prevent theft.

 The alarm is set after 30 seconds or more after locking the vehicle. (→P. 1-45)

#### Key lockout prevention function

This function prevents the vehicle from being locked when the key is left inside.

- When the engine switch is set to 'ACC' or 'ON', the following actions will activate this function and unlock all doors.
  - Setting the driver's door lock knob to lock while the driver's door is open.
  - Unlocking from inside the vehicle using the lock knob at any door except the driver's door, opening and closing the door while all the doors are locked. (The function does not activate if the engine switch is set to 'ON')
- When the engine switch is set to 'OFF' and the smart key is inside the vehicle, the following actions will activate this function and unlock all doors.
  - Closing the driver's door while pulling the door handle after setting the inside lock knob to lock.
  - Unlocking from inside the vehicle using the inside lock knob at any door except the driver's door, opening and closing the door while all the doors are locked.

#### ■ Driving with opened doors warning →P. 7-16, 7-29

# If the functions do not function properly $\rightarrow P. 3-9$

#### Auto-lock function

The vehicle will not relock if it is unlocked after locking it with the auto-lock function. However, the auto-lock function will reactivate under any of the following situations:

- Opening any doors while the vehicle is not moving
- The engine switch is set to 'ACC' or 'OFF'
- Unlocking the vehicle using the auto-unlock function

#### Opening the doors while using the child locks

The doors locked with child lock can be opened from the outside by pulling the door handle. In an unlikely event and you have to open the door from inside, pull the exterior door handle through an open window.

# WARNING

#### To prevent an accident

The following warnings must be observed while driving. Failure to do so may lead to the doors being opened accidentally and the occupants thrown outside the vehicle, resulting in serious injuries, even death.

- Always wear seat belts.
- All the doors are properly shut and locked.
- Never pull the inside door handle while driving Please be particularly careful
  as the doors can still open even when the driver's door lock switch is set to
  lock.
- When children are seated in the rear seats, set the child locks to prevent them from opening a door from the inside.

#### When opening and closing a door

- Check the surroundings of the vehicle, whether the vehicle is on an incline, whether there is enough space to open a door, or whether a strong wind is blowing. Open and close the door by firmly holding the door handle to prepare for any unexpected movement.
- Be careful not to slam the door on your fingers or other body parts when closing the door.
- Be careful not to leave the key inside the vehicle.

#### When children are in the vehicle

Do not let children open or close the vehicle doors or play with the doors. This may lead to unexpected accidents resulting in serious injuries, even death.

# Back door

The back door can be locked, unlocked and opened by the following ways.

# Locking and unlocking from outside the vehicle

## Key-free system

Carry the smart key to operate this system.

- Press the button to unlock the back door.
- Remote control
- →P. 3-14
- Keys
- →P. 3-14

# Locking and unlocking the back door from inside

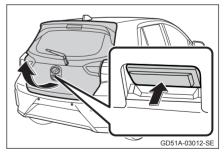
Inside Lock knob

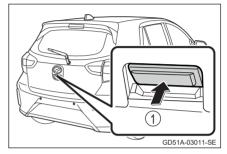
→P. 3-15

# Opening the back door

Lift the back door while pressing the back door opener switch.

The back door cannot be closed in about 1 second after pressing the back door open switch.

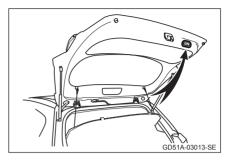




# Closing the back door

Pull down the back door by holding the back door handle.

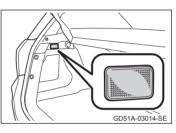
Make sure to push the back door down from outside to close it.



# Luggage compartment light (door activated)

The luggage compartment light (door activated) will turn on when the back door or any other door besides the back door is opened.

The light will turn off automatically after 10 minutes if the engine switch is set to 'ACCESSORY' mode or OFF.



#### Unlocking the back door

If the back door cannot be opened after unlocking it with the back door open switch, please check that the back door is not half opened.

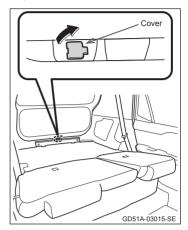
Driving with opened doors warning  $\rightarrow$  P. 7-16, 7-29

3

#### If the back door cannot be opened

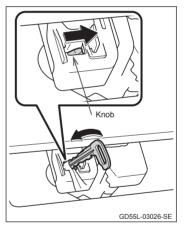
The back door can be opened from inside.

- 1 Fold the rear seat's seat back down ( $\rightarrow$ P. 3-28)
- 2 Open the cover



 Use the emergency key, etc. to move the lever in the direction shown by the arrow (→ P. 3-1)

> To prevent scratches, protect the emergency key, etc. by wrapping its forward end with cloth or something similar.



#### While driving

Close the back door when driving. Driving with the back door open may lead to unexpected accidents as the back door may hit objects outside the vehicle, or luggage may be thrown out.

Exhaust gasses may also enter the vehicle, creating serious health hazard and causing death. Always check that the back door is closed before driving.

- Check that the back door is firmly closed before driving. If the back door is not firmly closed, it may open suddenly while driving, leading to unexpected accidents.
- Never let anyone sit in the luggage compartment. They may be seriously injured or may even die in the event of sudden braking or a collision.

#### When children are in the vehicle

The following warning must be observed.

- Failure to do so may lead to serious injuries, even death.
- Do not let children play inside the luggage compartment. They may suffocate or get heat stroke if trapped inside.
- Do not let children open or close the back door.

Their body parts, such as hands, head, or neck may get caught in the door if not handled or shut carefully.

#### Using the back door

The following warning must be observed.

Failure to do so is dangerous as it may lead to serious injuries, including catching body parts in the door.

- Before opening the back door, remove any heavy materials stuck on the door. Opening the back door without removing the weight may cause the door to close suddenly.
- Make sure that the surroundings are safe enough to open and close the back door.
- If there are people around, check the safety and let them know you are operating the back door.
- Take proper precautions when opening and closing the back door in strong winds.

Strong wind may push the back door open or close.

- Leaving the back door half open may lead to serious injuries when the door suddenly closes. The back door may open or close suddenly, particularly when the vehicle is on an incline where it is more difficult to close and open the back door compared to a flat area. Always make sure that the back door is fully opened and standing still.
- Be very careful not to let your body parts, such as fingers, get caught when closing the back door.
- Always close the back door by pushing it lightly from outside. Your hand or arm may get caught if you close the back door while holding to the door interior handle.





 Do not pull down or close the back door by holding the back door damper stay.

Doing so may lead to unexpected accidents, for example your hand may get caught or the damper stay may be damaged.

 Hanging heavy objects, such as a bag on the back door may cause the door to close suddenly when opened, slamming down on your fingers, head, or neck.

# 

## Back door handle switch

Do not push the back door handle switch with a great force or with a sharp object. The switch may be damaged.

## Back door damper stays

The back door is equipped with damper stays that support the back door in place. Observe the following precautions to prevent damage or malfunction in damper stays.

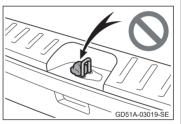
- Do not apply foreign objects, such as plastic sheets, stickers, or adhesives to the damper stay rods.
- Do not touch the stay rod with gloves, etc.
- Do not place your hand or apply lateral forces to the damper stays.



# Striker bar

Do not insert any foreign objects in the striker bar when closing the back door.

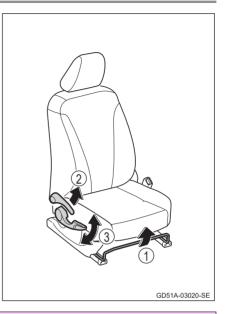
This may damage the bar and the back door can no longer close.



# Front seats

# Adjusting the seats

- ① Adjusts the seat positions
- ② Adjusts seat back reclining positions
- ③ Adjusts seat height (Driver's seat only)\*



# WARNING

#### When adjusting the seats

- Please be careful not to hit and injure your fellow passengers with the seat.
- Do not place your hands on the moving parts of the seat or under the seat. This is dangerous as your fingers and hands may get caught and result in serious injuries.
- Make sure there is enough leg room so that your legs are not trapped.

#### When adjusting the reclining position

- Always push the seat back with your hands when adjusting. The seat back may fall back suddenly.
- Do not apply strong force to the seat back. Applying strong force to the seat back may cause it to fall back suddenly, resulting in injuries.

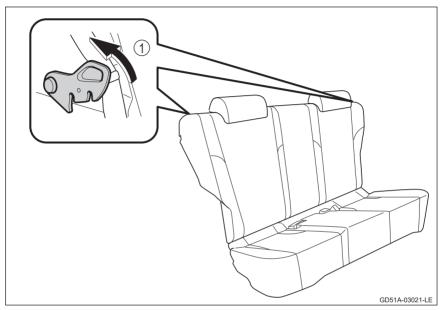
Do not recline the seat back more than necessary. Reclining the seat back more than necessary may result in serious injuries, even death in an accident as the occupant may slipped under the seat belt, with strong pressure applied to the chest or the neck caught in the shoulder strap.

Make sure that the seat is properly secured after adjusting it.

\* : The equipment may vary according to the vehicle grade and options.

# **Rear seats**

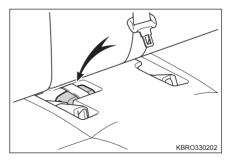
# Adjusting the seats



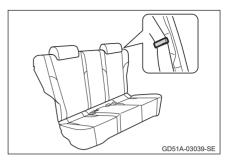
① Adjusts reclining positions The seat back can be reclined by pulling the reclining lever upward.

# Folding the seat back down

1 Store the rear centre seat's seat belt buckle in the slot



Insert the seat belt into the rear seat belt hanger so that it will not be pinched by the seat



- 3 Lower the headrest\* down to its lowest position (→P. 3-31)
- 4 Push forward the seat back while pulling the reclining lever upward

Pull the lever until the lock is fully released.



- 5 To return the seat back to its original position, repeat the steps in a reverse order
  - \* : The equipment may vary according to the vehicle grade and options.

The following warning must be observed.

Failure to do so may result in serious injuries, even death.

#### When adjusting the seats

- Please be careful not to hit other passengers or luggage with the seat.
- Always push the seat back with your hands when adjusting. The seat back may fall back suddenly.
- Do not apply strong force to the seat back. Applying strong force to the seat back may cause it to fall back suddenly, resulting in injuries.
- When sitting in the rear centre seat, make sure that the right and left rear seats are at the same angle. Unable to sit up properly may lead to serious injuries, even death in an accident.
- Make sure that the seat is properly secured after adjusting it.

#### When folding the seat back down

- Do not adjust the rear seats while driving
- Stop the vehicle on a flat area, firmly apply the hand brake, and put the shift lever in P
- Adjust the position of the front seat so that the seat cushion of the rear seat may not touch the front seat.
- Be careful not to let your hands or feet get caught between movable parts and joints when making adjustments
- Do not drive with people sitting in a seat with reclined seat back or in the luggage compartment
- Be careful not to let children get in the luggage compartment

#### After returning the seat back to its position

- Make sure that the seat back is firmly secure by lightly shaking the seat back and forth
- Make sure that the seat belts are not trapped between the seats

## CAUTION

When folding the seat back down, always store the rear centre seat belt and buckle before folding the seat back.

Failure to do so may damage the seat or the buckle.

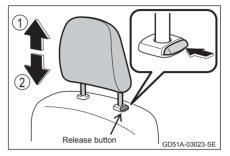
# **Head restraints**

# Adjusting the head restraints.

# Front seats

- 1 Up
- 2 Down

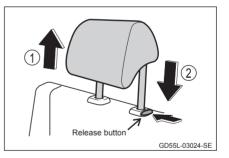
Lower the head restraint while pushing the release button.



# Rear seats\*

① Up

② Down Lower the head restraint while pushing the release button.



#### Removing the head restraints

Remove the head restraint while pushing the release button.

Recline the seat's seat back if the front seat head restraint hits the ceiling and cannot be removed. ( $\rightarrow$ P. 3-27)



\* : The equipment may vary according to the vehicle grade and options.

3

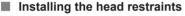
Operation of each component

# Removing the rear head restraints\*

1 Pull out the seatback hook, and then fold down the seatback.

Fold the seatback forward until the head restraint can be removed without coming into contact with the ceiling.

2 Remove the head restraint while pushing the lock release button.



Align the head restraint to the slot and push it down until it reaches the locked position\*.

To lower the head restraint further, push it while pushing the release button.

When it is difficult to push the head restraint down, push it while pushing the release button.

# Adjusting the height of the head restraint (front seat)

Adjust the head restraint so that its centre is at the top of your ears.

\*: The equipment may vary according to the vehicle grade and options.









### Using rear seat head restraint\*

Always raise the head restraint one level from the stowed position when in use.



# **WARNING**

#### Head restraints

Please observe the following warnings.

Failure to do so may result in serious injuries, even death.

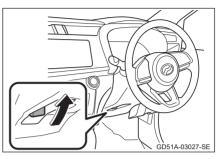
- Use the head restraint designed for each respective seat.
- Always adjust the head restraint to the correct position.
- Do not install the head restraints backward.
- Make sure that the head restraint is secured by pushing it down when making adjustments.
- Do not drive with the head restraints removed.
- Do not adjust the driver headrest while driving.

\* : The equipment may vary according to the vehicle grade and options.

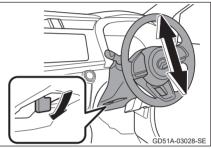
# **Steering wheel**

# Adjustment procedure

1 Hold the steering wheel and pull the lever up.

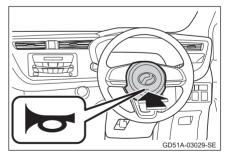


Adjust the steering wheel to an appropriate position by pushing the steering wheel up and down After adjustment, push the lever down to secure the steering wheel.



# Horn (Alerting device)

Sound the horn by pressing around the **born** mark on the steering wheel.



#### After adjusting the steering wheel position

Make sure that the steering wheel is securely locked. The horn may not sound if the steering wheel is not securely locked. ( $\rightarrow$ P. 3-34)

#### Things to keep in mind while driving

Do not adjust the steering position while driving. Making adjustments to the steering wheel while driving may result in driving errors leading to serious injuries, even death.

## After adjusting the steering wheel position

Make sure that the steering wheel is securely locked.

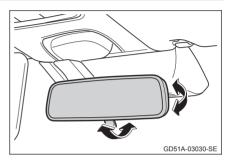
The steering wheel position may change suddenly if it is not securely locked. It may lead to serious injuries, even death.

# **Rear view mirror**

The mirror angle can be adjusted so that the driver can sufficiently check the rear view.

# Adjustment procedure

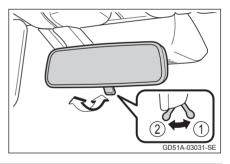
The rear-view mirror angle can be adjusted to align with driving posture. Hold the rear-view mirror to adjust it.



# **Anti-glare function**

Reflected light from the headlights of vehicles behind can be reduced by operating the lever.

- ① Normal position
- 2 Anti-glare position



# WARNING

#### While driving:

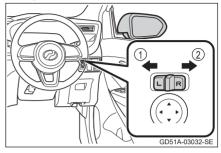
Do not adjust the mirror while driving. It may lead to driving error resulting in serious injuries, even death.

# Side view mirrors

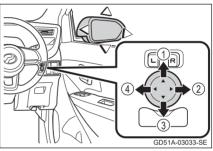
# Adjustment procedure

Adjust the angle of the mirror surface using the knob.

- 1 To select the mirror to adjust
  - $\textcircled{1} \quad \text{Left} \quad$
  - ② Right



- 2 Operate the knob to adjust the mirror surface
  - ① Up
  - 2 Right
  - ③ Down
  - ④ Left

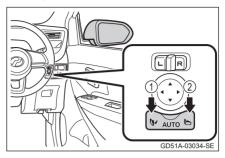


# Folding the side-view mirrors

# To fold and open the mirrors manually

Press the switch

- 1 To fold
- To open



# To automatically fold and open the mirrors

Setting the switch in the neutral position (AUTO) will automatically fold and open the side-view mirrors when the doors are locked or unlocked using the request switch or key-free system.



# This component is enabled when: The engine switch is in 'ACC' or 'ON' mode

When you do not want to fold (or open) the mirrors automatically Set the switch to open (or fold) position.

3

#### Things to keep in mind while driving

Please observe the following warnings while driving.

Failure to do so may lead to driving errors resulting in serious injuries, even death.

- Do not adjust the side-view mirrors
- Do not drive with the side-view mirrors folded
- Before driving, always open both the driver's side-view mirror and the passenger's side-view mirror and adjust them appropriately

#### When the mirrors are moving

Do not touch the mirrors with your hand. Getting your hands caught in the mirrors may lead to injuries or damaged mirrors.

# **Power windows**

# **Opening and closing procedures**

## Master switch (driver side)

The windows can be opened or closed using the switches. Operating the switches will move the windows as follows:

- ① Driver side
  - One-touch closing
  - One-touch opening

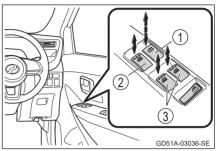
To stop the window partway, lightly operate the switch in the opposite direction.

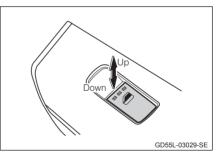
- 2 Front passenger side
- ③ Rear passenger side The rear passenger side window cannot be lowered fully.

## Window switch (passenger sides)

Pull up the switch to raise the window. Push it down to lower the window.

The window will move as long as the switch is being operated.

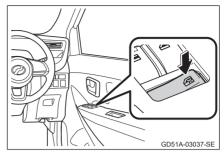




3

# Window lock switch

This switch will immobilize all window except the driver's window. It can prevent children from accidentally opening or closing the windows.



- This component is enable when The engine switch is set to 'ON'.
- Operating the window after switching off the engine (driver's window only) The window can still be closed or opened within 40 seconds after setting the engine switch to 'ACC' or 'OFF'.
- Jam protection function (driver's window only) If an object is caught between the window and the window frame when closing the window, the window will open slightly and stop moving.

#### When the driver's window cannot be closed

If the driver's window cannot be closed completely because the jam protection function malfunctions, please operate the driver's window switch as follows:

- Stop the vehicle and set the engine switch to 'ON'.
- 2 Continue pulling the driver's window switch to the 'One-touch closing' position.

After the window has closed completely, continue pulling the switch for another 6 seconds.

If you let go of the switch in the middle of operating the window, you have to repeat the operation from the beginning.

If the window still rebound and cannot be closed completely after these operations, please have your vehicle inspected at an authorised Perodua Service Centre.

#### After reconnecting the battery

In order for the power windows to operate properly, the following initial settings must be done.

- 1 Set the engine switch to 'ON'.
- 2 Open the window fully by pressing and hold the driver's window switch.
- 3 Continue pulling the driver's window switch to the 'One-touch closing' position. After the window has closed completely, continue pulling the switch for another 2 seconds.

If you let go of the switch in the middle of operating the window, you have to repeat operation from step 2.

## WARNING

The following warning must be observed.

Failure to do so may result in serious injuries, even death.

#### When opening and closing the windows

The driver is responsible for all operations involving opening or closing the windows, including the operation performed by the passengers. Do not let children to operate the windows in particular, in order to prevent accidents resulting from operation errors by children. It is possible for children and other passengers to have body parts caught in the power window. Using the window lock switch is recommended when there are children in the vehicle. ( $\rightarrow$ P. 3-41)

Make sure that the passengers' body parts, such as hands, arms, head or neck are not trapped when opening or closing the windows. Remind the children particularly not to hold their hands out of the vehicle.



When leaving the vehicle, make sure to switch off the engine, and take your keys and children with you. Operation errors caused by children playing in the vehicle may lead to unexpected accidents.

#### Jam protection function (driver's window only)

- Do not trap the passenger's body parts, such as hands, arms, head, and neck as the jam protection function is activated intentionally.
- The jam protection function may not activate until the window is almost completely closed and trapping an object. The jam protection function may not activate until the window traps an object when it is almost completely closed.

Please be careful not to trap your fingers.

The jam protection function may not activate particularly with a small object.

 Depending on surroundings and driving conditions, impacts sustained by the window glass that behave similar to an obstruction may trigger the jam protection function.

# 

Please observe the following precautions. Failure to do so may lead to damage.

#### To prevent damage to the power windows

- Do not operate the driver's window switch together with other switches in opposite directions.
- Do not continue to operate the window switches when the windows are completely opened or closed.
- Do not continue to operate the window switches when the windows are frozen and immobile.

#### To prevent battery depletion

Do not open or close the power windows more than necessary when the engine is switched off.

# Driving

4

# Before driving

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# Before driving

The following procedures should be observed to ensure safe driving.

# Starting the engine

→P. 4-11

#### Driving

- 1 Shift the shift lever to D while pressing on the brake pedal ( $\rightarrow$ P. 4-16)
- 2 Release the parking brake ( $\rightarrow$ P. 4-20)
- 3 To start moving, gradually release the brake pedal and gently press on the accelerator

# Stopping

- 1 Press the brake pedal with the shift lever still in D
- Apply the parking brake if necessary When stopping for an extended period, shift the shift lever to P or N. (→P. 4-16)

# Parking

- 1 Press the brake pedal with the shift lever still in D
- 2 Apply the parking brake
- 3 Shift the shift lever to P ( $\rightarrow$ P. 4-16)
- 4 Turn the engine switch to 'OFF' and stop the engine
- 5 Make sure to take the key and lock the doors When parking the car on an incline, please use a wheel stopper\* if necessary.
  - \* The wheel stopper is not included with the vehicle, please prepare it if necessary. Alternately, objects capable of immobilizing the tyres, such as a large rock can be used as a wheel stopper.

# Starting off on an uphill

- 1 Shift the shift lever to D after making sure the parking brake is firmly applied
- 2 Gently press the accelerator
- 3 Release the parking brake after making sure the vehicle is about to move

#### Starting off on an uphill

The hill-start assist system will activate. ( $\rightarrow$ P. 4-138)

#### Driving in the rain

- Drive carefully when it is raining because visibility will be reduced, the windows may become fogged up, and the road will be slippery.
- Drive carefully when it starts to rain because the road will be very slippery.
- Reduce your speed when driving on an expressway in the rain because a layer of water may form between the tyres and the road surface, preventing the steering wheel and brakes from operating properly.

#### Engine speed while driving

Engine speed may increase while driving in the following conditions: This is due to automatic up-shifting control or down-shifting to meet driving conditions. It does not indicate sudden acceleration.

- When it is determined that the vehicle is travelling up or down a slope
- When the accelerator is released

#### Engine output control

(Brake override system) Engine output is controlled when the accelerator and brake pedals are pressed simultaneously.

- Vehicle not equipped with a TFT colour multi-information display.
- The warning indicator lights up when the brake override system is operating. (→P. 7-16)
- Vehicle equipped with a TFT colour multi-information display
- A warning message is displayed when the brake override system is operating. (→P. 7-28)

#### Applying driving signs

Magnetic signage for novice drivers or elderly drivers cannot be applied to resin parts, such as bumpers or trunk door.

Driving

## Idling before stopping the engine\*

To prevent damage to the turbo unit, turn off the engine about one minute of idling after stopping the vehicle right after high speed driving or driving uphill.

\* Idling is not necessary if the engine is turned off by eco IDLE.

#### Engine overheating

The engine may become overheated when driving in harsh conditions as follows:

- Driving uphill on a hot day
- Sudden stop or sudden deceleration right after high speed driving

#### Environment-friendly driving

Vehicle not equipped with a TFT colour multi-information display

When driving in an environment-friendly mode, the eco drive indicator will light up. The indicator will flash when the vehicle is stopped or when pressing the accelerator more than necessary.

The eco drive indicator will not activate in the following conditions:

- When the shift lever is not in D
- When the vehicle speed is over 110 km/h
- When driving in power mode
  - (→P. 4-17)

The eco drive indicator can be set to display or not.

(→P. 2-21)

Vehicle equipped with a TFT colour multi-information display →P. 2-24

## Economical driving tips

- Accelerate your vehicle gently. Avoid unnecessary sudden acceleration or braking. Keep the same speed as long as possible.
- Avoid unnecessary high speed driving.
- It is advisable to drive by using the top gear when driving at high speed. This will help reduce engine noise level as well as fuel consumption.
- Take ample time as much as possible to help the vehicle move appropriately since moving the vehicle from a stop requires more fuel.
- Drive sensibly and maintain your vehicle properly. This will keep originally-designed performance of your vehicle as well as save fuel.
- Do not overload.
- Do not keep engine idling unnecessarily.
- Turn the air conditioner off when it is not required.



Please observe the following warnings. Failure to do so may result in serious injuries, even death.

#### When starting the vehicle

Press the brake pedal at all time when stopping the vehicle with the engine running. This prevents the vehicle from creeping.

#### When driving

- Do not drive without knowing the position of the brake pedal and the accelerator pedal in order to avoid pressing the wrong pedal.
  - Pressing the accelerator pedal instead of the brake pedal will result in sudden acceleration that may lead to unexpected accidents.
  - Operating the pedals may be difficult when reversing as you may twist your body around. Please be careful to press the correct pedal.
  - Keep a correct driving posture even when moving the vehicle only slightly. Make sure to press the brake pedal and accelerator pedal properly.
  - Press the brake pedal with your right foot. Pressing the brake pedal with your left foot is dangerous as it may delay your reaction in an emergency, leading to unexpected accidents.
- Do not drive your vehicle over or stop your vehicle near flammable materials. The exhaust and exhaust fumes can be extremely hot and may cause a fire if there are any flammable materials nearby.
- Do not turn off the engine during normal driving. Although it is still possible to operate the steering wheel and the brake with the engine turned off while driving, the power assist to these systems will be lost. Since this will make it more difficult to steer and brake, you should pull over and stop the vehicle as soon as it is safe to do so. However, in the event of an emergency, such as if it is impossible to stop the vehicle in the usual manner, please see P. 7-3.
- Use engine braking (downshift) to reduce your speed when driving down a steep slope. Continuously overusing the foot brake may cause the brakes to overheat and not functioning properly. (→P. 4-16)
- Depending on the road conditions and speed, please downshift and use engine braking by shift the shift lever to S.
- Please avoid sudden engine braking (operating the gear shift). Sudden engine braking will lock the tyre and may cause unexpected accidents, for example by skidding.

Driving

	WARNING
	Do not adjust the steering wheel, seats, side-view mirrors, and rear-view mirror while driving. This may cause the driver to lose control of the vehicle. Make sure that all passengers do not put their hands, head, or any other parts of their body out of the vehicle. Do not drive off-road. If driving off-road is unavoidable, please drive cautiously. Do not drive in water, for example crossing rivers. The water may cause serious vehicle damage, such as damage to the engine or electrical systems. Do not place personal belongings on or near the seats while driving. When braking suddenly or making a turn, the belongings may fly around and hitting other occupants, or damaged, or the driver may focus on the belongings, leading to unexpected accidents. Drive carefully in locations with large bumps or with wheel stoppers. The bumper may be damaged.
w	hen driving on slippery road surfaces
•	Sudden braking, acceleration and steering may cause the tyre to slip and you may lose control of the vehicle. Sudden acceleration, engine braking due to shifting, or changes in engine speed may cause the vehicle to slip sideways. After driving through a puddle, lightly press the brake pedal to make sure that the brakes are functioning properly. Steering control may be affected if the brakes lose their effectiveness when the brake pads are wet or the brake is only effective on one side.
W	hen shifting the shift lever
•	Never let the vehicle move backward on momentum with the shift lever in the driving position, or let the vehicle move forward on momentum with the shift lever in R. Doing so may cause the engine to stall, leading to poor braking and steering performance, resulting in unexpected accidents or damage to the vehicle. Do not put the shift lever in P while the vehicle is moving. Doing so may damage the transmission and losing vehicle control.

- Do not put the shift lever in R while the vehicle is moving forward. Doing so may damage the transmission and losing vehicle control.
- Do not put the shift lever in a driving position while the vehicle is moving backward.
  - Doing so may damage the transmission and losing vehicle control.
- Shifting the shift lever to N while driving will disengage the transmission from the engine power transmission and engine braking will not be effective.
- Be careful not to shift the shift lever while pressing the accelerator. Shifting the shift lever to other than P or N may cause the vehicle to accelerate suddenly, resulting in unexpected accidents.
- If the engine stalls while driving, restart it with the shift lever is N. It is however, advisable to start the engine with the shift lever in P normally.

#### When squealing noise can be heard continuously from around the brakes

Please have your vehicle inspected at an authorised Perodua Service Centre as soon as possible to replace the brake pads.

If the brake pads are not replaced when necessary, it may cause damage to the disc rotor.

Parts, such as brake pads and rotors will wear down as they function. Driving the vehicle with the parts exceeding their wear limits will not only cause damage, but also lead to accidents.

#### When parking

• Do not press the accelerator more than necessary.

Shifting the shift lever to other than P or N may cause the vehicle to accelerate suddenly, resulting in unexpected accidents.

- In order to prevent accidents caused by the vehicle moving away, press the brake pedal at all time while the engine is running and apply the parking brake if necessary.
- When stopping the vehicle on an incline, press the brake pedal at all time and apply the parking brake if necessary, to prevent accidents caused by the vehicle moving forward or backward.
- Do not idle the engine when stopping the vehicle. The exhaust will be overheated and may cause a fire if there are any flammable materials nearby.

### WARNING

#### When parking

 Do not leave objects, such as glasses, cigarette lighters, spray cans, or carbonated drink cans in the vehicle under blazing sun.

The following incidents may take place when these objects are left in the vehicle.

- · Gas leaks from cigarette lighters or spray cans can cause fire
- Glasses with plastic lens or glasses made with plastic may be distorted or cracked
- Carbonated drink cans can explode and soiling the vehicle or short-circuiting electrical components

Never leave cigarette lighters in the vehicle. If a cigarette lighter is in a place such as the glove compartment or dropped on the vehicle floor, it may lights up accidentally when luggage is loaded or the seat is adjusted, causing a fire.

 Do not attach suction cups to the windows. Do not place containers, such as air fresheners on the instrument panel or dashboard.

Suction cups and containers may act as lens that can cause vehicle fire.

 Do not leave a door or window open if a curved glass is coated with a metallized film, such as silver-coloured film.

Reflected sunlight will be reflected on the inside of the curved glass, which act as a lens and may cause fire.

 Always apply the parking brake, put the shift lever in P, turn off the engine, and lock the vehicle.

Never leave your vehicle while the engine is running.

Leaving the vehicle by simply putting the shift lever in P without applying the parking brake is dangerous because the vehicle may move and cause unexpected accidents.

 Do not touch the exhaust while the engine is running or right after turning off the engine. Doing so may cause burns.

#### When taking a nap

Always turn off the engine.

Taking a nap with the engine running may lead to an accident or fire due to engine overheating if you accidentally move the shift lever, or pressing the accelerator. Furthermore, if the vehicle is parked in a poorly ventilated place, exhaust fumes may enter the vehicle, leading to serious health hazard, even death.

## WARNING

#### When braking

Drive more carefully than usual when the brakes are wet.

When the brakes are wet, the braking distance will be longer and there may be difference in the right and left brakes when applied. The parking brake may not securely hold the vehicle.

 If the brake booster device is not functioning, keep your distance from other vehicles. Please avoid downslope or sudden curve as well.

In this case, the brakes are still functioning, but you must press them harder than usual. The braking distance is also longer. Please repair the brakes immediately.

Do not repeatedly press the brake pedal should the engine stall.
 Every time the pedal is pressed, it will use up the reserve for the power-assisted braking.

 Do not rest your foot on the brake while driving. This could cause brake overheating.

The brake system consists of two independent hydraulic systems so that if one of the systems fails, the other will still operate. In this case, the brake pedal should be pressed more firmly than usual, and the braking distance will be longer. Please repair the brakes immediately.

#### If you have a flat tyre while driving

The tyres may be flat or damaged in the following situations. Hold the steering wheel firmly and gradually apply the brakes to reduce your speed. Sudden braking may cause you to lose control of the vehicle, resulting in an accident.

- Difficult to control the vehicle
- There are abnormal sounds and vibrations
- The vehicle leans abnormally

See P. 7-43 for information on what to do in case of a flat tyre.

## 

#### When driving

- Do not press the accelerator and brake pedal at the same time when driving. Pressing the accelerator and brake pedal at the same time will restrain driving power.
- Do not press the accelerator or press the accelerator and brake pedal at the same time to stop the vehicle on an incline.

 Do not rest your hand on the shift lever knob while driving. The transmission could accidentally be shifted into another range. It could also cause damage to the transmission.

 Do not drive with the shift lever in N. This could cause transmission overheating.

CAUTION
When parking
Always apply the parking brake and put the shift lever in P. Not applying the parking brake and putting the shift lever in P may cause the vehicle to move or the vehicle may accelerate suddenly if the accelerator is accidentally pressed.
To prevent damage to vehicle parts
<ul> <li>Do not turn the steering wheel fully in either direction and hold it there for an extended period of time to avoid damage to the power steering motor.</li> <li>To prevent damage to disc wheels, etc., drive as slowly as possible when driving over bumps.</li> </ul>
When driving on flooded roads
<ul> <li>Do not drive on a road that is flooded after heavy rain because this may cause the following serious damage to the vehicle.</li> <li>Engine stalling</li> <li>Short circuit in electrical components</li> </ul>
<ul> <li>Engine damage caused by water immersion</li> </ul>
If by any chance, drive slowly. After you have driven on a flooded road and the vehicle has immersed in water, please have an authorised Perodua Service Center check the following: Brake function
<ul> <li>Changes in quantity and quality of the oils and fluids in systems such as differential</li> </ul>
Lubricant condition for the bearings and suspension joints

## Precautions on loading baggage

# Please observe the following precautions when loading baggage to ensure safe and comfortable drive.

## WARNING

#### Things you must never carry in the luggage compartment

The following objects must never be carried in the luggage compartment because they are fire hazard.

- Fuel containers
- Spray cans

### When loading baggage

The following warning must be observed.

Failure to do so may prevent the accelerator or brake pedals from being pressed properly, may block the driver's vision, or may result in items hitting the occupants, possibly causing an accident.

- Stow baggage in the luggage compartment whenever possible.
- Do not place objects or baggage in the following locations.
  - At the feet of the driver
  - On the front passenger seat or rear seats (if the items are stacked)
  - On the instrument panel
  - On the dashboard
  - Small containers without lids or trays
- Firmly secure all items placed in the cab.
- Do not stow objects that are longer than the backrest in the luggage compartment.

These objects may be hurled forward and injure the occupants in an accident or when braking suddenly.

- When the rear seat backrests are folded down, whenever possible avoid placing long objects directly behind the front seats.
- Do not seat people in the luggage compartment. The luggage compartment is not designed to carry passengers.

Please seat the passengers in their seats and wearing seatbelts properly. Failure to do so may result in serious injuries, even death in a collision or when braking suddenly.

## Load and distribution

- Do not overload the vehicle.
- Do not apply loads unevenly.

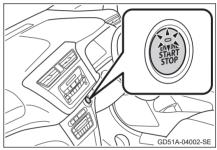
Uneven loads may not only place burden on the tyres, it may also reduce steering and braking control that may lead to unexpected accidents resulting in serious injury, even death.

## Engine (ignition) switch

Igniting the engine or changing the engine switch mode can be done by performing the following operations with the smart key.

## Starting the engine

- 1 Adjust the seat for the correct driving posture ( $\rightarrow$ P. 1-3) and check the pedal positions
- 2 Make sure that the parking brake is set
- 3 Make sure that the shift lever is in P
- Firmly press on the brake The engine switch indicator will light up in green. The engine will not start if the light is not green.

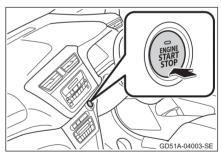


5 Press the engine switch briefly and firmly

It is not necessary to hold and press the switch if it is pressed briefly and firmly.

The starter will rotate for a maximum of 30 seconds until the engine ignites. Continue pressing on the brake until the engine ignites completely.

The engine can be ignited in any engine mode ( $\rightarrow$ P. 4-12).



## Turning off the engine

- 1 Stop the vehicle completely
- 2 Apply the parking brake ( $\rightarrow$ P. 4-20) and shift the shift lever to P
- 3 Press the engine switch
- 4 Release the brake pedal and make sure that the engine switch indicator is off

## Changing engine switch modes

Engine switch mode can be changed by pressing the engine switch without stepping on the brake pedal. (The mode changes every time the switch is pressed.)

'OFF'\*

Enable hazard lights.

'ACC'

Enable electrical components, such as accessory sockets.

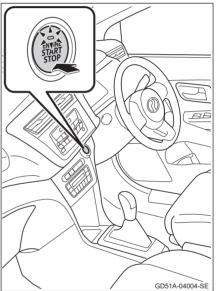
The engine switch indicator slowly flashes in green.

'ON'

Enable all electrical components.

The engine switch indicator slowly flashes in green.

\* When the shift lever is in a position other than 'P', the engine switch will be set to 'ACC' and not 'OFF'.



# When turning off the engine with the shift lever in a position other than P

If the engine is turned off with the shift lever in a position other than P, the engine will be turned off, but the engine switch will not be set to 'OFF'. Please set the engine switch to 'OFF' mode using the following procedures.

- 1 Make sure that the parking brake is set
- 2 Shift the shift lever to P
- 3 Press the engine switch twice after making sure that the engine switch indicator is flashing slowly in green
- 4 Make sure that the engine switch indicator is off

#### Auto power off function

If the engine switch is left in 'ON' mode (the engine is not running) for more than 20 minutes or in 'ACC' for more than one hour with the shift lever in P, the engine switch will automatically turn to 'OFF'.

However, this function cannot entirely prevent battery depletion. Do not leave the engine switch in 'ACC' or 'ON' mode for an extended period when the engine is not running.

## Smart key battery consumption

→P. 3-12

- If the key-free system does not function properly →P. 3-12
- Please keep in mind  $\rightarrow P. 3-10$

#### When the engine does not ignite

 The engine immobilizer system may not be deactivated. (→P. 1-44)

Please contact an authorised Perodua Service Centre.

 Please check if the shift lever is in P. The engine may not ignite if the shift lever is tilted or in a position other than P.

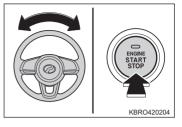
#### Steering lock

- Opening and closing any of the doors except the trunk door after turning the engine switch to 'OFF' will lock the steering wheel. The steering lock is automatically released by operating the engine switch.
- The steering lock will not activate when the vehicle battery is depleted.

#### When the steering lock cannot be released

The engine switch indicator will flash quickly in green for a while.

Make sure that the shift lever is in P and operate the engine switch again while turning the steering wheel left and right.



#### Preventing steering lock motor from overheating

To prevent the steering lock motor from overheating, the motor may be suspended if the engine is turned off and on repeatedly in a short period of time. In this case, please refrain from operating the engine. The steering lock motor will resume functioning in about 10 seconds.

#### When the engine switch indicator lights up or flashes in yellow The system may be malfunctioning. Please have your vehicle inspected at an authorised Perodua Service Centre immediately.

When the smart key runs out of battery  $\rightarrow$  P. 7-18

#### Operating the engine switch

- Changing the mode or starting the engine may not be possible if the engine switch is not pressed briefly and firmly, or if it is pressed quickly and continuously.
- The engine may not start if it is restarted immediately after turning the engine switch to 'OFF'. Please wait several seconds before restarting the engine after turning the engine switch to 'OFF'.

#### WARNING

#### When starting the engine

Always sit in the driver seat. At this time, the accelerator must never be pressed. Pressing the accelerator at this time may lead to unexpected accidents resulting in serious injuries, even death.

#### While driving:

If the vehicle is hydroplaning, for example during engine failure, do not open the door or operate the lock until the vehicle reaches a safe and complete stop. Opening the door or operating the lock will activate the steering lock that may lead to unexpected accidents resulting in serious injuries, even death.

#### Turning off the engine in an emergency

To turn off the engine in an emergency while driving, either press and hold the engine switch for more than 3 seconds or quickly press the switch continuously more than three times. ( $\rightarrow$ P. 7-3)

Do not touch the engine switch while driving except for an emergency. Although it is still possible to operate the steering wheel and the brake with the engine turned off while driving, the power assist to these systems will be lost. Since this will make it more difficult to steer and brake, you should pull over and stop the vehicle as soon as it is safe to do so.

## CAUTION

#### To prevent battery depletion

- Do not leave the engine switch in 'ACC' or 'ON' mode for an extended period when the engine is not running.
- If the engine switch indicator is not turned off, the engine switch is not turn to 'OFF'. Turn the engine switch to 'OFF' before leaving the vehicle.
- Do not turn off the engine with the shift lever in a position other than P. The engine switch will turn to 'ACC' if the engine is turned off with the shift lever in a position other than P. Leaving it like that will cause battery depletion.

#### When starting the engine

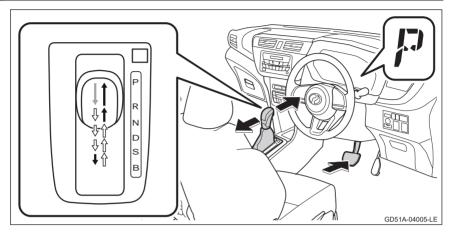
- Do not race the engine on cold engine. Keep moderate speed until the engine warms up throughly.
- Do not accelerate the vehicle when the engine coolant temperature is low.
- If the engine is difficult to start or stalls frequently, please have the vehicle inspected at an authorised Perodua Service Centre immediately.

#### Operating the engine switch

The engine switch may be malfunctioning if it seems to be operating differently than usual, for example if the engine switch stuck slightly. Immediately contact an authorised Perodua Service Centre.

## **Operation of CVT**

## Shifting the shift lever



 Operate with the brake pedal depressed and the shift lever button pressed with the engine switch set to IGNITION ON mode.

- : Operate with the shift lever button pressed.
- $\square$ : Operate without the shift lever button pressed.

When shifting the shift lever between P and D, make sure that the vehicle is completely stopped.

## Shift lever position purposes

Shift lever position	Purpose
Р	Parking the vehicle/starting the engine
R	Reversing
N	Neutral
D	Normal driving*
S	Driving on a slope
В	Driving down a steep hill

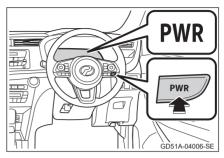
\* Setting the shift lever in D is recommended for normal driving because this will improve fuel consumption and reduce noise. Normal driving can be defined as driving under optimal condition such as good weather, clear traffic and good vehicle and road condition.

## Selecting driving mode

Press the driving mode switch over steering wheel button

The mode is switch to power mode and power mode indicator lights up. Power mode enables the vehicle to accelerate more by increasing the engine power when the shift lever is in D or S. It is suitable when driver wants to quickly speed up while driving.

Pressing the button again will switch back to normal driving mode.



#### Shift lock system

The shift lock system prevents mishandling of the shift lever at departure. The shift lever cannot be shifted from P if the engine switch is not set to 'ON' and the brake is not pressed.

#### When the shift lever cannot be shifted from P

Make sure that the brake is pressed.

If the shift lever cannot be shifted with the brake pressed, the shift lock system may be malfunctioning. Please have the vehicle inspected at an authorised Perodua Service Centre immediately. However, the shift lever can be shifted using the following stop-gap measures.

The shift lever cannot be shifted from P range to other range when the engine switch is OFF even if the brake is pressed.

How to release the shift lock:

- 1 Apply the parking brake
- 2 Set the engine switch to 'OFF'
- Press on the brake
- Press the shift lock release button The shift lever can be shifted while the button is pressed.



#### Power mode

- Power mode control is not active in either of the following condition.
  - When the shift lever is in R
  - When the ACC\* (P. 4-81) is activated
- Even if the driving mode assist switch-over steering wheel button is set to 'ON', the driving mode assist switch-over steering wheel button will automatically return to 'OFF' by turning the engine switch from 'ON' to 'OFF' once.
- The mode cannot be changed to power mode when the engine indicator or CVT indicator\* lights up or flashes.

#### Reverse alarm

The alarm will sound when the shift lever is in R to alert the driver that the vehicle is in R.

#### WARNING

#### When driving on slippery road surfaces

Do not accelerate or shift gears suddenly. Please keep in mind that sudden changes in engine braking force will cause the vehicle to skid or spin.

#### To prevent an accident when releasing the shift lock

When pressing the shift lock release button, always apply the parking brake and press the brake pedal.

If the accelerator is accidentally pressed when pressing the shift lock release button and shifting the shift lever, the vehicle may suddenly start, possibly leading to an unexpected accident resulting in serious injuries, even death.

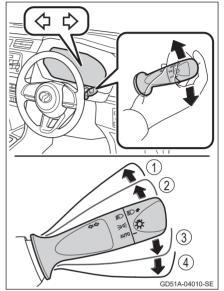
\* : The equipment may vary according to the vehicle grade and options.

## Turn signal lever

## **Operation instructions**

Immediately return the lever to its original position after use.

- 1 Left turn
- ② Changing to left lane (keep the lever in a halfway position\*) The left turn signal will flash until the lever is released.
- ③ Changing to right lane (keep the lever in a halfway position\*) The right turn signal will flash until the lever is released.
- ④ Right turn
  - \* The turn signal indicator flashes 3 times when the lever is released right after shifting it in the opposite direction to position ② or ③.



### If the turn signal indicator continues flashing after making a turn or to cancel the signal

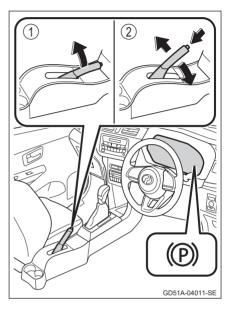
Shift the turn signal lever in the opposite direction to position (2) or (3). The selected turn signal will flash when the lever is shifted to position (1) or (4).

- This component is enabled when: The engine switch is set to 'ON'
- If the indicator flashes faster than usual Check if a turn signal light bulb has not burned out.

## Parking brake

## **Operation instructions**

- To engage the parking brake, pull the parking brake lever all the way up while pressing the brake pedal
- ② To release the parking brake, pull the lever up slightly and lower it all the way down while pressing the button



#### ■ Parking brake engaged warning buzzer →P. 7-16

CAUTION

#### Before driving

Fully release the parking brake.

Driving with the parking brake engaged will cause the brake components to overheat and may reduce its braking efficiency or early wear and tear.

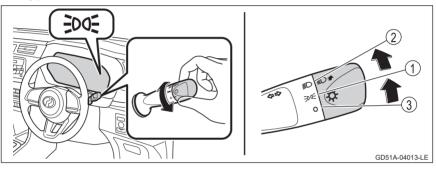
## Headlight switch

## The headlights can be switched on or off manually or automatically.

## **Operation instructions**

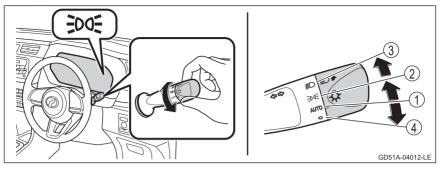
Turning the headlight  $-\overset{\circ}{\Box}$  switch to the following position will turn on or off the lights shown in the table below. This operation must be done when the engine switch is in 'ON' mode.

### Type 1



		Type of lights	
Switch position		Headlights	Clearance lights License plate light Tail lights
1	EDOE	Lights off	Lights on
2	≣D	Lights on	
3	0	Lights off	

Type 2\*



		Type of lights	
Switch position		Headlights	Clearance lights License plate light Tail lights
1	AUTO	Lights on or off automatically	
2	EDOE	Lights off	Lights on
3	≣D	Lights on	
(4)	0	Lights off	

\* : The equipment may vary according to the vehicle grade and options.

## Turning on the lights again

After turning off the lights by turning the knob  $-\overset{\circ}{\nabla}$  to  $\bigcirc$  position, the lights will turn on again in any of the following situations.

- When the vehicle speed is over 3 km/h
- When the knob  $\overset{\circ}{\mathcal{D}}$  is turned to  $\bigcirc$  position
- When the engine switch is set to 'ON' again
- When the vehicle speed is 3 km/h or less for more than 30 seconds (except when stopping the vehicle)

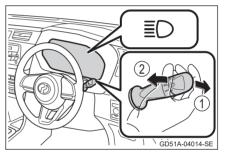
## Auto light function

The headlights turns on when the control sensor senses dark condition. It will turn on and off automatically when the engine switch is 'ON' and the knob is set to 'AUTO'.

## Turning on the high beam headlights

- Change to high beam with the headlights switched on Returning the lever to its original position will switch the headlights to low beam.
- ② The high beam headlights will turn on while the lever is pulled The high beam headlights will turn on even when the lights are switched off. Releasing the lever will return the headlights to low beam or turn it off.

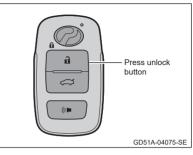
To flash the headlights, pull the lever lightly and release.



## Leaving home light

Leaving home light function is to assist driver finding his way and get into his car in the dark.

When the engine switch is "OFF", the headlight switch is in the "AUTO" position with all the doors locked, by pressing the transmitter smart key unlock button will cause the headlights to be lit for approx. 30 seconds.



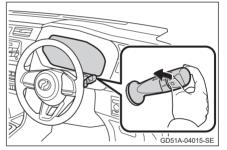
#### Follow me home system

This system allows the headlights to be turned on for 30 seconds when the engine switch is turned off.

Pull the lever toward you and release it with the light switch in O or AUTO after turning the engine switch off.

The lights are turned off in the following situations.

- The engine switch is turned to IGNITION ON mode.
- The light switch is turned on.
- The light switch is pulled toward you and then released.



## Headlight levelling switch

The optical axis of the headlights can be adjusted to meet the changes in the vehicle position due to the quantity of baggage or number of passengers.

- ① Upward adjustment
- 2 Downward adjustment

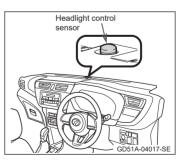


## Guide to set the dial

Passenger a	Dial position		
Passenger	Baggage	Dial position	
Driver	None	1	
Driver and front passenger	None	2	
All passengers	None	3	
All passengers	When the luggage compartment is full	4	
Driver	When the luggage compartment is full	5	

#### Headlights control sensor\*

- Please observe the following warnings.
   Failure to do so may cause the automatic headlights system to malfunction.
  - Do not place objects on top of the sensor, do not apply anything that will block the sensor on the windscreen
  - Do not spray the sensor with chemicals, such as glass cleaner



#### Light reminder function

- The lights that are switched on will turn off automatically when the engine switch is turned from 'ON' to 'ACC' or 'OFF'.
- To turn on the lights again, either turn the engine switch to 'ON' or turn the ID switch to the position again.

#### Light reminder buzzer

A buzzer sounds when the engine switch is set to 'ACC' or 'OFF" and the driver's door is opened with the headlights and tail lights are on.

 A warning message is also displayed together with the buzzer in vehicles equipped with a TFT colour multi-information display. (→P. 7-32)

#### Power saving function

To prevent the vehicle battery depletion, when the engine switch is set to 'ACC' or 'OFF' with the headlights or the tail lights switched on, the power saving function activates and automatically turn off all the lights after about 10 minutes.

After the lights are automatically switched off, any of the following actions will deactivate the power saving function and the lights can be switched on.

- Setting the engine switch is to 'ON'
- Operating the light switch (however, the lights will be turned off again automatically about 10 minutes later)
- Opening or closing any of the doors (however, the lights will be turned off again automatically about 10 minutes later)

#### 

#### To prevent battery depletion

Do not leave the lights on for an extended period with the engine turned off. Always turn off the lights when leaving the vehicle.

\* : The equipment may vary according to the vehicle grade and options.

## Auto High Beam (AHB)\*

The feature automatically switches the headlights into high beam or low beam based on the brightness of the surrounding, for example the brightness of the street lamps or the lights from the preceding vehicle or vehicle coming in the opposite direction using the stereo camera installed at the top of the windscreen.

#### WARNING

#### For safe use

Do not overly relying on the Auto High Beam feature. This feature helps in guaranteeing visibility for the driver, but it may not switch between high beam and low beam depending on the situation.

The driver is responsible for keeping track of the surroundings at all time and to practice safe driving. Please switch between high beam and low beam manually if necessary.

### CAUTION

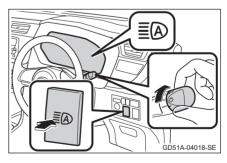
#### For the Auto High Beam feature to work properly

- Do not overload the vehicle.
- Do not modify the vehicle.

## How to use the Auto High Beam feature

When all of the following requirements are met, this feature will activate, and the AHB activation light will turn on.

- The engine switch is set to 'ON'
- The lever is in original position
- The light switch is set to ≣D (type 1), ≣D or AUTO (type 2)
- AHB switch is pressed (turn ON)
- Front wiper is not set to high speed operation



# The requirements for automatically switching between high beam and low beam

The headlights will be in high beam when all of the following requirements are met.

- The vehicle speed is about 30 km/h or more
- The area in front of the vehicle is dark
- There are no vehicles coming in the opposite direction or in front, or their lights are switched off
- The street lamps in front are dark

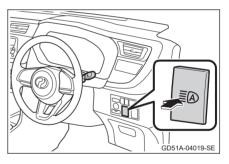
The headlights will be in low beam if any of the following requirements is met.

- The vehicle speed is about 20 km/h or less
- The area in front of the vehicle is bright
- The vehicle coming in the opposite direction or in front turn on their lights
- The street lamps in front are bright

### How to switch manually

## Switching to low beam

Turn off the AHB switch by pressing it. The AHB activation light is turned off.

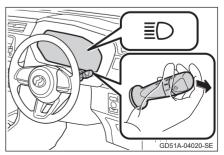


## Switching to high beam

Push the lever forward

The AHB activation light is turned off and the high beam indicator lights up.

To resume the Auto High Beam function, press the AHB switch once again to turn it ON and return the lever to its original position.



#### Auto High Beam

- In the following situations, the high beam may not switch to low beam automatically.
  - · Passing a vehicle from the opposite direction at a blind curved
  - Another vehicle crossing in front
  - The preceding vehicles in front or in opposite direction are invisible from time to time due to continuous curves, dividers and street trees
  - The vehicle from opposite direction approaches from a distant lane
  - The lights in vehicles from the opposite direction or in preceding vehicles are not turned on, dirty or damaged, or the optical axis is misaligned
- The high beam may switch to low beam due to the fog lights in the preceding vehicle
- The high beam may switch to low beam, or the headlights may continue in low beam because of lightings, for example from street lamps, signals or billboards or the reflections from signs and signboards.
- The timing of switching between high beam and low beam may change due to the following reasons.
  - The brightness of the lights from vehicles from the opposite direction or in preceding vehicle
  - The movement and direction of the vehicles from the opposite direction or in preceding vehicle
  - Only one of the headlights from the preceding vehicle or vehicle from the opposite direction is turned on
  - The preceding vehicle or the vehicle from the opposite direction is a motorcycle
  - The conditions of the road (for example, slope, curve, and road surface conditions)
  - The number of passengers and baggage
- The Auto High Beam reads the surroundings with the brightness of the lights in the front part of the vehicle. Therefore, the high beam and low beam may be switched without matching the driver's senses.
- Light vehicles, such as a bicycle may not be detected.
- The function may be unable to accurately detect the surrounding brightness in the following situation, causing the high beam to inconvenient pedestrians, preceding vehicles, and vehicles from the opposite direction, or the headlights may continue in low beam. In this case, please switch between high beam and low beam manually.
  - In bad weather (heavy rain, blizzard, or thick fog)
  - The windscreen is fogged or dirty, or the front of the stereo camera is covered, for example by raindrops or a sticker
  - The windscreen is scratched or cracked
  - The stereo camera temperature is high
  - The stereo camera is damaged or dirty
  - There are lights similar to headlights and taillights around

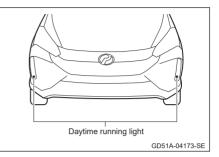
- The lights in vehicles from the opposite direction or preceding vehicles are not turned on, dirty or damaged, or the optical axis is misaligned
- There are splashes of water sprays or dust thrown up by a preceding vehicle
- Poor visibility due to exhaust fumes, steam, sand, smoke, sand dust, etc.
- Rapidly and continuously changing brightness
- Driving on a very bumpy road
- Driving on a curve road, undulating road, sloping roads
- There are objects that strongly reflect light, such as signs or mirrors in front of the vehicle
- The back of the preceding vehicle strongly reflects light, such as a freight container
- Damaged or dirty headlights that are unable to correctly illuminate objects, making it difficult to recognize objects
- The vehicle tilts due to a flat tyre or towing
- Frequently switching between high beam and low beam
- When there is a problem with using the high beam or when using the high beam is considered an inconvenience to other drivers and nearby pedestrians
- When it is not dark enough, for example in early dawn or sunset
- When the AHB warning light turns on and 'AHB malfunction' warning message is displayed on TFT colour multi-information display\*

The system may be malfunctioning. Please have the vehicle inspected at an authorised Perodua Service Centre.

\*: The equipment may vary according to the vehicle grade and options.

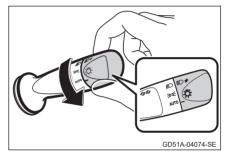
## Daytime running light (DRL)\*

The daytime running light is to assist other drivers to distinguish the car. It is automatically switched on when the parking brake is release and the lamp switch is turned on after the engine is running.



## Operating condition

- Engine is ON
- Headlight switch position in AUTO
- Parking brake is release



\* : The equipment may vary according to the vehicle grade and options.

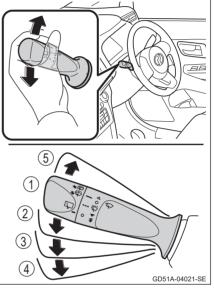
## Front wipers and washer

## **Operation instructions**

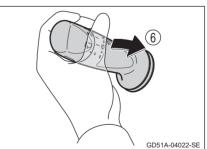
Shifting the  $\nabla$  lever as follows will operate the wipers or washer.

On a vehicle equipped with vehicle speed-sensitive intermittent wipers, the time for intermittent wiper operations will change according to the vehicle speed when  $\overline{NP}$  is selected.

- ① Ó : OFF
- ② 菜 : Intermittent operation On a vehicle equipped with vehicle speed sensitive intermittent wipers, the operation frequency increases as the vehicle speed increases.
- ③ ▼ : Low speed operation
- ④ **▼** : High speed operation
- (5) **\Delta** : Temporary operation



(6) (1) : Squirts the washer fluid Pulling the lever squirts the washer fluid and activates the wipers.



#### This component is enabled when:

The engine switch is set to 'ON'

#### If the washer fluid does not come out

If the washer fluid does not come out even when there is enough washer fluid, please check that the nozzle is not blocked.

#### WARNING

#### When using the wiper blades

Worn and dirty blades could reduce your visibility. This may lead to unexpected accidents resulting in serious injuries, even death.

## CAUTION

#### When the windscreen is dry

Do not use the wipers. The wipers may scratch the windscreen.

#### Squirting the washer fluid

Avoid squirting the washer fluid continuously for more than 20 seconds. If the washer fluid does not come out, do not continue to pull on the lever. The pump may be damaged.

#### If the nozzle is blocked

Please contact an authorised Perodua Service Centre if the nozzle is blocked. Do not try to unblock it using sharp objects, such as a pin. The nozzle may be damaged.

#### To prevent battery depletion

Do not use the wipers for an extended period when the engine is turned off.

#### To prevent wiper blades stuck at windscreen

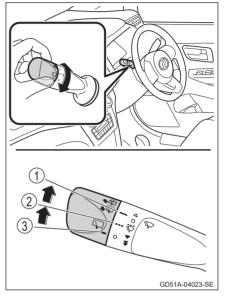
Check the wiper blades after long period of non-use. Operating the wipers while stuck to the windscreen may damage the wiper motor and cause malfunction.

## Rear wiper and washer

## **Operation instructions**

Turning the  $\Box$  knob on the lever as follows will operate the rear wiper.

- ① O : OFF
- ② --- : Intermittent operation after about 4 seconds of low speed operation
- ③ : Normal operation



④ 🛱 : Squirts the washer fluid Pushing the lever will operate the washer.



#### This component is enabled when:

The engine switch is set to 'ON'

#### If the washer fluid does not come out

If the washer fluid does not come out even when there is enough washer fluid, please check that the nozzle is not blocked.

#### Reverse gear-activated function

The rear wiper will operate a few times when the shift lever is shift to R while the front wipers are in operation. The rear wiper will also operate a few times when the shift lever is shifted to R within about 10 seconds after the front wipers are disabled.

#### CAUTION

#### When the rear window is dry

Do not use the wipers. The wiper may scratch the rear window.

#### Squirting the washer fluid

Avoid squirting the washer fluid continuously for more than 20 seconds. If the washer fluid does not come out, do not continue to pull on the lever. The pump may be damaged.

#### If the nozzle is blocked

Please contact an authorised Perodua Service Centre if the nozzle is blocked. Do not try to unblock it using sharp objects, such as a pin. The nozzle may be damaged.

#### To prevent battery depletion

Do not use the wipers for an extended period when the engine is turned off.

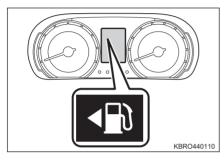
#### To prevent wiper blades stuck at windscreen

Check the wiper blades after long period of non-use. Operating the wipers while stuck to the windscreen may damage the wiper motor and cause malfunction.

## Opening the fuel tank cap

## **Before refuelling**

- Turn the engine switch to 'OFF' after closing the doors and windows.
- Check the fuel type.
- The gauge shows which side of the vehicle the fuel tank opening is located.



#### Fuel type

Unleaded fuel with its Research Octane Number 95 or higher



#### When refuelling

The following warning must be observed.

Failure to do so may cause a fire resulting in serious injuries, even death.

Before refuelling, touch a metal part of the vehicle to discharge any static electricity. Do not touch another person, any objects, or sit in the vehicle after discharging the static electricity and until the refuelling is completed. Do not let people who have not discharge static electricity near the fuel tank opening.

People who carry static electricity on them may lit the fuel with sparks from electric discharge when they are near the fuel tank opening.

#### WARNING

Hold the grip on the fuel tank cap and open it slowly. A whooshing sound may be heard when the fuel cap is loosened, wait until the sound can no longer be heard to completely remove the cap.

Removing the cap without waiting may cause the fuel to spray out from the fuel tank opening in high temperature.

- Do not inhale vaporized fuel.
   Fuel contains harmful substances.
- Do not smoke.
- Do not use electronic devices, for example mobile phones.
- Pay attention to the following precautions to prevent the fuel overflowing from the fuel tank.
  - · Securely insert the fuel nozzle into the fuel tank opening
  - Do not top off the fuel tank
- If refuelling cannot be performed properly, ask the petrol station attendant for help.

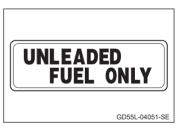
## CAUTION

#### When refuelling

Please use the specified petrol.

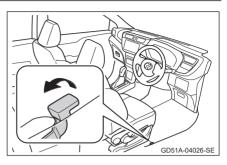
A fuel information is displayed on the back of the fuel lid. Do not use petrol other than the specified petrol or other types of fuel, for example inferior petrol, diesel, kerosene, or fuel containing alcohol. Do not spill the fuel. Doing so may lead to:

- Engine ignition deterioration
- Noise or vibration (knocking) in the engine
- Decreased engine output
- Exhaust control system malfunction
- Damage to the fuel system components
- Damage to the vehicle painted surface

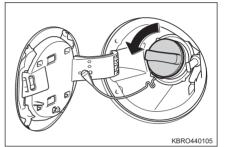


## Opening the fuel tank cap

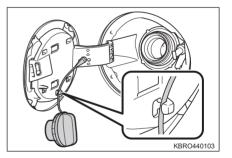
1 Pull up the opener to open the fuel filler door



2 Turn and open the cap slowly

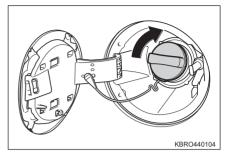


3 Place the cap on the hanger



## Closing the fuel tank cap

1 Turn and fasten the cap until a clicking sound can be heard Once released, the cap will turn slightly in the opposite direction.



2 Push close the fuel filler door until a clicking sound can be heard

#### If the fuel filler door cannot be opened

Please consult an authorised Perodua Service Centre.

#### WARNING

### If the cap cannot be closed properly

Please contact an authorised Perodua Service Centre. Driving with the cap that is not closed properly or using a cap other than a genuine Perodua product may cause fire, resulting in serious injuries, even death.

## Advanced Safety Assist

Advanced Safety Assist helps the driver to drive safely and comfortably with the following functions.

Pre-Collision Warning
→ P. 4-55
Pre-Collision Braking
→P. 4-55
Pedal Misoperation Control
→P. 4-65
<ul> <li>Lane Departure Warning (LDW)</li> </ul>
→P. 4-73
<ul> <li>Lane Departure Prevention (LDP)</li> </ul>
→P. 4-73
Front Departure Alert
→P. 4-79
Adaptive Cruise Control (ACC)*
→P. 4-81
Lane Keep Control (LKC)*
→P. 4-99
<ul> <li>Auto High Beam (AHB)</li> </ul>

→P. 4-27

\* : The equipment may vary according to the vehicle grade and options.

## WARNING

#### Advanced Safety Assist

Advanced Safety Assist is a system operating on the premise that the driver is practicing safe driving. It is designed to contribute to mitigate accident damage and driving load. There is a limit to Advanced Safety Assist recognition and control performance. Drivers should keep in mind not to rely on the system too much. They should be responsible in being aware of their surroundings and practice safe driving at all times.

The system will not operate properly in the following situations. Please deactivate the Advanced Safety Assist functions. (→ P. 4-44)

- If the tyre inflation pressure in incorrect
- If using a spare tyre or tyre chains
- · If using worn tyres, or tyres with significantly different level of wear
- If using tyres of any size other than that recommended by the manufacturer
- If using the flat tyre temporary repair set
- If the suspension is modified
- If any objects that may obstruct the stereo camera field of view are attached to the vehicle
- If the headlights are dirty and unable to correctly illuminate objects, making it difficult to recognize objects
- If the headlights optical axis is out of alignment
- If any of the lights, including the headlights are modified
- · If the vehicle is leaning excessively due to carrying goods
- · If the vehicle is modified or customized
- If being towed
- If loaded onto a car carrier
- If using a chassis dynamometer or free roller, etc.
- If the vehicle is lifted up with the engine running and wheels free-running
- Driving while coming into contact with drapes, flags, hanging branches, vinyl curtains, thickets or bushes
- If sport driving on a racing track, etc.
- If derailed or when getting out of mud
- If driving on a flooded road
- If the vehicle driving is unstable due to an accident or break down
- If the brake system warning light lights up

## Vehicle data recordings

Advanced Safety Assist is equipped with a computer that records data related to vehicle control and operations, particularly the following data.

- How the driver uses the accelerator and brake
- How the driver uses the steering wheel and gear lever
- Information related to the vehicle, including speed
- Operational status of each Advanced Safety Assist function
- Information on the distance and relative speed to the vehicle in front and obstacles
- Image information from the stereo camera (only when the secondary brake is in operation)

However, conversations, voices or images inside the vehicle are not recorded.

#### Data usage

Perodua and its authorised third parties may obtain and use the data recorded in these computers to diagnose vehicle malfunctions, conduct research and development, and improve quality.

Perodua and its authorised third parties shall not disclose or provide the data obtained to other third parties except:

- With consent of the vehicle owner or with consent of the lessee of the vehicle is leased
- In response to an official request by legal authorities, such as the police, a court of law or a government agency
- For use by Perodua in a lawsuit
- When providing data for example to a research institute for statistical analysis. In this case, the data will be anonymous.

The recorded image data can be erased using a special device.

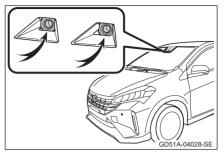
It is also possible to deactivate the function that records image data.

Please contact an authorised Perodua Service Centre for details.

## Stereo camera

The stereo camera recognizes information required for the following functions.

- Pre-Collision Warning (for vehicle, two-wheeled vehicle and pedestrians)
- Pre-Collision Braking (for vehicle, two-wheeled vehicle and pedestrians)
- Pedal Misoperation Control
- Lane Departure Warning (LDW)
- Lane Departure Prevention (LDP)
- Front Departure Alert
- Adaptive Cruise Control (ACC)\*
- Lane Keep Control (LKC)\*
- Auto High Beam (AHB)



\* : The equipment may vary according to the vehicle grade and options.

## To disable Advanced Safety Assist function

Advanced Safety Assist function can be disabled by pressing the Advanced Safety Assist OFF switch.

Some of the Advanced Safety Assist functions can also be disabled by changing the settings for multi-information display\*or TFT colour multi-information display\*.

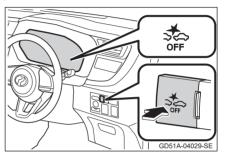
(→P. 2-42)

## Disabling the Pre-Collision Warning, Pre-Collision Braking, Pedal Misoperation Control, Front Departure Alert, and ACC\*

Press and hold the Advanced Safety Assist OFF switch for 2 seconds or longer

The buzzer will sound and the Advanced Safety Assist OFF indicator will turn on.

The buzzer will sound and the Advanced Safety Assist OFF indicator will go out by pressing and holding the switch again for 2 seconds or longer. This will enable the functions again.

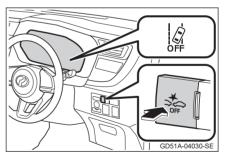


## Disabling Lane Departure Warning, Lane Departure Prevention and LKC\*

Press the Advanced Safety Assist OFF switch

The buzzer will sound and Lane Departure Warning OFF indicator will turn on.

Pressing the switch again will enable the functions after the buzzer sounds and Lane Departure Warning OFF indicator turns off.



\* : The equipment may vary according to the vehicle grade and options.

#### Advanced Safety Assist automatic recovery

Even if the following functions are disabled by pressing the Advanced Safety Assist OFF switch, they will be automatically enabled by turning the engine switch ON.

- Pre-Collision Warning (for vehicle, two-wheel vehicle and pedestrians)
- Pre-Collision Braking (for vehicle, two-wheel vehicle and pedestrians)
- Pedal Misoperation Control
- Front Departure Alert
- ACC\*
- Lane Departure Warning, Lane Departure Prevention and LKC\*

The operational status for Lane Departure Warning, Lane Departure Prevention and LKC will be maintained even when the engine is restarted.

#### Advanced Safety Assist operational status

Advanced Safety Assist operational status is notified by the buzzer, meter and display.

Buzzer	Warning indicator	Display <b></b> * <sup>1</sup>	Operational status
"Pipipipipipip"	(flashing)	BRAKE L(((CCCC) PROCEED WITH CAUTION	Pre-Collision Warning is enabled
"Pipipipipi" sounds continuously	(flashing)	BRAKE L((CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Primary or secondary brake in the Pre-Collision Braking system activates
"Pipipip" sounds continuously	(flashing)	BRAKE L(((COD) PROCEED WITH CAUTION	The vehicle stops after the secondary brake in the Pre-Collision Braking system activates. The buzzer and display are turned off by the driver.

\* : The equipment may vary according to the vehicle grade and options.

Buzzer	Warning indicator	Display <b></b> * <sup>1</sup>	Operational status
"Pipipipipipip"	(flashing)	BRAKE 	Pedal Misoperation Control warning is activated
"Pipipipipip" sounds continuously	(flashing)	BRAKE 	Controls engine output while Pedal Misoperation Control warning is activated
"Pipipipipip" sounds continuously	(flashing)	BRAKE L((CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Brake control in the Pedal Misoperation Control function is activated
"Pipipipip" "Pipipipip"	(flashing)	LDW in Operation	Lane Departure Warning is activated
_	(lights up)	×2 80 cm/h (flashing)	Lane Departure Prevention is activated

Buzzer	Warning indicator	Display ×1	Operational status
"Pipipipipip"	(lights up)	Hold Steering Wheel *2	Lane Departure Prevention function activates twice or more in about 3 minutes period when the system determines that the driver is driving with hands off the steering wheel to alert the driver
"Pipipipipip" sounds continuously	(lights up)	Kerring Wheel Keld Steering Wheel Kerring Wheel Kerring Wheel Kerring Wheel	Lane Departure Prevention function activates again after alerting the driver about driving with hands off the steering wheel to warn the driver
"Pipipip"	(flashing)	Front Camera in Operation	Front Departure Alert is activated

Buzzer	Warning indicator	Display <b></b> * <sup>1</sup>	Operational status
_		_	AHB is activated
_	SET	80 km/h	ACC* is activated in distance control mode
-	کی SET	80 km/h	ACC* is activated in constant speed control mode
"Pip"	_	* <sup>3</sup>	The system recognizes or no longer recognizes a vehicle in front when ACC* is activated

Buzzer	Warning indicator	Display <b>%</b> <sup>1</sup>	Operational status
"Pipipipipip" sounds continuously		ROCCEED WITH CAUTION	Distance alarm for ACC* is activated
"Pip"	<b>OFF</b> (flashing)	ACC Unavailable	-SET switch or +RES switch is pressed without meeting the ACC* control settings

Buzzer	Warning indicator	Display ×1	Operational status
"Pipip"	<b>OFF</b> (flashing)	Cut of Working Range ACC Cancel	The ACC* is cancelled as it no longer meets the operational conditions
"Pipip"	<b>OFF</b> (flashing)	Cut of Working Range ACC Cancel	The ACC* is cancelled as it no longer recognizes preceding vehicle
-		_	LKC* is activated

Buzzer	Warning indicator	Display <b></b> * <sup>1</sup>	Operational status
_		Hold Steering Wheel	The system determines and alert the driver about driving with hands off the steering wheel
"Pipi" sounds continuously		Hold Steering Wheel	The system warns the driver after the driver continues to drive with hands off the steering wheel after being alerted
"Pipipipipip" sounds continuously	_	_	LKC* is cancelled after the driver continues to drive with hands off the steering wheel after being warned when LKC* is activated

\* : The equipment may vary according to the vehicle grade and options.

\*<sup>1</sup> Vehicles equipped with a TFT colour multi-information display.

 $*^2$  Vehicles equipped with ACC\*.

 $\times^3$  The preceding vehicle indicator turns on when there is a vehicle in front.

When there is no longer a vehicle in front, the indicator will go out.

## WARNING

#### Stereo camera

The stereo camera has the characteristics that are similar to the human eye. Therefore, in conditions where it is difficult for the driver to see ahead, it is similarly difficult for the stereo camera to recognize the vehicles, pedestrians, obstacles or traffic lanes in front.

The stereo camera recognition of the vehicles, pedestrians, obstacles and traffic lanes in front is limited to within its field of view. It also takes a few seconds from the time an object enters the field of view until it is recognized for control or warning.

#### Preventing stereo camera malfunction and misoperation

Please observe the following warnings. Failure to do so may cause the stereo camera to cease functioning properly, leading to unexpected accidents resulting in serious injuries, even death.

- Always keep the windscreen in front of the stereo camera clean.
- Remove any dirt, oil film, water drops on the outside of the windscreen.
- Do not use any glass coating agent other than the agent specified by Perodua for the windscreen. Use the wiper to wipe off any water droplets, etc. in front of the stereo camera even when glass coating agent is used on the windscreen.
- Please contact an authorised Perodua Service Centre if the stereo camera fitting on the inside of the windscreen becomes dirty.
- Do not fix stickers, including transparent stickers on the windscreen in front of the stereo camera. If a sticker must be fix, for example the motor vehicle license sticker, make sure not to fix it in front of the stereo camera.
- If the windscreen fogs up, please wipe it clean.

(→P. 5-2, 5-5)

- If the wipers do not wipe clean the water droplets on the windscreen in front of the stereo camera, please replace the wiper rubber or wiper blade.
  - (→P. 6-61)
  - Please contact an authorised Perodua Service Centre if wiper blades need replacing.
- Do not apply films to the windscreen.
- Please contact an authorised Perodua Service Centre if the area surrounding the stereo camera is deformed because of an accident, etc.

## WARNING

- Please replace the windscreen if it is scratched or cracked. Do not leave it as it is. The system may not function properly if the windscreen in front of the stereo camera is damaged, for example cracked or scratched, or partially repaired. Please contact an authorised Perodua Service Center if the windscreen needs replacing.
- Do not replace the windscreen with any product other than a genuine Perodua product.
- Do not spill any liquid on the stereo camera.
- Do not let the stereo camera lens get dirty or scratched. Please contact an authorised Perodua Service Centre if the lens is dirty or scratched.
- Do not subject the stereo camera to strong impacts.
- Do not change the mounting position or direction or remove the stereo camera.
- Do not dismantle the stereo camera.
- Do not install devices emitting strong radio waves, such as electronic devices or antennas, in the area surrounding the stereo camera.
- Do not modify the components around the stereo camera, such as the rear view mirrors or the ceiling.
- Do not place objects on top of the instrument panel. The object may be reflected on the windscreen and the system may not function properly.
- If the upper surface of the instrument panel is shiny because of chemicals, the stereo camera may not recognize objects stably due to the reflection in the windscreen and the system may not function properly.
- Do not attach any accessories that may obstruct the stereo camera field of view on the hood, front grille, or front bumper.
- When loading long loads on the roof, for example surfboard or canoe, make sure that the stereo camera field of view is not obstructed.
- Do not use any rear view mirror (wide rear view mirror, etc.) or sun visor other than genuine Perodua products.

#### Dirt detection function

 Although the stereo camera is equipped with a dirt detection function, it is not perfect. Advanced Safety Assist functions are automatically disabled when dirt is detected.

### If Advanced Safety Assist is not functioning

Advanced Safety Assist functions do not function in any of the following situations.

- Right after the engine started
- When the system is disabled by pressing the Advanced Safety Assist OFF switch
- When Advanced Safety Assist OFF indicator is on or flashing
- When there is a malfunction in Advanced Safety Assist System
- When Function OFF Code is displayed\* (function disabled)
- \* Some functions are working even when Function OFF Code is displayed. Please read the description of each function for details.

#### Advanced Safety Assist functions disabled

In the following situations, Advanced Safety Assist recognition performance may be reduced or temporarily disabled. ( $\rightarrow$ P. 7-38)

The system will resume functioning once the situation improves.

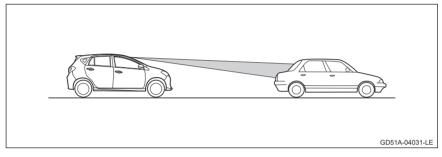
- In bad weather (heavy rain or thick fog)
- If the stereo camera temperature is extremely high, for example after the vehicle has been left under the hot sun
- Right after the engine started
- When bright light is shining from the front (back lighting by the sun or oncoming vehicle headlights)
- In pitch dark with no street lamps, and no surrounding buildings or vehicles
- When there is dirt on the stereo camera and obscuring it
- When loading heavy load
- When water is sprayed up from the road
- Poor visibility due to exhaust fumes, steam, sand, smoke, sand dust, etc.

Conditions that reduce recognition performance vary according to function. Please read the description of each function for details.

## Pre-Collision Warning, Pre-Collision Braking

The Pre-Collision Warning and Pre-Collision Braking functions use the stereo camera to recognize vehicles, two-wheeled vehicle and pedestrians\* in front and activate when the risk of a collision is high. These functions alert the driver and control the brakes to assist in avoiding a collision, as well as to contribute in mitigating collision damage.

\*During day and night time



# Pre-Collision Warning (for vehicle, two-wheeled vehicle and pedestrians)

The driver is alerted with the buzzer and display ( $\rightarrow$ P. 4-45) in the following situations.

- When driving approximately 4 120 km/h and the speed difference with the vehicle and two-wheeled vehicle in front is approximately 4 - 120 km/h and there is a risk of collision. Depending on the circumstance, the collision warning may activate for walls and guard rails and other obstacles.
- When driving approximately 4 60 km/h and the speed difference with the pedestrian in front is approximately 4 - 60 km/h and there is a risk of collision

# Pre-Collision Braking (for vehicle, two-wheeled vehicle and pedestrians)

The driver is alerted with the buzzer and warning lights shown in the meter as well as display ( $\rightarrow$  P. 4-45) in the following situations. Emergency brakes operate immediately before the collision to assist in avoiding a collision, or to contribute to mitigating collision damage.

- When driving approximately 4 120 km/h and the speed difference with the vehicle and two-wheeled vehicle in front is approximately 4 - 120 km/h and there is a risk of collision
- When driving approximately 4 60 km/h and the speed difference with the pedestrian in front is approximately 4 - 60 km/h and there is a risk of collision

## Damage Mitigation Brake Assist

This function helps the deceleration with more braking force than normal if the brake pedal is pressed under the following conditions while the emergency brake is operating.

- When driving approximately 30 120 km/h and the speed difference with the vehicle and two-wheeled vehicle in front is approximately 30 - 120 km/h and there is a risk of collision
- When driving approximately 30 60 km/h and the speed difference with the pedestrian in front is approximately 30 - 60 km/h and there is a risk of collision

## WARNING

#### For safe use

It is the driver's responsibility to drive safely. Always be aware of your surroundings and drive safely. The Pre-Collision Braking should never be used to replace everyday braking. The Pre-Collision Braking does not avoid collisions or mitigate collision damage in all conditions. Relying on this function or entrusting driving safety to it may lead to unexpected accidents resulting in serious injuries, even death.

The Pre-Collision Braking aim is to assist in avoiding collisions or to contribute to mitigating collision damage. It is designed so that the emergency brake will be activated when it is determined that collision is unavoidable, and a strong braking will be applied right before a collision. However, it is unable to display the same performance at all times. The outcome changes depending on various conditions. Therefore, do not rely too much on the system and practice safe driving. Please read the following items and practice safe driving too much on the system.

- If the function activates even when there is no risk of collision:→P. 4-63
- If the function does not operate properly:→P. 4-61, 4-68
- For safety, do not test the Pre-Collision Braking function operation yourself. The vehicle may not be able to stop completely, or the system may not operate, leading to unexpected accidents.

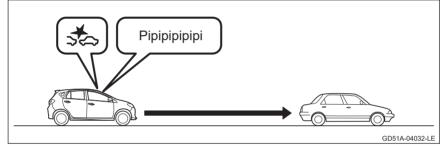
### Pre-Collision Warning and Pre-Collision Braking systems

- The Pre-Collision Braking operates on vehicles, two-wheeled vehicles and pedestrians in front of the vehicle that are recognized by the stereo camera. The system may operate on other objects, such as utility poles, or walls but its purpose is not for avoiding a collision with these objects.
- Once the emergency brake is activated, it will continue to operate even when the accelerator is pressed. However, fully pressing the accelerator will cancel the Pre-Collision Braking.
- If the driver presses the brake pedal or operates the steering wheel, it may cause the Pre-Collision Warning and Pre-Collision Braking systems to determine that the driver is taking evasive actions and may not operate.
- The Pre-Collision Braking does not activate if the speed difference with the vehicle and two-wheeled vehicle in front is over 120 km/h (60 km/h speed difference with the pedestrians).
- Fasten your seat belt and always make sure that other passengers wear it too. Not wearing the seat belts properly is dangerous when Pre-Collision Braking activates. (→P. 1-5)

# Pre-Collision Warning, Pre-Collision Braking, and Damage Mitigation Brake Assist operations

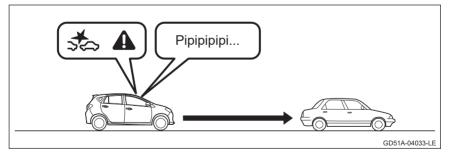
The system operates from 1 to 3 to alert the driver and control the brake.

- When the system is operating, the driver is alerted by the buzzer and warning indicator in the meter, as well as the display.
- The brake light and high mounted brake light light up while the brakes are being controlled.
- If the brake pedal is pressed while the brakes are being controlled, the Damage Mitigation Brake Assist will activate and assist in deceleration with more than normal braking force.
- 1 Collision warning



When the system determines that there is a risk of collision with the vehicle, two-wheeled vehicle or pedestrian in front, the driver is alerted and urged to take evasive action with the buzzer and display ( $\rightarrow$ P. 4-45).

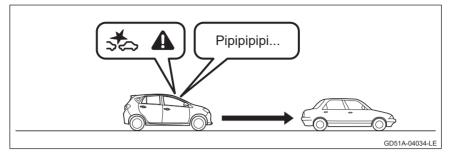
2 Primary brake



If the system recognizes a vehicle, two-wheeled vehicle or pedestrian in front and determines that there is a high risk of collision, it will change the buzzer and control the brakes.

- The system will not control the brakes if it does not recognize a vehicle, two-wheeled vehicle or pedestrian in front or if the driver decelerates by pressing the brake pedal and maintain appropriate vehicle distance.
- The operation is cancelled if the system determines that the risk of collision is low based on the operational volume of the driver's evasive action, such as pressing the brake pedal or operating the steering wheel.

## 3 Secondary brake



If the system determines that the risk of collision with the vehicle, two-wheeled vehicle or pedestrian in front is extremely high, it will apply a stronger control on the brakes than the primary brake.

After the vehicle stop, the vehicle may begins to move slowly due to the creeping phenomenon. To continue keeping the vehicle stop, firmly press the brake pedal.

#### Pre-Collision Warning, Pre-Collision Braking, and Damage Mitigation Brake Assist operating conditions

The system is enabled when all the following conditions are met.

- The engine switch is set to 'ON'
- Advanced Safety Assist OFF indicator is OFF
- When Function Off Code 11E, 12E, 14E is not displayed
- When there is no malfunctioning in Advanced Safety Assist System
- The shift lever is not in P or R
- When driving at the operational speed or speed difference for any of the functions shown in the table below.

Function	Target	Operational speed and speed differencex1
Pre-Collision Warning	Vehicle and two-wheeled vehicle	Approx. 4 - 120 km/h
Fie-Collision Warning	Pedestrians (day and night)	Approx. 4 - 60 km/h
Dra Callisian Braking	Vehicle and two-wheeled vehicle	Approx. 4 - 120 km/h
Pre-Collision Braking	Pedestrians (day and night)	Approx. 4 - 60 km/h
Damage Mitigation	Vehicle and two-wheeled vehicle	Approx. 30 - 120 km/h
Brake Assist × <sup>2</sup>	Pedestrians (day and night)	Approx. 30 - 60 km/h

×<sup>1</sup> Speed difference between your vehicle and the vehicle or pedestrian in front is the same value as the operational speed.

- $\times^2$  If brake pedal is pressed while the emergency brake is operating
- To disable Pre-Collision Warning and Pre-Collision Braking systems  $\rightarrow P.~4\text{-}44$

### Pre-Collision Braking

- Depending on the situation, the system may start operating from primary brake or secondary brake.
- Sound may be heard while the Pre-Collision Braking is operating. The sound is due to brake controlling and not a malfunction.
- The brake pedal may feel hard when pressed while the Pre-Collision Braking is operating. This is not a malfunction.

#### Stereo camera

Stereo camera recognizes motorcyclist, bicyclist or pedestrians. Pedestrian recognition is based on size, shape and movement of the target. The recognition takes place when the outline of the head and shoulders is clear.

## Conditions in which the Pre-Collision Warning and Pre-Collision Braking may not operate



The Pre-Collision Warning and Pre-Collision Braking may not operate in the following conditions and the vehicle may not be able to stop completely.

- Discrepancy in speed difference, vehicle distance, approaching situation, sideways direction (not directly in front of your vehicle) with vehicle, two-wheeled vehicle or pedestrian in front
- The state of the vehicle (size of load, passengers, etc.)
- The state of the road (inclination, slipperiness, shape, bumps, etc.)
- The field of view in front is bad (heavy rain, blizzard, thick fog, dust, etc.)
- The system determines that the driver is taking evasive action based on the driver's operation, such as pressing the brake pedal or accelerator, or operating the steering wheel
- Right after the engine started
- The brake is cold, for example right after started driving or when ambient temperature is low
- Braking is not effective because the brake is overheated, for example on a downslope
- Braking is not effective because the brake is wet, for example after driving through a puddle or after washing the vehicle
- In situations where it is difficult for the stereo camera to recognize (particularly in the following situations)
  - The front of the stereo camera is covered, for example by a sticker, dust, raindrops, or dirty or foggy windscreen
  - A glass coating agent other than that specified by Perodua is used
  - A film is applied to the windscreen
  - Stable recognition is not possible due to the reflection on the windscreen
  - The windscreen is not wiped clean completely while or after using the washer
  - The windscreen is scratched or cracked
  - The stereo camera field of view is obstructed with long loads on the roof, for example surf board, canoe, or skis
  - Wiper blades installed are not genuine Perodua products (including the short type)

- Target recognition is incomplete because the stereo camera field of view is obstructed by rain drops, window washer droplets, or wiper blades
- The front of the stereo camera is blocked, for example with a hand
- The stereo camera is subjected to an impact causing misalignment or distortion
- In bad weather (heavy rain or thick fog)
- Approaching the vehicle, two wheeled vehicle or pedestrian in front in a dark place, for example at night, in a tunnel, or in an indoor garage
- In changing brightness, for example at tunnel exit, in the shadow of trees or building
- Bright light shines from the front of the stereo camera (back lighting by the sun or oncoming vehicle headlights)
- Bright light reflects on vehicles, two-wheeled vehicles, pedestrians and road surface
- Curves, undulating road, sloping roads
- Road surface is covered by puddle or film of water
- Roads with irregularities and ruts, for example unpaved roads
- The distance with vehicle, two-wheeled vehicle or pedestrian in front is extremely short
- A vehicle, two-wheeled vehicle or pedestrian suddenly appears or jumps into view in front of your vehicle
- Approaching the vehicle, two-wheeled vehicle or pedestrian in front while rapidly accelerating or handling the steering wheel
- Only a part of the vehicle or two-wheeled vehicle in front is within the stereo camera recognition range
- Approaching at a small speed difference (as control is carried out after the approach, depending on the size and shape of the object, the rearmost surface may be outside the stereo camera field of view)
- There are splashes of water sprays or snow
- Poor visibility due to exhaust fumes, steam, sand, smoke, sand dust, etc.
- · Approaching close behind the vehicle in front after changing lane
- The vehicle or two-wheeled vehicle in front makes sudden turn, rapidly accelerating or decelerating
- With unusually shaped vehicles (including car transporters and side cars)
- The rearmost surface of the vehicle in front is small (such as a trailer), low or uneven
- Approaching a vehicle in front with a large rear window that allows view to the front

- The vehicle in front is a truck or something similar without loaded goods and without side or rear panels
- With vehicles or two-wheeled vehicle carrying a load protruding from the rear
- With vehicles or two-wheeled vehicles stopping at an incline or sideways
- Oncoming or reversing vehicle or two-wheeled vehicle
- With low-height vehicles
- There is a wall or other objects in front of a parked vehicle or two-wheeled vehicle
- The vehicle or two-wheeled vehicle in front is leaning, for example when carrying heavy load
- The pedestrian is partially hidden, for example the head, arms or legs by a bag, an umbrella, a hat, vehicle, or building
- The stereo camera cannot recognize the pedestrian because the pedestrian blended in the background
- The pedestrian stoops or squats, lying down or running with hands waving
- With small children or tall pedestrians (since control is carried out after approaching, depending on the pedestrian body shape, they may be outside the stereo camera range and the function is not activated or cancelled)
- With pedestrians carrying or holding a large load, or pushing a bicycle or cart
- The pedestrian feet are not visible because they are wearing long skirt
- The stereo camera cannot recognize pedestrians because they are walking in a group
- The object is outside the headlights range
- All of the surroundings are of the same colour (for example, snow covered ground)
- The contrast between the object and background is small. For example, a pedestrian in white in front of a white wall, a black vehicle in a forest

## Situations in which Pre-Collision Warning and Pre-Collision Braking operate even when there is no risk of collision

The Pre-Collision Warning and Pre-Collision Braking may operate in the following situations even when there is no risk of collision.

- Driving on a narrow road with walls or obstacles on both sides, for example a narrow bridge, small tunnel, rural road, ETC gate, narrow guardrails, a bank of snow
- Driving close behind the vehicle or two-wheeled vehicle in front, or driving right up to a wall, or vehicle or two-wheeled vehicle in front before stopping
- Driving right next to a stopped vehicle or two-wheeled vehicle, or an oncoming vehicle or two-wheeled vehicle is approaching
- Driving in a place where the inclination of the road changes suddenly

- Driving through steam, fog or smoke
- Passing under plastic curtains or flags
- When water is sprayed up from the road
- Poor visibility due to exhaust fumes, steam, sand, smoke, sand dust, etc.
- The stereo camera optical axis is misaligned
- Using vehicle elevator or mechanical parking
- There is a large paint work on the road
- There are roadside objects, such as guardrails, signboards, line of trees at the beginning of a curve or at intersections
- There are oncoming vehicles when taking a curve
- Before a parking bar or crossing gate has fully risen
- There are cats eyes, manholes, tram tracks, etc., on the road when driving down a slope
- There are shadows of signs or road joints when driving over a bump
- Several vehicles or two-wheeled vehicle in front appear to overlap
- There are signs or tree branches above when driving up slope
- There is a continuous vertical pattern, such as a vertically stripped fence, tiled wall, vertically stripped clothes, etc.
- When the blinkers, hazard lights, or brake lights of the vehicle in front are flashing
- The scenery or lights are reflected in puddles, wet road surface or the vehicle mirrored surface
- There are lights coming from outside
- There are more than one vehicle, or vehicles and pedestrians, or pedestrians, or a distant group of lamps moving together at the same speed
- There are pedestrians, or objects the same size as pedestrians lined up at the side of the road
- When two objects, such as pedestrians passing each other or a vehicle in front changing lanes
- When there is a depth difference at the rear surface, such as with dump trucks, unladen trucks, people carrying suitcases
- Vehicles with complex shape
- When a pedestrian crossing the street stands still before passing in front of your vehicle
- When clothing, tree branches, or flags are fluttering in the wind

#### Pre-Collision Braking

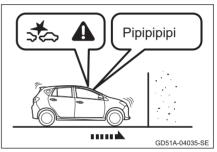
A strong braking force is applied when the emergency brake is operating. After the vehicle stop, the vehicle may begins to move slowly due to the creeping phenomenon. To continue keeping the vehicle stop, firmly press the brake pedal.

## Pedal Misoperation Control

The Pedal Misoperation Control assists in avoiding collisions or contributes to mitigating collision damage by controlling the brakes in addition to controlling engine output and warning the driver by means of the buzzer, meter and display ( $\rightarrow$ P. 4-45) upon recognizing obstacles in front when the system determines that the accelerator is pressed more than necessary due to an error, such as pressing the wrong pedal while the vehicle is immobile or driving slowly (approximately 10 km/h or slower).

The system activates in the following situations.

• The stereo camera recognizes an obstacle within 4 m ahead



## WARNING

#### Pedal Misoperation Control

- Do not rely too much on the Pedal Misoperation Control system. The system does not avoid collisions or mitigate collision damage in every situation. When starting the drive, carefully check the shift lever and pedal positions, as well as the safety of the surrounding area. Relying on this function may lead to serious injuries, even death.
- The Pedal Misoperation Control does not keep the vehicle immobile.
- The system activates when it recognizes an obstacle in front. It does not activate when it cannot see an obstacle, for example a cliff.
- Do not intentionally press the accelerator more than necessary near an obstacle. Relying on the Pedal Misoperation Control for accelerator control may cause collision accidents.
- Front obstacles that the system can recognize vary.
- Obstacles that activate the Pedal Misoperation Control system and corner sensors vary. The Pedal Misoperation Control system may not activate even when the buzzer for corner sensors sound, or the system may activate even when the buzzer does not sound.
- In an unlikely event that your vehicle is shut inside a railroad crossing, the Pedal Misoperation Control may activate if the stereo camera recognize the crossing gate as an obstacle. If you continue forward by pushing your way through the crossing gate, do not panic. Either continue to press the accelerator or disable Advanced Safety Assist. (→P. 4-44)
- If the driver operates the steering wheel, the Pedal Misoperation Control may not activate depending on the steering operation as the system determines that the driver is taking evasive action.
- The Pedal Misoperation Control does not activate if TRC or VSC/TRC is disabled.
- Engine output control is cancelled by continuing to press the accelerator for about 8 seconds or more. The Pedal Misoperation Control does not activate if the accelerator is fully and quickly pressed repeatedly three times or more.
- If brake control activates, the Pedal Misoperation Control will not activate for a definite period of time.
- Fasten your seat belt and always make sure that other passengers wear it too. Not wearing the seat belts properly is dangerous when brake control activates. (→P. 1-5)

## **Pedal Misoperation Control operation**

## Warning

If the system determines that the accelerator is pressed more than necessary when driving at approximately 4 km/h or less, the driver is alerted using the buzzer and display ( $\rightarrow$  P. 4-46) and prompted to take evasive action.

## Engine output control

If the system determines that the accelerator is pressed quickly and more than necessary while moving at approximately 10 km/h, the system will control engine output while alerting the driver using the buzzer, warning lights in the meter, and display ( $\rightarrow$ P. 4-46).

- Controlling engine output will continue for about 8 seconds maximum while the accelerator is being pressed.
- The master warning in the meter will turn on while engine output is controlled.

## Brake control

If the accelerator is still pressed even when engine output is controlled and the system determines that collision with the obstacle is unavoidable, the system will control the brakes while alerting the driver using the buzzer, warning lights in the meter, and display ( $\rightarrow$ P. 4-46).

- The brake light and high mounted brake light light up while the brakes are being controlled.
- After the vehicle comes to a stop, the brake control is released after continuing for about 1.5 seconds maximum. Press the brake pedal immediately.

#### Pedal Misoperation Control operational conditions

The system is enabled when all the following conditions are met.

- The engine is running
- Advanced Safety Assist OFF indicator is OFF
- When there is no malfunctioning in Advanced Safety Assist System
- The brake pedal is not pressed
- Vehicle speed is at approximately 0 to 10 km/h
- Turn signal indicator is off
- VSC OFF indicator and TRC OFF indicator in the meter are off
- The system will activate when all the following conditions are met
  - When the shift lever is in D, S and B
  - Function OFF Code 11E, 12E and 14E are not displayed

#### Brake control

- Sound may be heard while brake control is operating. The sound is due to brake controlling and not a malfunction.
- The brake pedal may feel hard when pressed while brake control is operating. This is not a malfunction.

#### To disable Pedal Misoperation Control

→P. 4-44

## 

Situations in which Pedal Misoperation Control may not operate properly

The Pedal Misoperation Control may not operate or the vehicle may not be able to stop even when brake control is operating due to discrepancies in the following conditions.

- Discrepancies in speed difference, vehicle distance, approaching situation, sideways direction (no obstacle directly in front of your vehicle) with obstacle in front
- The state of the vehicle (size of load, passengers, etc.)
- The state of the road (inclination, slipperiness, shape, bumps, etc.)
- The system determines that the driver is taking evasive action based on the driver's operation, such as pressing the brake or accelerator, or operating the steering wheel
- Vehicle maintenance condition (brake related, tyre wear, inflation pressure, spare tyre, etc.)
- Sudden appearance of vehicles or two-wheeled vehicles and pedestrians jumping into view
- Right after the engine started
- The vehicle leans excessively, or the vehicle height changes significantly due to carrying goods or being on an uneven surface
- Discrepancies in distance and direction, and sideways direction (no obstacle directly in front of your vehicle) with obstacle in front
- Driving on inclines with steep gradients
- The brake is cold, for example right after started driving
- Braking is not effective because the brake is overheated, for example on a down slope
- Braking is not effective because the brake is wet, for example after driving through a puddle or after washing the vehicle
- In situations where it is difficult for the stereo camera to recognize (particularly in the following situations)
  - In bad weather (heavy rain or thick fog)
  - When bright light is shining from the front (back lighting by the sun or oncoming vehicle headlights)
  - When the windscreen is covered with fog, dirt, rain drops, dust, etc.
  - · When the stereo camera temperature is extremely high
  - When approaching an obstacle at night or in twilight in the evening or morning
  - When approaching an obstacle in a dark place, such as an indoor parking
  - When there is an obstacle outside the headlights range

- Obstacle recognition is incomplete because the stereo camera field of view is obstructed by rain drops, window washer droplets, or wiper blades
- The stereo camera field of view is obstructed with long loads on the roof, for example surfboard or canoe
- · If the vehicle is leaning excessively due to carrying goods
- The vehicle in front splashes up water
- Poor visibility due to exhaust fumes, steam, sand, smoke, sand dust, etc.
- Driving on bad roads, such as bumpy roads or off-road
- Thin, rod-like obstacles, for example road signs or poles
- When there is an obstacle extremely close but slightly off-centre to the vehicle
- When your vehicle is immediately behind the obstacle after changing lanes
- At sharp curves, steep uphill or downhill slopes
- The obstacle is outside the stereo camera recognition range
- The obstacle is low (for example, low walls, low guardrails, low-height vehicle, curbstone)
- People stooping or lying down
- Small obstacles, such as small animals, small children, etc.
- When the rearmost surface of the obstacle or vehicle in front (trailer or oncoming vehicle) or its surface closest to your vehicle is small, or when approaching too close to an obstacle (the system may activate after recognizing the part that is not closest to your vehicle, giving inadequate results)
- The obstacle is a fence, wall or shutter with an even pattern (stripes or brick) or no pattern at all
- The obstacle is a glass or mirror wall or door
- A car, motorcycle, bicycle, or pedestrian suddenly appears or jumps out in front of your vehicle

## 

#### Situations in which Pedal Misoperation Control is activated even when there is no risk of collision

Pedal Misoperation Control is activated even when there is no risk of collision in the following situations.

- Driving close behind the vehicle in front or driving right up to an obstacle before stopping
- Driving in a place where the inclination of the road changes suddenly
- Driving through steam, fog or smoke
- Passing under plastic curtains or flags
- When water is sprayed up from the road
- Poor visibility due to exhaust fumes, steam, sand, smoke, sand dust, etc.
- Passing by a stopped vehicle very closely or an oncoming vehicle is approaching
- Using vehicle elevator or mechanical parking
- There is a major paint work on the road surface, uneven road surface, curbstones, protruding objects from the road, or there are ruts or holes on the ground

- There are roadside objects, such as guardrails or signboards at the beginning of a curve
- There are oncoming vehicles when taking a curve
- There are obstacles at curves or intersections
- Merging into traffic flow from parallel parking
- Before a parking gate or crossing gate has fully risen
- When loaded onto a car transporter
- Driving through a riverbed, rough grass or cluster of trees
- When parallel parking
- Driving over a difference in level when there is an obstacle in front
- There is an obstacle close to the side of the vehicle
- Entering a narrow space
- There are water sprays or drizzling rain
- In bad weather (heavy rain, thick fog, sandstorm, etc.)
- When the vehicle height changed significantly because of how it is loaded, etc.
- Driving over metal lids (gratings) of drains or gravel roads

#### Brake control

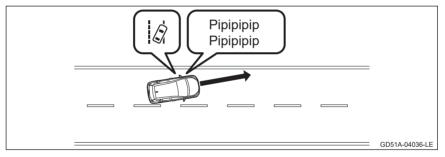
A strong braking force is applied when brake control is operating. Brake control is released after about 1.5 seconds after the vehicle is stopped, press the brake pedal immediately.

## Lane Departure Warning (LDW), Lane Departure Prevention (LDP)

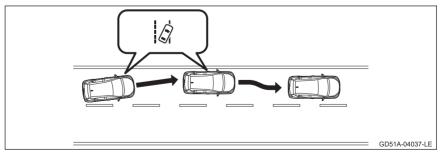
Lane Departure Warning and Lane Departure Prevention system activates when it determines that there is a risk the driver has unintentionally depart from the vehicle lane when driving at approximately 60 km/h or more. The system makes the determination by recognizing the white (or yellow) lines on the right and left using the stereo camera installed at the top of the windscreen.

- Lane Departure Warning alerts the driver using the buzzer and indicator lights in the meter\*, or display\* (→P. 4-46).
- Lane Departure Prevention provides a small steering force to the steering wheel for a short period in assisting some of the steering required to avoid departing from the vehicle lane and alerts the driver using indicators in the meter\* or display\* (→P. 4-46).

Lane Departure Warning



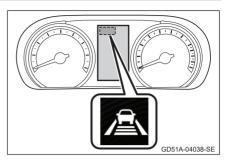
Lane Departure Prevention



\* : The equipment may vary according to the vehicle grade and options.

## Lane recognition indicator\*

- The indicator will light up when it recognizes the left and right white or yellow lines.
- When the system detects lane departure, the indicator will flash to show the departure takes place on which side of the lane.
- The display position changes when the basic screen changes.
   (→P. 2-31)



### WARNING

#### Lane Departure Warning and Lane Departure Prevention

- The Lane Departure Warning and Lane Departure Prevention do not prevent lane departure. The system also does not provide support when visibility is poor, such as driving in the rain or fog, or when not keeping your eyes on the road while driving or careless driving. Relying on the Lane Departure Warning and Lane Departure Prevention system to keep the vehicle in the lane may lead to accidents caused by lane departure, resulting in serious injuries, even death.
- If the Lane Departure Warning and Lane Departure Prevention system activates, take appropriate action, such as steering depending on the surrounding situation.
- The Lane Departure Warning and Lane Departure Prevention system does not activate when it detects the edge of the road, such as road shoulder or ditch.
- Situations in which Lane Departure Warning and Lane Departure Prevention system does not activate

Lane Departure Warning and Lane Departure Prevention system may not activate under the following conditions.

- Not driving within vehicle lane
- When running out of the lane while taking a curve
- On a narrow or wide vehicle lane
- Using the turn indicator signal
- The system determines that the driver is taking evasive action based on sudden steering movement
- When abnormal vibration in the steering wheel is detected, or when the steering wheel feels heavier than usual
- The steering wheel is replaced by products other than genuine Perodua products or when accessories are attached to the steering wheel

\* : The equipment may vary according to the vehicle grade and options.

#### Lane Departure Warning operational conditions

The system is enabled when all the following conditions are met.

- The engine switch is set to 'ON'
- When the vehicle speed is over 60 km/h
- When Lane Departure Warning OFF indicator is off
- When Function OFF Code is not displayed
- When there is no malfunctioning in Advanced Safety Assist System
- When turn signal indicator is off (the system does not activate for about 4 seconds after the turn signal indicator is turned off)
- When there is no sudden steering wheel operation
- Driving on a straight or gently curved road
- The system recognizes the right and left white or yellow lines
- The vehicle lane width is approximately 2.5 to 4.2 m

#### Lane Departure Prevention operational conditions

The system is enabled when all the following conditions are met.

- The engine switch is set to 'ON'
- When the vehicle speed is over 60 km/h
- ABS, VSC, TRC are not operating
- Pre-Collision Braking is not operating
- Pedal Misoperation Control is not operating
- When Lane Departure Warning OFF indicator is off
- VSC OFF indicator and TRC OFF indicator are off
- When Function OFF Code is not displayed
- When there is no malfunctioning in Advanced Safety Assist System
- When turn signal indicator is off (the system does not activate for about 1 second after the turn signal indicator is turned off)
- Setting the 'steering wheel assist' to ON in TFT colour multi-information display settings\* (→P. 2-42)
- The brake pedal is not pressed
- There is no acceleration or deceleration above a certain level
- When the shift lever is in D
- When there is no sudden steering wheel operation
- Driving on a straight or gently curved road
- The system recognizes the right and left white or yellow lines
- The vehicle lane width is approximately 3 to 4 m

\* : The equipment may vary according to the vehicle grade and options.

#### Lane Departure Warning

- Noise from outside or audio sound may make it difficult to hear the buzzer.
- Lane Departure Warning may not activate if the lane is not clearly visible or the lane is not straight.
- Do not test Lane Departure Warning operations.

## Lane Departure Prevention

- The Lane Departure Prevention operation may not be felt, or the system may not operate depending on the speed, road condition and departure condition.
- Assisted steering by Lane Departure Prevention can be corrected manually by the driver.
- The buzzer will sound when the Lane Departure Prevention operates continuously for more than 7 seconds.
- Do not test Lane Departure Prevention operations.

### Driving with hands off the steering wheel alert

If the system determines that the driver is driving with hands off the steering wheel and the Lane Departure Prevention activates more than twice in about 3 minutes, hands off the wheel indicator will light up and the driver is prompted to hold the steering wheel. When using the system, securely hold the steering at all time regardless of the alert.

- A warning message is displayed in vehicles equipped with a TFT colour multi-information display.
- The buzzer will sound, and the driver is alerted if there is still no steering and assisted steering operates. The buzzer will sound continuously for a longer period as the number of assisted steering operation increases.
- The same alert will be made if steering operation by the driver continues to be small.

## To disable Lane Departure Warning and Lane Departure Prevention $\rightarrow P.~4\text{-}44$

#### Customizable features

The settings for Lane Departure Warning and Lane Departure Prevention can be changed.

(→P. 2-42)

## 

## Situations in which Lane Departure Warning and Lane Departure Prevention may not operate properly or operate improperly

The Lane Departure Warning and Lane Departure Prevention system is unable to accurately recognize the white or yellow lines under the following conditions and may not function properly or function inappropriately.

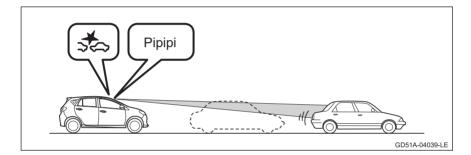
- When the system is unable to differentiate the white or yellow lines from the road surface, or when it is difficult to see the lines because the road surface is cracked or dirty
- The white or yellow lines are difficult to see due to bad weather (heavy rain, thick fog, sandstorm, etc.)
- When the road is wet
- When bright light is shining from the front (back lighting by the sun or oncoming vehicle headlights) or when bright light is reflected by the road
- When the brightness changes, for example at a tunnel exit and entrance, in the shadow of trees or buildings
- When the road is wet and shiny, such as right after the rain or when there are puddles on the road
- When driving in the shadow of trees or buildings or when there are shadows on the road, for example guardrail shadow
- When driving on roads without street lamps at night
- Road conditions (particularly in the following situations)
  - When driving in areas with lane regulation or temporary lanes
  - When there are tyre tracks, fading or overlapping white or yellow lines, traces of line repair and joints on the asphalts because of road repair and old white or yellow lines
  - When driving in areas where the number of lanes fluctuates, such as at intersections or pedestrian crossings and areas with intricately intersecting lanes
  - The lane width is narrow or wide, or changing
  - When the white or yellow lines are partially hidden by vehicles, etc., or the line width is narrow
  - When approaching the top of a hill or an uphill slope
  - When the vehicle is heavily shaken due to difference in level
  - When the system recognizes objects on the road, such as curbstones, guardrails or traffic cones as white or yellow lines
  - On undulating roads where the lanes appear crooked or when it is difficult to see ahead
  - When driving on unpaved roads or rough roads
  - When driving on roads with double painted lanes
  - When driving on slippery roads
  - · When there are tyre tracks on wet roads
  - · When driving on branching or converging roads
  - · When driving on roads with sharp curves

- When there are traces of road repair or border lines of and asphalt
- When there is guardrail shadow
- The mark lines are double painted
- When there are paint lines on the road surface, for example previous marking lines in roadwork areas that have not completely disappeared
- In situations where it is difficult for the stereo camera to recognize (particularly in the following situations)
  - The outer side of the windscreen is covered by dirt or mud
  - The stereo camera field of view is obstructed with long loads on the roof, for example surfboard or canoe
  - · When the inside of the windscreen is foggy
  - The windscreen is not wiped clean completely while or after using the washer
  - The vehicle is leaning because of heavy load
  - The distance between the vehicle and the vehicle in front is short
  - Your vehicle is not running straight against the white or yellow lines
  - The stereo camera is hot
- When driving in places with no white or yellow lines, for example at intersections, in front of toll booths and check points
- When the white or yellow lines are faded, or there are cats eyes or stones on the road
- When in yellow lanes (the recognition rate is reduced compared to white lanes)
- When driving on roads with bright surface, such as concrete roads
- When there is no clear border or the border is not straight, for example the border between the asphalt and grass, soil, curb, etc.
- When driving in places that grow brighter due to reflection, etc.
- When the vehicle is subjected to crosswinds
- When affected by the wind generated by vehicles driving in the vicinity
- Immediately after changing lanes
- When driving with inappropriate tyres, etc.
- When driving at an extremely high speed
- When another vehicle cuts in from the neighbouring lane
- When there are curbstones or side walls on road shoulders
- When there is water or dust raised by the vehicle in front or oncoming vehicle, or sand, smoke, water steam blown by the wind in front
- When there are lines other than vehicle lanes painted on the road surface

# **Front Departure Alert**

Front Departure Alert notify the driver with the buzzer and display ( $\rightarrow$  P. 4-47) if your vehicle continues to remain stop after the vehicle in front has started moving.

This function activates if your vehicle remains stop following the vehicle in front (your vehicle has stopped for a while and the distance between vehicles is within 10 m) and your vehicle has not started moving even when the vehicle in front has moved more than 3 m.



# WARNING

#### Front Departure Alert

This function is not designed to inform that it is safe to start moving or that the vehicle in front has started to move in all conditions. Please drive after carefully making sure of safety without relying on this function.

#### Front Departure Alert operating conditions

The system is enabled when all the following conditions are met.

- The engine switch is set to 'ON'
- Advanced Safety Assist OFF indicator is OFF
- When Function Off Code 11E, 12E, 14E is not displayed
- When there is no malfunctioning in Advanced Safety Assist System
- The shift lever is in D, S, and B with brake pedal pressed, or the shift lever is in N
- A few seconds have passed since stopping
- To disable Front Departure Alert

→P. 4-44

#### Customizable features

- The volume of the buzzer can be changed. ( $\rightarrow$ P. 2-40)
- The timing of the buzzer can be changed. ( $\rightarrow$ P. 2-42)
- Situations in which the Front Departure Alert may not function properly The function may activate even when the vehicle in front has not moved, or the function may be slow to activate even if the vehicle in front has moved, or the function may not activate in the following situations.
  - When other vehicles, such as a motorcycle slipped between your vehicle and a stationary vehicle in front
  - When pedestrians walked between your vehicle and a stationary vehicle in front
  - When the function is unable to detect a vehicle in front due to the weather or road conditions
  - When the stereo camera loses sight of the vehicle in front
  - Discrepancy in sideways direction (the vehicle in front is not directly in front of your vehicle, etc.)
  - When the vehicle in front is moving when your vehicle stops
  - When the distance between your vehicle and the vehicle in front is very small
  - When the vehicle in front moves or turns suddenly
  - The vehicle in front is in an unusual shape (including car transporters and side cars)
  - The rearmost surface of the vehicle in front is small (such as a trailer), low or uneven
  - When the vehicle in front has a large rear window that allows through view to the front
  - When the vehicle in front is a truck or something similar without loaded goods and without side or rear panels
  - When the vehicle in front has a load protruding from the rear
  - When the vehicle in front has low vehicle height
  - When the vehicle stops at an angle or sideways
  - When stopping with the steering wheel turned hard
  - When driving on bad roads, such as bumpy roads or off-road

# Adaptive Cruise Control (ACC)\*

Consist of 'Distance control mode' which detecting front vehicle by stereo camera, then automatically accelerates or decelerates based on the speed changes of front vehicle and 'Constant speed control mode' which runs at constant speed set by the driver.

# System components

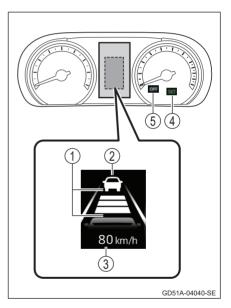
# Driving assist display

The display position changes when the basic screen changes.

- (→P. 2-25)
- Set vehicle distance Displays the set distance between vehicles.
- ② Leading vehicle indicator This indicator is displayed when the system recognizes the vehicle in front while in distance control mode. It will flash in either of the following situation.
  - Distance alarm (→P. 4-89) is activated
- ③ Set vehicle speed

Displays the set vehicle speed. It will flash in either of the following situation.

- The control is automatically cancelled
- Pressing the -SET or +RES switch while the system is ON in distance control mode and setting requirements (→P. 4-91) are not met



# ④ ACC SET indicator

This indicator is displayed when the system is activated in the distance control mode or constant speed control mode.

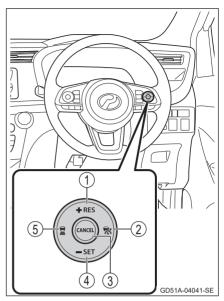
(5) ACC OFF indicator The indicator will be ON when the system is unable to activate because of function disabled.

It will flash in either of the following situation.

- The control is automatically cancelled
- Pressing the −SET or +RES switch while the system is ON in distance control mode and setting requirements (→ P. 4-93) not met
  - \* : The equipment may vary according to the vehicle grade and options.

## Operation switch

- 1 +RES switch
- ACC main switch
- ③ Cancel switch
- ④ -SET switch
- Set vehicle distance change switch



#### WARNING

#### For safe use

- It is the driver's responsibility to drive safely. Drivers should keep in mind not to rely on the system too much. They should be responsible in being aware of their surroundings and practice safe driving at all times.
- The ACC supports some of the driver's operations. It is a system designed to reduce the operational load and there is a limit to the range of support.
- Please set the vehicle speed appropriately after taking into consideration factors, such as speed limit, traffic flow, road environment, and weather. The driver must check the set vehicle speed.
- Even when the system functions properly, the situation detected by the system may be different from the situation in front seen by the driver. Therefore, the driver is responsible for paying attention, ensure safety and determine the risks. Relying on this system or entrusting driving safety to it may lead to unexpected accidents resulting in serious injuries, even death.
- When not using the ACC, please turn off the system by pressing the ACC main switch.
- When using the ACC, always check the display in the meter to see which mode is selected, either distance control mode or constant speed control mode.

# WARNING

#### Precautions related to the support provided by the system

Please keep in mind the following points as there is a limit to the support provided by the system. Relying too much on the system may lead to unexpected accidents resulting in serious injuries, even death.

- The ACC only detects the set distance between your vehicle and the vehicle in front. This system does not provide support when visibility is poor, nor allows you to drive with your eyes off the road or driving carelessly. The driver must pay attention to the surroundings.
- The ACC does not prevent collision with the vehicle in front. Therefore, the driver must ensure safety when there is a risk.
- The ACC determines whether the distance set between your vehicle and the vehicle in front is appropriate or not. It does not determine anything else. Therefore, the driver must determine safety, whether there is a risk or not.
- There is a limit to the ACC ability to determine the situation. Deceleration may not be in time in the following situations. Press the brake pedal to decelerate if necessary.
  - When the system recognizes the vehicle in front, but the speed difference is big or if decelerating rapidly
  - When following the vehicle in front while gradually decelerating, but then the vehicle in front rapidly decelerated
- The system does not decelerate toward the vehicle stopping at the end of the line, for example at a toll gate or in traffic congestion. Please be very careful.
- The driver cannot drive with hands off the steering wheel. The driver must hold the steering wheel and practice safe driving.
- Distance alarm does not work in the constant speed control mode.

# WARNING

### Situations in which the ACC must not be used

Do not use the ACC in the following situations. Unable to appropriately control the vehicle may lead to unexpected accidents resulting in serious injuries, even death.

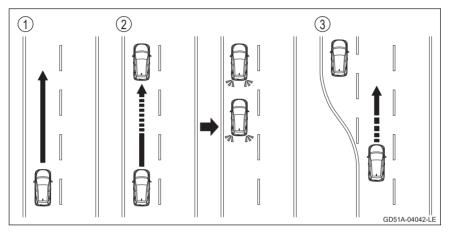
- When distance alarm sounds frequently
- Roads with pedestrians and bicycles
- Roads with heavy traffic
- General roads (other than motorways)
- Roads with sharp curves
- Winding roads
- Slippery roads, for example driving in a rain
- When the traffic calls for repeated and frequent acceleration and deceleration
- Steep down hills or steep slopes
  - · Vehicle speed may exceed the set vehicle speed on downhill.
- When approaching a toll booth, interchange, entering a rest area, or parking area on an expressway
- When brightness changes, for example at a tunnel entrance or exit
- When water is sprayed up from the road
- Poor visibility due to exhaust fumes, steam, sand, smoke, sand dust, etc.
- Roads with lanes very close to roadside structures, for example walls, guardrails, poles, or curb stones
- In bad weather (heavy rain, thick fog or sandstorm)
- When the position of the vehicle in front is laterally displaced
- When the vehicle distance is very short
- When meandearing of your vehicle in your lane
- When the road surface is uneven, for example rippled roads or unpaved roads
- When the headlights are not on at night or in a tunnel
- When the tail lights of the vehicle in front are not on at night or in a tunnel
- When bright light is shining from the front (back lighting by the sun or vehicle headlights)

## Driving in the distance control mode

In the distance control mode, the system uses the stereo camera to determine if there is a vehicle in front and the distance to the vehicle in front, and controls the vehicle to ensure appropriate distance to the vehicle in front.

The distance can also be set to the distance you wish by operating the set vehicle distance change switch.

When driving downhill, the vehicle distance may become shorter.



- Constant speed driving (no vehicle in front) Driving at a constant speed set by the driver. This feature cannot be used while moving at less than 30 km/h if there is no vehicle in front.
- ② Decelerated driving cruise control driving (when a vehicle moving slower than the set speed appears in front) The system automatically decelerates when it detects a vehicle in front and

The system automatically decelerates when it detects a vehicle in front and applies the brakes if more deceleration is needed (in this case, the brake lights will be on). Your vehicle is in cruise control mode and follows the vehicle in front and maintains the distance between vehicles set by the driver by matching the speed changes made by the vehicle in front. The distance alarm will sound if your vehicle approaches the vehicle in front without being able to decelerate sufficiently.

③ Accelerated driving (when a vehicle moving slower than the set speed is no longer in front)

Your vehicle will accelerate to the set speed and return to constant speed driving.

4

# Setting the speed (distance control mode)

Press the ACC main switch to turn on the system in distance control mode

ACC indicator will light up. Vehicle distance settings are displayed and the set speed is displayed as '- - km/h'.

To turn off the system, press the ACC main switch again.

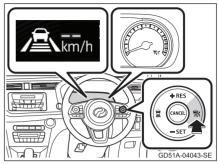
Pressing the ACC main switch for more than 2 seconds will turn on the system in constant speed control mode. ( $\rightarrow$ P. 4-91)

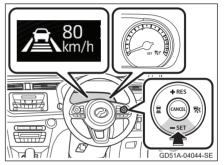
Accelerate or decelerate by manipulating the accelerator to the desired speed (approximately 30 km/h or higher). Then press - SET switch

The set speed is displayed and control is initiated.

The speed is set when the switch is released.

ACC SET indicator will light up and the speed can be set from 30 km/h.



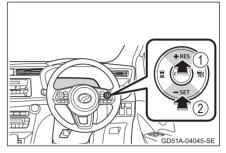


## Changing the set speed (distance control mode)

To change the set speed, press +RES or -SET switch until the desired speed is displayed

The set speed display will change every time the switch is pressed.

- ① Increase the speed
- (2) Reduce the speed Fine adjustment: press the switch. Major adjustment: press and hold the switch to change the speed. Release the switch once the desired speed is reached



The set speed can be changed as follows:

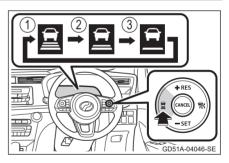
Fine adjustment: 1 km/h every time the switch is pressed. Major adjustment: changes at 5 km/h increment while the switch is pressed.

## Switching the set distance (distance control mode)

The set distance will change as follows every time the set distance change switch is pressed.

The set distance will return to 1 every time the engine switch is turned on.

- 1 Long
- 2 Intermediate
- ③ Short



# Guide to switching the set distance (distance control mode)

The following guide can be used as a reference when changing the set vehicle distance. (When driving at 80 km/h.)

Vehicle distance fluctuates depending on speed.

Set distance selection	Vehicle distance
Long	Approx. 50 m
Intermediate	Approx. 40 m
Short	Approx. 25 m

# Distance alarm (distance control mode)

The driver is alerted with flashing preceding vehicle indicator, buzzer and warning message on the TFT colour multi-information display when approaching another vehicle in front while unable to decelerate fully, for example another vehicle cutting in front while in cruise control mode. In this case, please ensure appropriate vehicle distance by stepping on the brake pedal, etc.



# Distance alarm is not activated

The distance alarm may not activate in the following situations.

- You are moving at the same speed as the vehicle in front or the vehicle in front is faster
- Another vehicle cuts in at a very close distance
- The vehicle in front decelerates suddenly
- The vehicle in front is moving at a very low speed
- Immediately after distance control mode is activated
- When pressing the accelerator
- When going uphill or downhill repeatedly
- When approaching a vehicle stopping at the end of a line at a toll booth or in a congestion

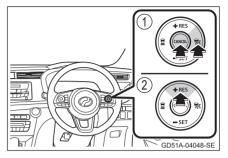
# Cancelling and resetting the control (distance control mode)

 To cancel the control, press cancel switch or ACC main switch

The control is also cancelled when brake pedal is pressed.

The control is automatically cancelled when the engine is turned off after turning the engine switch off.

② To reset the control, press +RES switch



## If the control cannot be reset

The control cannot be reset in the following situations.

- The vehicle is moving at less than about 30 km/h
- When the system is turned off by pressing the ACC main switch
- When any of the requirements for system automatic cancellation (→P. 4-94) is met

# Driving in the constant speed control mode

In constant speed control mode, the vehicle moves at a constant speed set by the driver without matching the changes in speed made by the vehicle in front.

## Setting the speed (constant speed control mode)

Press and hold the ACC main switch for 2 seconds or longer to turn on the system in constant speed control mode

The cruise control indicator will light up and the set speed is displayed as '- - km/h'.

The mode can be switched to constant speed control only when the system is operated after it is turned off.

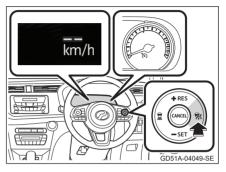
To turn off the system, press the ACC main switch again.

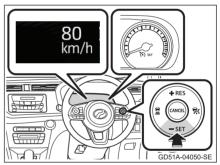
Accelerate or decelerate by manipulating the accelerator to the desired speed (approximately 30 km/h or higher). Then press -SET switch

The set speed is displayed, and cruise control begins.

The speed is set when the switch is released.

ACC SET indicator will light up and the speed can be set from 30 km/h.





# Changing the set speed (constant speed control mode)

The set speed can be changed with the following methods.

- Operating the accelerator or brake pedal
- Pushing the operation switch
- Changing the set speed by operating the accelerator or brake pedal

Increase the speed by pressing the accelerator. Once the desired speed is reached, press the -SET switch.

Reduce the speed by pressing the brake pedal. Once the desired speed is reached, release the brake pedal and press the -SET switch.

Pressing the brake pedal will cancel the ACC and ACC SET indicator will go out.

The speed is set at the speed when the switch is pressed and the new set speed is displayed.

# Changing the set speed using operation switch

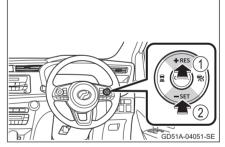
To change the set speed, press + RES or - SET switch until the desired speed is displayed

The set speed display will change every time the switch is pressed.

1 Increase the speed

2 Reduce the speed

Fine adjustment: Press the switch. Major adjustment: press and hold the switch to change the speed. Release the switch once the desired speed is reached.



The set speed can be changed as follows:

Fine adjustment: 1 km/h every time the switch is pressed.

Major adjustment: the speed changes continuously while the switch is pressed.

# Cancelling and resetting the control (constant speed control mode)

The control can be cancelled and reset using the same method as in distance control mode. ( $\rightarrow$ P. 4-90)

#### Setting requirements

The desired speed can be set when all the following requirements are met.

- When the speed is more than 30 km/h (constant speed control model)
- When the engine coolant temperature is not too high
- The engine is running
- VSC OFF indicator and TRC OFF indicator are off
- When the ACC indicator lights up (distance control mode)
- When cruise control indicator lights up (constant speed control mode)
- Advanced Safety Assist OFF indicator is OFF
- When ACC OFF indicator is turned off
- Function OFF Codes 2E, 10E, 11E, 12E and 14E are not displayed
- ACC warning light is not lights up
- The brake pedal is not pressed
- When the shift lever is in D
- When the parking brake is not applied
- When not driving on steep slopes

#### Accelerating after setting the speed

Similar to normal driving, accelerating is possible by pressing the accelerator. After accelerating, the speed will return to the set speed. However, the speed may be lower than the set speed in distance control mode to maintain distance with the vehicle in front.

#### Decelerating after setting the speed

Press the brake pedal to decelerate temporarily.

- At this time, the ACC is cancelled.
- The set speed is displayed as '- km/h' and the ACC SET indicator is turned off.
- To reset the speed, release the brake pedal and press the +RES switch.

#### Automatic system cancellation

The ACC will be cancelled automatically in any of the following situations. If the ACC is automatically cancelled, please reset the function by pressing -SET switch or +RES switch after the situations in which the function is cancelled have been resolved. If the setting cannot be made even after the situations have been resolved, the ACC may be malfunctioning. It will not affect normal driving, but please have your vehicle inspected at an authorised Perodua Service Centre.

- The vehicle speed is less than 25 km/h
- When engine coolant temperature is too high
- When the shift lever is in a position other than D
- When the parking brake is applied
- When VSC or TRC is off
- When turning off the Advanced Safety Assist by turning the Advanced Safety Assist switch off
- When ACC OFF indicator lights up
- When VSC or TRC is activated
- When in any of the following situations (the function cannot be reset even by pressing +RES switch)
  - When the speed has decreased much less than the vehicle set speed with no vehicle in front detected
  - When any of the Function OFF Codes 2E, 10E, 11E, 12E and 14E are displayed
  - · When ACC warning light lights up
  - When driving on steep slope
  - When Pre-Collision Braking is activated
  - When Pedal Misoperation Control is activated
    - \* : The equipment may vary according to the vehicle grade and options.

#### Braking

 Braking sound may be heard, or the brake response may change, but this is not a malfunction.

In order to maintain the set speed even when no vehicle in front is detected, for example while on a downhill, the ACC may operate the brake.

#### When driving on a curve

The vehicle may not accelerate or decelerate even when the set speed is higher than the vehicle speed.

#### When turning on the system in constant speed control mode

When turning on the system in constant speed control mode by pressing and holding the ACC main switch for more than 2 seconds, the system will be in the following status immediately after pressing the switch. Then, cruise control indicator will light up while ACC indicator and set vehicle distance are turned off.

- ACC indicator lights up
- Set speed is displayed as '- km/h'
- Set vehicle distance is displayed

#### 

#### ACC

 The vehicle will not accelerate in distance control mode even when the set speed is increased to more than the speed of vehicle in front by pushing the +RES switch because the vehicle speed is controlled to match the vehicle in front.

However, since the set speed has changed, the vehicle will accelerate to the set speed once the vehicle in front is no longer detected. Please change the set speed while checking the cruise control display indicator.

- The distance control mode will not issue distance alarm nor apply the brakes if the accelerator is pressed while setting the mode. However, when the risk of collision with obstacles in front is high, the Pre-Collision Warning and Pre-Collision Braking will issue an alert and operate the brakes even in this situation.
- Usually, the speed is automatically adjusted to match the speed of vehicle in front while driving under cruise control. However, if it is necessary to accelerate, such as when changing lanes or if it is getting very close to the vehicle in front, for example the vehicle in front decelerate suddenly or another vehicle cuts in, please accelerate or decelerate appropriately depending on the surroundings by pressing the accelerator or brake pedal.
- Depending on the surrounding situation and vehicle condition, it may be impossible to drive at the set speed even when driving in constant speed control mode.

## CAUTION

- Brake control and distance alarm may activate if shapes composed by the road surface or patterns and paintwork on the road surface, or road structure in front, for example tunnels, viaducts, traffic signs, reflectors installed at the side of vehicles, reflective sheets, and guardrails are similar to vehicle outline features or vehicle tail lights size and location.
  - The brake may not be effective in the following conditions. Press the brake to decelerate if necessary.
    - The state of the vehicle (size of load, passengers, etc.)
    - The state of the road (gradient, slipperiness, shape, bumps, etc.)
    - Vehicle maintenance condition (brake related, tyre wear, inflation pressure, etc.)
    - The brake is cold, for example right after started driving
    - Driving for some time after starting the engine (roughly until the warm-up operation is completed)
    - Braking is not effective because the brake is overheated, for example on a downslope
    - Braking is not effective because the brake is wet, for example after driving through a puddle or after washing the vehicle
- Please maintain sufficient vehicle distance when using constant speed control mode.
- When in constant speed control mode, there is no accelerator and brake control to match the speed of vehicle in front. Please use the accelerator or brake when necessary.

#### Situations in which distance control mode may not work correctly

In the following situations, the system may not work properly as the stereo camera is unable to detect vehicles properly. Please decelerate using brake pedal (or accelerate using the accelerator) when necessary.

- When another vehicle suddenly cuts in
- If the vehicle in front brakes suddenly
- When the vehicle in front is moving at low speed
- When it is not possible to distinguish the vehicle in front from the background due to similar colouring
- When the vehicle in front is close to road signs, such as speed limit signs or zebra crossing on the road
- When the vehicle in front approaches water puddles on the road (the surrounding view is reflected in the water puddle, etc.)
- When the vehicle in front is under the shadow of buildings or roadside trees
- When there is steam or smoke between your vehicle and the vehicle in front

### 

- If the vehicle in front is:
  - A vehicle with the rear that is too small (such as a trailer without a load)
  - · An empty truck or something similar without loaded goods
  - A vehicle with loads protruding from the rear
  - An unusually shaped vehicle (including car transporters and side cars)
  - A vehicle with difficult to see tyres due to bumper shape, etc.
  - A vehicle that is long between the rear tyres to the rear end of the vehicle
  - A high-height vehicle
  - A low-height vehicle
  - A vehicle with a continuous pattern on the back, such as vertical stripes, cages, or tiles
- In situations where it is difficult for the stereo camera to recognize (particularly in the following situations)
  - The front of the stereo camera is covered, for example by a sticker, dust, raindrops, dirty or foggy windscreen
  - A glass coating agent other than that specified by Perodua is used
  - A film is applied to the windscreen
  - Stable recognition is not possible due to the reflection on the windscreen
  - The windscreen is not wiped clean completely while or after using the washer
  - The windscreen is scratched or cracked
  - The stereo camera field of view is obstructed with long loads on the roof, for example surfboard or canoe
  - Wiper blades installed are not genuine Perodua products (including the short type)
  - Target recognition is incomplete because the stereo camera field of view is obstructed by rain drops, window washer droplets or wiper blades
  - The front of the stereo camera is blocked, for example with a hand
  - The stereo camera is subjected to an impact causing misalignment or distortion
- When there is a vehicle stopping in the same lane
- When your vehicle or the vehicle in front is driving on one side of the lane
- When there is a two-wheeled vehicle running in the same lane
- When water is sprayed up from the road
- Poor visibility due to exhaust fumes, steam, sand, smoke, sand dust, etc.
- When your vehicle is tilted upward (for example when carrying heavy load)
- When it is slightly dark, for example at dawn or dusk
- When there is an object near your vehicle bumper

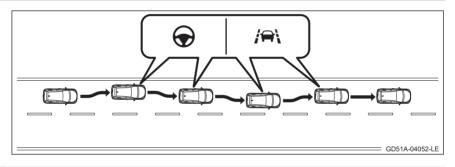
### CAUTION

- When driving on a curve or near the beginning or end of a curve, or on a road with narrow lane
- If the steering wheel operation is unstable or if your vehicle position within the lane is not constant
- When driving on a road with roadside structures, such as tunnels or bridges
- When the speed is reset to set speed after accelerating by pressing the accelerator
- When driving on a road with no white (or yellow) lines or the white (or yellow) lines are faded or dirty and difficult to see
- When moving from uphill to flat road and then downhill
- When moving from downhill to a flat road and then uphill
- When driving on branching or converging roads

# Lane Keep Control (LKC)\*

LKC is a system that assists driver's steering operation ensuring to drive in the current lane by recognizing the white (or yellow) lines on the left and right using the stereo camera installed at the top of the windscreen and working together with the ACC ( $\rightarrow$ P. 4-81).

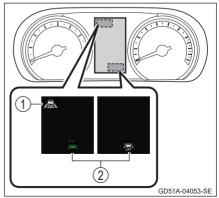
- The driver is informed when the LKC is in operation with the indicator in the meter and display ( $\rightarrow$ P. 4-50).
- The LKC does not operate when the ACC is not active
- If there is no steering operation for a certain time or driving without firmly holding the steering wheel continues, the driver is alerted with the display in the meter and the function is cancelled.
- Please use this function on expressways or motorways.



# LKC OFF indicator/lane recognition indicator

The display position changes when the basic screen changes. ( $\rightarrow$ P. 2-25)

- LKC OFF indicator The indicator will go out when the system is unable to activate because it is disabled.
- ② Lane recognition indicator The indicator will light up when it recognizes the left and right white or yellow lines.



\* : The equipment may vary according to the vehicle grade and options.

## WARNING

#### For safe use

Do not rely too much on LKC. LKC is not a device that drives automatically, nor it is a device that relieve driver's attention to the front. The system also does not provide support when visibility is poor, such as driving in the rain or fog, or when not keeping your eyes on the road while driving or careless driving. Relying on LKC to keep within the lane may lead to accidents resulting in serious injuries, even death.

The driver is responsible at all times to be aware of the surroundings, to correct the navigation by steering, and to practice safe driving. The driver should also take appropriate breaks when tired, for example after driving for an extended period. Not driving appropriately or not paying attention may lead to unexpected accidents.

- Please turn off the LKC by pressing the LKC switch when not in use.
- The driver cannot drive with hands off the steering wheel. The driver must hold the steering wheel and practice safe driving.

#### Situations in which LKC must not be used

Please turn off the LKC by pressing the LKC switch in the following situations. It is dangerous as doing so may lead to unexpected accidents.

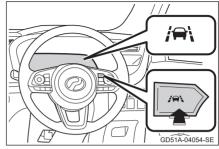
- When driving on slippery roads
- When the system is unable to differentiate the white or yellow lines from the road surface, or when it is difficult to see the lines because the road surface is cracked or dirty
- When driving in areas with lane regulation or temporary lanes
- When driving in a construction zone
- When driving in a lane other than on an expressway or motorway
- When abnormal vibration in the steering wheel is detected, or when the steering wheel feels heavier than usual
- The steering wheel is replaced by products other than a genuine Perodua product or when accessories are attached to the steering wheel

# How to set or cancel the function

## How to set the function

Press the LKC switch when turning the system on in the distance control mode by pressing the ACC main switch

LKC indicator is lit.



LKC is activated when all the operating conditions ( $\rightarrow$ P. 4-101) are met while driving in the middle of the lane.

LKC indicator and steering operation support activated light ( $\rightarrow$ P. 4-99) are lit when steering is supported.

## How to cancel the function

Press the LKC switch again to turn the LKC off.

LKC indicator is turned off.

### LKC operating conditions

The system will activate when all the following requirements are met.

- When the vehicle speed is over 60 km/h
- When ACC is operating in distance control mode and the set speed is 60 km/h or higher
- LKC indicator lights up
- ABS, VSC, TRC are not operating
- Pre-Collision Braking is not operating
- Pedal Misoperation Control is not operating
- Lane Departure Prevention is not activated
- When Lane Departure Warning OFF indicator is off
- VSC OFF indicator and TRC OFF indicator are off
- When LKC OFF indicator is turned off
- Function OFF Codes 2E, 10E, 11E, 12E and 14E are not displayed
- LKC warning light is not lights up

- When turn signal indicator is not on (the system does not activate for about 1 second after the turn signal indicator is turned off)
- When steering wheel assist is set to 'ON' in the TFT colour multi-information display settings (→P. 2-42)
- The brake pedal is not pressed
- There is no acceleration or deceleration above a certain level
- When the shift lever is in D
- When there is no sudden steering wheel operation
- When there is no steering with a steering force equivalent to the force used for changing lanes
- Driving on a straight or gently curved road
- The system recognizes the right and left white or yellow lines
- The vehicle lane width is approximately 3 to 4 m
- When there is no alert for driving with hands off the wheel ( $\rightarrow$ P. 4-103)
- When driving in the middle of the lane

#### The system is temporarily suspended

LKC is automatically suspended temporarily in any of the following situations. If LKC is temporarily suspended, it will automatically resume operation once the conditions causing it to suspend is resolved. If LKC cannot be reset even after the condition is resolved, Advanced Safety Assist may malfunction. It will not affect normal driving, but please have your vehicle inspected at an authorised Perodua Service Centre.

- When the speed is less than 60 km/h
- When the speed set for ACC in distance control mode is less than 60 km/h
- When LKC OFF indicator is lit
- Any of the Function OFF Codes 2E, 10E, 11E, 12E and 14E are displayed
- When operating the turn signal lever
- When pressing the brake pedal and the ACC is cancelled
- When the shift lever is in a position other than D and the ACC is cancelled
- When operating the steering wheel suddenly
- When the accelerator is firmly pressed
- When the right or left white (or yellow) lines cannot be detected
- When driving on a road with lane width of less than 3 m or more than 4 m
- When the vehicle in on the lane
- When driving on roads with sharp curves

#### Automatic system cancellation

LKC is automatically cancelled in any of the following situations. If LKC is automatically cancelled, please reset it again after the cancellation situation is resolved. If LKC cannot be reset even after the situation is resolved,

LKC may be malfunctioning. It will not affect normal driving, but please have your vehicle inspected at an authorised Perodua Service Centre.

- When the system is turned off by pressing the ACC main switch
- When Lane Departure Warning, Lane Departure Prevention and LKC are turned off by pressing Advanced Safety Assist OFF switch
- When pressing LKC switch
- When VSC or TRC is off
- When steering wheel assist is set to 'ON' in the TFT colour multi-information display settings (→P. 2-42)
- When LKC warning light is on
- When there is no steering wheel operation even after hands off the wheel alert is issued (→P. 4-103)
- When Lane Departure Prevention is activated
- When ABS, VSC, and TRC are activated
- When Pre-Collision Braking is activated
- When Pedal Misoperation Control is operating

#### LKC

- LKC operation may not be felt or LKC may not be operating depending on the speed, lane departure and condition of the road.
- Assisted steering by LKC can be corrected manually by the driver.
- When LKC is in operation and if the system determines that there is a risk of the driver driving with hands off the steering wheel and depart from the lane, the buzzer will sound and lane recognition indicator will flash on both sides.
- If there is a bias to the left and right lanes while LKC is in operation, stop the system and have the vehicle inspected at an authorised Perodua Service Centre.

#### Driving with hands off the steering wheel alert

In the following situations, the driver is alerted by the hands off the wheel warning light ( $\rightarrow$ P. 7-16) turning on and a message to hold the steering wheel displayed on the TFT colour multi-information display. When using the system, securely hold the steering at all time regardless of the alert.

- If the system determines that the driver is driving with hands off the steering wheel while LKC indicator lights up
  - The buzzer will sound to alert the driver if the driver continues to make no steering operation.
  - If the driver is still not making any operations, LKC will be cancelled.
  - The same alert will be made if steering operation by the driver continues to be small.
- If the system determines that the driver is driving with hands off the steering wheel while lane departure control is supporting the steering operation to prevent lane departure (→P. 4-103)

#### Customizable features

LKC can be disabled. ( $\rightarrow$ P. 2-42)

#### CAUTION

#### Situations in which LKC may not operate properly

LKC may not operate appropriately in the following situations as it is unable to accurately recognize the white (or yellow) lines.

- The white or yellow lines are difficult to see due to bad weather (heavy rain, thick fog, sandstorm, etc.)
- When bright light is shining from the front (back lighting by the sun or oncoming vehicle headlights) or when bright light is reflected by the road
- When the brightness changes, for example at a tunnel exit and entrance, in the shadow of trees or buildings
- When the road is wet and shiny, such as right after the rain or when there are puddles on the road
- When driving in the shadow of trees or buildings or when there are shadows on the road, for example guardrail shadow
- When driving on roads without street lamps at night
- Road conditions (particularly in the following situations)
  - When there are tyre tracks, fading or overlapping white or yellow lines, traces of line repair and joints on the asphalts because of road repair and old white or yellow lines
  - When driving in a zone with fluctuating number of lanes, such as at intersections or pedestrian crossings and in a zone with intricately intersecting lanes
  - When lane width is extremely narrow or wide, or changing
  - When the white or yellow lines are partially hidden by vehicles, etc., or the line width is narrow
  - When approaching the top of a hill or an uphill slope
  - When the vehicle is heavily shaken due to difference in level
  - When the system recognizes objects on the road, such as curb stones, guardrails or traffic cones as white or yellow lines
  - On undulating roads where the lanes appear crooked or when it is difficult to see ahead

#### CAUTION

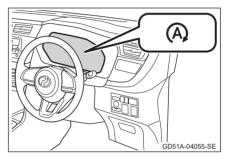
- When driving on rough roads or unpaved roads
- When driving on roads with double painted lanes
- When there are tyre tracks on wet roads
- When driving and passing over junction point or converging roads
- When driving on roads with sharp curves
- · When there are traces of road repair or border lines of snow and asphalt
- When there is guardrail shadow
- The mark lines are double painted
- When there are paint lines on the road surface, for example previous marking lines in roadwork zones that have not completely disappeared
- In situations where it is difficult for the stereo camera to recognize (particularly in the following situations)
  - The outer side of the windscreen is covered by dirt or mud
  - The stereo camera field of view is obstructed with long loads on the roof, for example surfboard or canoe
  - · The inside of the windscreen is foggy
  - The windscreen is not wiped clean completely while or after using the washer
  - The vehicle is leaning because of heavy load
  - The distance to the vehicle in front is short
  - Your vehicle is not running straight against the white or yellow lines
  - The stereo camera is hot
- When driving in places with no white or yellow lines, for example at intersections, in front of toll booths and check points
- When the white or yellow lines are faded, or there are cats eyes or stones on the road
- When in yellow lanes (the recognition rate is reduced compared to white lanes)
- When driving on roads with bright surface, such as concrete roads
- When driving in places that grow brighter due to reflection, etc.
- When the vehicle is subjected to crosswinds
- When affected by the wind generated by vehicles driving in the vicinity
- Immediately after changing lanes
- When driving with tyres other than for normal driving
- When driving at an extremely high speed
- When another vehicle cuts in from the neighbouring lane
- When there are curb stones or side walls on road shoulders
- When water is sprayed up from the road
- Poor visibility due to exhaust fumes, steam, sand, smoke, sand dust, etc.
- When there are lines other than vehicle lanes painted on the road surface

# Idling Stop System (eco IDLE)

eco IDLE is a system that stops and restart the engine with the brake pedal without using the engine switch. This system improves fuel economy and reduces idling noise and after the vehicle stops at a red traffic light or an intersection.

## The engine stops

eco IDLE indicator lights up if it is possible to stop the engine while driving with the shift lever in D (→P. 4-108)



2 The engine stops automatically after the vehicle stops when the brake pedal is pressed to decelerate The eco IDLE indicator is still lights up.

# The engine restarts

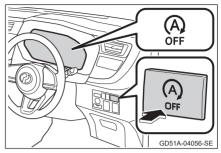
The engine restarts when the brake pedal is released

eco IDLE indicator turns off. After driving a while, eco IDLE indicator lights up again if the engine can be stopped again.

# To disable eco IDLE

To disable eco IDLE, press the eco IDLE OFF switch

eco IDLE OFF indicator lights up. Pressing the switch again will enable the system and eco IDLE OFF indicator will go out.



# When pressing the eco IDLE OFF switch

- The engine will restart when eco IDLE OFF switch is pressed while the engine is turned off by eco IDLE system.
- Pressing the eco IDLE OFF switch while the eco IDLE system is disabled will enable the system again but the engine will not stop. The eco IDLE system will stop the engine the next time the vehicle stops (when eco IDLE system is enabled again).

## Hill-start assist system

When starting on a slope after the engine is stopped by eco IDLE system, the system holds the brake hydraulic pressure (braking effect) for about 2 seconds maximum until enough driving force is generated after releasing the brake pedal and the engine is restarted to prevent the vehicle from moving backward and making hill start easier.

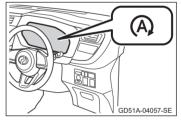
The brake hydraulic pressure (braking effect) held by the system is automatically released once enough driving force is generated.

# eco IDLE operating conditions

- The eco IDLE indicator lights up and the engine can be stopped when all of the following conditions are met.
  - If eco IDLE system operation is not disabled by pressing the eco IDLE OFF switch
    - (eco IDLE OFF indicator lights up when eco IDLE system is disabled)
  - When the engine is sufficiently warmed
  - When the transmission is sufficiently warmed
  - When the engine coolant temperature is not too high
  - After driving for a while for more than 10 km/h after the engine started (The engine does not stop if the vehicle continues idling)
  - When the battery is in good condition (charging, temperature, etc.)
  - When the driver's door is closed
  - When the driver's seat belt is fastened
  - When the hood is closed
  - When the shift lever is in D
  - When the system is normal (eco IDLE system, engine electronic control, CVT electronic control, ABS, VSC, air-conditioner, power steering, and vehicle communication systems)
- It may take time until the engine can be stopped in the following situations.
  - When the battery is discharging
  - · After the battery is disconnected, for example when replacing the battery

# eco IDLE indicator

The eco IDLE indicator lights up while driving when all the eco IDLE system operating conditions are met to indicate that the system is ready to operate when the vehicle stops.



## Requirements for engine stop after vehicle stop

- The system stops the engine after the vehicle stops when eco IDLE indicator lights up and all the following conditions are met.
  - When the vehicle stops
  - When the brake pedal is pressed
  - When the accelerator is not pressed
  - When not operating the steering wheel
  - When ABS and VSC are not operating
  - When Pre-Collision Braking is not operating

- The engine may not stop after the vehicle stops in the following situations, but this is not a malfunction.
  - When the force applied on the brake pedal is weak
  - When the vehicle stops on a steep slope
  - · When negative pressure of the brake booster is reduced

#### Operation while the engine is stopped

- When you want to prepare to start the vehicle in advance while the engine is stopped, such as when turning left or right or merging lanes, you can restart the engine in advance with the following operation.
  - Press the brake pedal more strongly
  - Turn the steering wheel
  - Press the eco IDLE OFF switch ( $\rightarrow$ P. 4-107)
- The engine does not start even when the shift lever is shifted from D to N or B while the engine is stopped.

However, the engine will restart if the shift lever is shifted to another position after it is in N.

When refuelling, shift the shift lever to P, turn off the engine switch and stop the engine.

#### Restarting the engine

- The engine restarts automatically when any of the following operation is performed while the engine is stopped.
  - Releasing the brake pedal
  - · Pressing the brake pedal more strongly
  - Pressing the accelerator
  - Turning the steering wheel
  - Shifting the shift lever to R or P
  - Shifting the shift lever to another position after N
  - Pressing the eco IDLE OFF switch
  - Opening the driver's door
  - Unfasten the driver's seat belt
- The engine may restart automatically in any of the following situations. (The eco IDLE indicator will lights up, then go out)
  - · When negative pressure of the brake booster is reduced
  - When the battery discharge volume is high
  - When the vehicle starts moving, such as on a slope
  - When accelerating downhill after engine stop before the vehicle stops
  - When a system malfunctions (engine electronic control, CVT electronic control, ABS, VSC, TRC, air-conditioner, power steering, for example when a warning light turns on (→P. 7-12) or a warning message\* (→P. 7-20) is displayed
  - After 3 minutes have passed since the engine is stopped
  - During cooling where the air flow temperature at the air conditioner air outlet has risen

- If there is a malfunction in the eco IDLE system during engine stop or it is time to replace the starter or battery, eco IDLE OFF indicator will flash and 'Stop & Start System Malfunction' warning message\* (→P. 7-26) is displayed, and the engine will restart automatically.
- The engine stop time may be shorter in the following situations.
  - When the engine is frequently stop while using the air-conditioner in high ambient temperature
  - When power consumption is high, for example by the electric components
- If there is a power consumption during engine stop, for example the audio volume is high, the audio power may be off temporarily when the engine restarts.
- Depending on the appliance used, the power may be off temporarily because the accessory socket voltage drops when the engine restarts.

#### Automatic eco IDLE system restart

Turning on the engine switch after turning it off will automatically enable eco IDLE system even when the system is disabled by pressing the eco IDLE OFF switch.

#### When the hood is opened

The engine will not restart automatically if the hood is opened while engine is stopped. Please start the engine using the engine switch.

#### Hill-start assist system

- This function works on flat surfaces as well as slopes.
- Using hill-start assist system may lead to the following situations. These are not malfunction.
  - Changes in brake pedal response
  - Brake pedal vibrates
  - Sound can be heard from the brakes

#### eco IDLE system

eco IDLE system is used when stopping the vehicle temporarily, for example at a red traffic signal or an intersection. Please turn off the engine when stopping the vehicle for an extended period of time.

#### Warning buzzer

If the following situations occur during engine stop by eco IDLE system, the buzzer will sound and at the same time, eco IDLE indicator will light up quickly and a warning message  $\Rightarrow$  P. 7-19) will be displayed.

- When the driver's door is opened
- When the driver's seat belt is unfastened
- When the hood is opened\*
- \* Warning message\* is not displayed if the hood is opened.

\* : The equipment may vary according to the vehicle grade and options.

If eco IDLE OFF indicator continues to flash and 'Stop & Start System Malfunction' warning message\* (→P. 7-26) does not go off

It may be time to replace the starter or the system may be malfunctioning. Please have the vehicle inspected at an authorised Perodua Service Centre.

If eco IDLE OFF indicator flashes for a few seconds and 'Stop & Start System Malfunction' warning message\* (→P. 7-26) is displayed for a few seconds during when starting the engine

It is time to replace the battery. Please have your vehicle inspected at an authorised Perodua Service Centre.

#### Air-conditioning during engine stop

 The air-conditioning (cooling and dehumidifying functions) are turned off during engine stop and it will shift to a blower function. To enable the air conditioning, either apply more force to the brake pedal or restart the engine by pressing the eco IDLE OFF switch.

#### If the windscreen fogs up during engine stop

Restart the engine by either applying more force to the brake pedal or pressing the eco IDLE OFF switch.

Turn on the air-conditioning by and switch the air flow outlet to  $\widehat{W}$ . If the windscreen continues to fog up, disable the eco IDLE system by pressing the eco IDLE OFF switch.

- Idling stop time display and idling stop cumulative time display →P. 2-12
- When replacing the battery  $\rightarrow$  P. 7-60

\* : The equipment may vary according to the vehicle grade and options.

# WARNING

#### When eco IDLE is enabled

- While the engine is stopped, press the brake pedal and apply the parking brake if necessary. (While the eco IDLE indicator lights up.) The engine will start automatically and may lead to unexpected accidents.
- Do not leave the vehicle during engine stop. (While the eco IDLE indicator lights up.) The engine will start automatically when the following operations are performed and may lead to unexpected accidents.
  - Releasing the brake pedal
  - · Opening the driver's door
  - Unfasten the driver's seat belt

#### Hill-start assist system

- Hill-start assist system is not a device to stop the vehicle on slopes. Even when the system functions normally, releasing the brake pedal while the vehicle is on a slope may cause the vehicle to move. Therefore, continue to firmly press the brake pedal when the vehicle is stopped.
- Do not rely too much on the hill-start assist system. Relying too much on the system may lead to unexpected accidents, such as the vehicle moving unintentionally when starting. Always check your surroundings and move after appropriately operating the shift lever, brake pedal, accelerator and parking brake.
- Perform start off operations immediately after releasing the brake pedal. If the vehicle moves backward on inertia when on a slope, it may cause an accident or breakdown, such as stalled engine, reduced braking effect, or heavy steering.
- The vehicle may move backward on a gentle upslope if the driver attempts to accelerate by pressing the accelerator before the vehicle stops after the engine has stopped. When inertia causes the vehicle to move backward, start moving safely by operating the brake pedal or accelerator depending on the surrounding situation.
- If the vehicle is heavily loaded or if the slope is steep, the vehicle may move backward even when the hill-start assist system is activated. Please use the parking brake when starting on a slope.

## CAUTION

#### When eco IDLE is enabled

Be careful of the vehicle moving during engine stop because the engine restarts when the accelerator is pressed while pressing the brake pedal.

#### For eco IDLE system to operate properly

- eco IDLE system may not function properly in the following situation. Please have your vehicle inspected at an authorised Perodua Service Centre.
  - When the driver's seat belt is fastened, but the driver's seat belt reminder light in the meter flashes and 'Fasten Seat Belt' warning message\* (→P. 7-29) is displayed on the TFT colour multi-information display
  - When the driver's seat belt is unfastened, but the driver's seat belt reminder light in the meter does not flash and 'Fasten Seat Belt' warning message\* (→P. 7-29) is not displayed on the TFT colour multi-information display

Vehicles not equipped with a TFT colour multi-information display

- When the driver's door or hood is closed but door open warning light in the meter is on, or the interior lights are turned on when the interior light switch is set to the door position
- When the driver's door or hood is opened but door open warning light in the meter is does not turn on, or the interior lights do not turn on when the interior light switch is set to the door position

Vehicle equipped with a TFT colour multi-information display

- The driver's door or hood is closed but 'Open' warning message\* (→P. 7-29) is displayed on the TFT colour multi-information display, or the interior lights turn on when the interior light switch is set to the door position
- The driver's door or hood is opened but 'Open' warning message\* (→P. 7-29) is not displayed on the TFT colour multi-information display, or the interior lights do not turn on when the interior light switch is set to the door position
- Do not connect electrical appliances to the battery terminals. eco IDLE system will stop functioning properly.

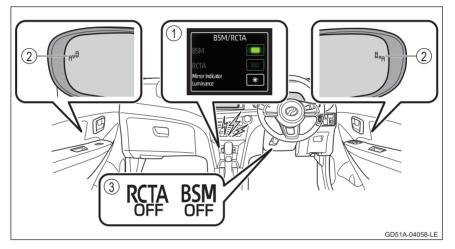
\* : The equipment may vary according to the vehicle grade and options.

# Blind Spot Monitor (BSM)\*, Rear Cross Traffic Alert (RCTA)\*

# **Blind Spot Monitor Overview**

Blind spot monitor has two functions.

- BSM (blind spot monitor) function This function assists the driver when changing lanes.
- RCTA (rear cross traffic alert) function This function assists the driver when reversing. These functions use the same sensors.



- TFT colour multi-information display The BSM function or RCTA function can be turned on or off.
- ② Side-view mirror indicator Installed at the side-view mirrors. The indicators will light up or flash when it detects a vehicle approaching from the rear. BSM function: If the function detects a vehicle in the side-view mirror's blind spot or if it detects a rapidly approaching vehicle from the rear in the blind spot,

the side-view mirror indicator on the side the vehicle is detected will light up. If the turn signal lever is moved to the side the vehicle is detected, the side-view mirror indicator will flash.

RCTA function: The side-view mirror indicator on both sides will flash when a vehicle approaching from your right rear or left rear is detected.

\* : The equipment may vary according to the vehicle grade and options.

- ③ BSM OFF indicator/RCTA OFF indicator BSM OFF indicator lights up when BSM function is turned off. RCTA OFF indicator lights up when RCTA function is turned off.
- ④ Buzzer
  - BSM buzzer:

The buzzer will sound if the turn signal lever is moved to the side where a vehicle is detected.

RCTA buzzer:

The buzzer will sound when a vehicle is detected approaching from your right rear or left rear.

## WARNING

## To use BSM function safely

It is the driver's responsibility to drive safely. Always be aware of your surroundings and drive safely.

BSM function is a support system that informs the driver of vehicles entering the side-view mirror's blind spot or vehicles rapidly approaching the blind spot. The system alone cannot determine whether it is safe to change lanes or not. Therefore, relying too much on this system may lead to unexpected accidents resulting in serious injuries, even death.

This system may not work effectively in some situations and the driver must perform safety checking using eyesight and mirrors.

### To use RCTA function safely

It is the driver's responsibility to drive safely. Always be aware of your surroundings and drive safely.

RCTA function is a support system that informs the driver of vehicles approaching from the driver's rear right or rear left.

RCTA system may not work effectively in some situations and the driver must perform safety checking using eyesight and mirrors. Relying too much on the system may lead to unexpected accidents resulting in serious injuries, even death.

## How to set the function

BSM function/RCTA function can be turned on (enabled) or off (disabled) in the 'settings' menu on the TFT colour multi-information display.  $(\rightarrow P. 2-44)$ 

#### Visibility of the side-view mirror indicator

- It may be difficult to see if the side-view mirror indicator lights up or flashes in the following situations.
  - Under strong sunlight
  - · When there is dirt on the side-view mirror

#### Buzzer

- It may be difficult to hear the buzzer if there are loud sounds, such as high volume audio.
- If 'BSM Radar obstructed. Temporary Unavailable' is displayed on the TFT colour multi-information display

There may be dirt or mud on the rear bumper around the sensors. The system will return to normal if the dirt or mud on the rear bumper around the sensors is removed.

■ If 'BSM Temporary Unavailable' is displayed on the TFT colour multi-information display

The system is temporarily suspended if it is used in an extremely hot or cold environment, or if the battery voltage is lower or higher than rated voltage.

Please have the vehicle inspected at an authorised Perodua Service Centre if the BSM OFF indicator or RCTA OFF indicator lights up for an extended period of time.

If 'BSM Malfunction' is displayed on the TFT colour multi-information display

The sensors may be malfunctioning or misaligned. Please have the vehicle inspected at an authorised Perodua Service Centre.

#### Customizable features

The settings for BSM and RCTA can be changed. ( $\rightarrow$ P. 2-44)

#### Handling radar sensors

Do not dismantle and modify the sensor.

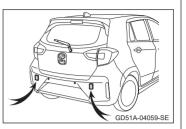
# WARNING

#### Handling the radar sensors

 BSM sensors are installed in the inside of the rear bumper, one on the left and another on the right.

Please observe the following warning to ensure that the system functions properly.

• Always keep the rear bumper around the sensors clean.

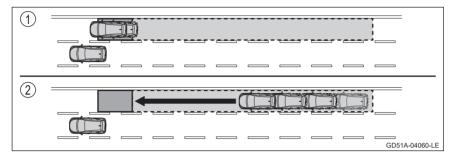


Along with a warning message ( $\rightarrow$ P. 7-27), the system may stop functioning if there are rain drops or dirt on the rear bumper around the sensors. In this case, please drive under BSM function operating conditions ( $\rightarrow$ P. 4-119) for a while after removing the rain drops or dirt (approximately 10 minutes). If the warning message is still displayed, please have the vehicle inspected at an authorised Perodua Service Centre.

- Avoid applying strong impact to the rear bumper around the sensors. The system may not function properly, for example it may not be able to detect vehicles correctly if the sensors' position or orientation is slightly misaligned.
- Please have the vehicle inspected at an authorised Perodua Service Centre in the following situations.
  - The sensors or the area surrounding the sensors are subjected to strong impact
  - There are scratches or bumps on the rear bumper around the sensors, the bumper came off partially
- Do not dismantle the sensors.
- Do not fix stickers or attach any accessories to the rear bumper around the sensors or on the sensors.
- Do not modify the sensor or the rear bumper around the sensors.
- Do not change the rear bumper colour to other than the colour set by Perodua when repairing the rear bumper paintwork.
- The system may not function properly if there are any scratches on the rear bumper paint. Please consult an authorised Perodua Service Centre.

# **BSM** function

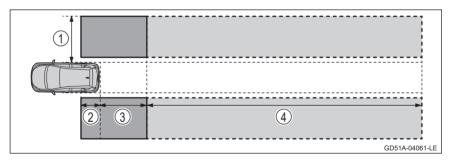
BSM function detects the next vehicle running in the next lane using the radar sensors and informs the driver of such vehicle using the side-view mirror indicator and buzzer.



- ① Vehicle running in a zone not reflected in the side-view mirror (blind spot)
- ② Vehicle rapidly approaching from the rear to a zone not reflected in the side-view mirror (blind spot)

## **BSM** function effective range

The system detects vehicles entering the following range.



- ① A zone of approximately 3.5 m from 0.5 m from both sides of the vehicle Vehicles within 0.5 m from the vehicle sides are not detected.
- ② A zone approximately 1 m in front of the rear bumper
- ③ A zone approximately 3 m behind the rear bumper
- ④ A zone approximately 3 to 60 m behind the rear bumper The side-view mirror indicator will light up or flash when the other vehicle is still far away if there is a large gap between your vehicle speed and the other vehicle speed.

### BSM function operating conditions

BSM function will activate when all of the following requirements are met.

- When 'BSM' is set to 'ON' in the TFT colour multi-information display settings (→P. 2-44)
- When the shift lever is not in R
- When BSM OFF indicator is turned off
- When the vehicle speed is over 16 km/h

#### For BSM function to detect vehicles

BSM function detects vehicles entering its effective range in the following situations.

- When your vehicle is overtaken by another vehicle running in the next lane
- You are overtaking another vehicle running in the next lane with a small speed difference
- Another vehicle entered the effective range while changing lanes

### Situations in which BSM function does not detect vehicles

BSM function may not detect vehicles or objects other than vehicles in the following situations.

- Compact two-wheeled vehicles, bicycles, pedestrians, etc.
- Oncoming vehicles
- Objects at standstill, such as guardrails, walls, signs, or parked vehicles
- A vehicle running behind you in the same lane
- Another vehicle running in the next two lanes
- A vehicle overtaking your vehicle with a significant speed difference
- A vehicle that does not approach your vehicle even when it is in the next lane rearward effective range (The system determines an approaching vehicle based on the radar detection data.)
- Vehicles with a design that is difficult to reflect the radar radio wave, for example low-height empty trailers or sports cars

### Situations in which the BSM function may not function properly

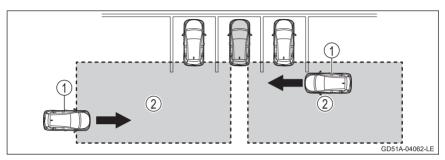
- The BSM function may not detect vehicles correctly in the following situations.
  - When sensors' positions and orientation are misaligned due to strong impact on the sensors or its proximity
  - When there are mud, stickers, etc., on the sensors or the rear bumper around the sensors
  - When driving in bad weather, such as heavy rain, fog or when driving on a wet road with water puddles, etc.
  - · When several vehicles approach continuously at narrow intervals
  - When the distance between your vehicle the vehicle behind you is short
  - When the speed difference between your vehicle and the vehicle entering the effective range is too big
  - When the speed difference between your vehicle and the other vehicle changes

- When the speed of your vehicle and the vehicle entering the effective range is almost equal
- When the other vehicle has always been in the effective range when your vehicle starts to move
- When driving on bumpy roads or sloping roads with continuous steep uphill and downhill
- When driving in places with bumps, sharp curves or continuous curves
- When the other vehicle in the next lane is too far from your vehicle, for example driving in a wide lane or driving at the edge of the lane
- When accessories are installed at the rear of the vehicle, such as a bicycle carrier
- When the height between your vehicle and the vehicle entering the effective range is too different
- Immediately after turning on the BSM function or RCTA function
- Immediately after shifting the shift lever into a position other than R
- When carrying extremely heavy load in the luggage compartment
- When the vehicle changes lane to the next lane from the next two lanes
- BSM function may increase unnecessary detection, particularly in the following situations.
  - When sensors' positions and orientation are misaligned due to strong impact on the sensors or its proximity
  - When objects, such as guardrails and walls entered the effective range at a short distance
  - When a vehicle not running in the next lane entered the effective range, for example a vehicle running in a narrow lane or at the edge of the lane
  - When driving on bumpy roads or sloping roads with continuous steep uphill and downhill
  - When driving in places with bumps, sharp curves or continuous curves
  - When the tyre slip (spinning freely)
  - When the distance between your vehicle the vehicle behind you is short
  - When accessories are installed at the rear of the vehicle, such as a bicycle carrier
  - When rain is sprayed up rearward

# **RCTA** function

# RCTA function operation

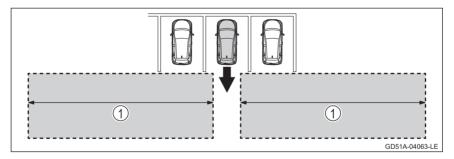
RCTA function detects vehicles approaching from your left rear or right rear using the sensors and inform the driver of such vehicles using the side-view mirror indicator and buzzer.



- 1 Approaching vehicle
- 2 The range that can detect approaching vehicles

# RCTA function effective range

The system detects vehicles entering the following range.



For fast vehicles, the buzzer will sound when the vehicle is further away.

Approaching vehicle speed	① Alert distance (estimate)	
Approximately 28 km/h (fast)	Approximately 20 m	
Approximately 8 km/h (slow)	Approximately 5.5 m	

### RCTA function operating conditions

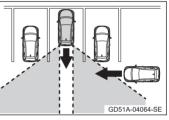
RCTA function will activate when all of the following requirements are met.

- When 'RCTA' is set to 'ON' in the TFT colour multi-information display settings (→P. 2-44)
- When the shift lever is in R
- When RCTA OFF indicator is turned off
- When your vehicle speed is approximately 8 km/h or less
- When the speed of the approaching vehicle is approximately between 8 to 28 km/h

#### Situations in which the RCTA function may not function properly

RCTA function may not detect vehicles or objects other than vehicles in the following situations.

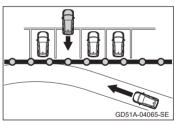
- Vehicles approaching directly from behind
- Vehicle reversing in the parking space next to your vehicle
- Vehicles that the sensors cannot detect due to obstacles



- Objects at standstill, such as guardrails, walls, signs, or parked vehicles
- Compact two-wheeled vehicles, bicycles, pedestrians, etc.
- Vehicles moving away from your vehicle
- Vehicle approaching from the parking space next to your vehicle
- Vehicles approaching at high speed

## Situations in which the RCTA function may not function properly

- The RCTA function may not detect vehicles correctly in the following situations.
  - When sensors' positions and orientation are misaligned due to strong impact on the sensors or its proximity
  - When there are mud, stickers, etc., on the sensors or the rear bumper around the sensors
  - When driving in bad weather, such as heavy rain and fog, or when driving on a wet road with water puddles, etc.
  - When several vehicles passing behind your vehicle successively or when a vehicle from the opposite direction approaches the vehicle first detected
  - When parked on a slope or a road that is not flat
  - When accessories are installed at the rear of the vehicle, such as a bicycle carrier
  - · When reversing on a slope with rapidly changing gradients
  - When parked at an angle
  - Immediately after turning on the RCTA function
  - Immediately after starting the engine with the RCTA function turned on
  - When affected by radio wave interference because the vehicle parked next to your vehicle is equipped with radar sensors
  - When exiting from a sloped parking space
  - When there is a large vehicle parked next to you
  - When reversing at high speed
- RCTA function may increase unnecessary detection, particularly in the following situations.
  - When sensors' positions and orientation are misaligned due to strong impact on the sensors or its proximity
  - · When a vehicle passes next to your vehicle
  - When there are vehicles running on the road facing the parking lot



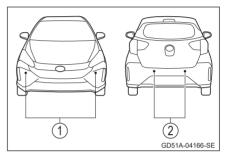
- When there are metals that easily reflect radio wave behind the vehicle, for example guardrails, walls, signs, and parked vehicles
- When accessories are installed at the rear of the vehicle, such as a bicycle carrier
- When there are objects, such as buildings or roadside walls in the direction you are reversing

# Front & Rear Corner Sensor

Front & Rear Corner Sensor recognize the approximate distance between your vehicle and obstacles using sonar when the vehicle speed is approximately 10 km/h or less. This device then informs the driver of the approximate distance using the buzzer and display.

## Sonar locations and types

- Front sonar Recognizes the information required by the front corner sensors.
- Rear sonar Recognizes the information required by the rear corner sensors.

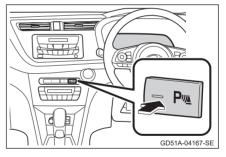


# Front corner sensors

Push the switch.

Pushing the switch will turn on the front corner sensors and light up the switch activated indicator.

To turn it off, push the switch again.



# How to read the distance indicator

The driver is informed using the buzzer and display when all the operating conditions are met and the sensors recognize obstacles.

- The buzzer will sound when the parking brake is not applied.
- As the distance with obstacles grows shorter, the buzzer and display will change as shown in the table below.

### **Rear sensors**

Approximate distance from vehicle to obstacle	Buzzer sound	
1.15 meter to 0.8 meter	Intermittent sound with long interval	
0.8 meter to 0.5 meters	Intermittent sound with short interval	
0.5 meters or less	Continuous sound	

## **Front sensors**

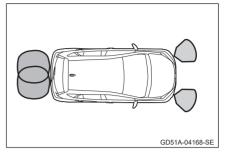
Approximate distance from vehicle to obstacle	Buzzer sound	
0.6 meters to 0.3 meters	Intermittent sound	
0.3 meters or less	Continuous sound	

- If the sonar detects several obstacles at the same time, the buzzer will sound indicating the distance with the nearest obstacle.
- When the buzzer sounds, reduce the speed of the vehicle and beware of the obstacles near the vehicle. When the buzzer sound changes from an intermittent one to a continuous one, it means that the distance between either bumper of your vehicle and the nearest obstacle is less than 0.5 meters (rear) or 0.3 meters (front). Immediately stop your vehicle.

## The range that the sonar can detect obstacles

The sonar effective range is shown in the illustration on the right. However, the sonar cannot detect obstacles that are too close

Depending on the shape of obstacles and requirements, the distance the sonar can detect obstacles may be shorter or the sonar may not be able to detect obstacles.



#### This component is enabled when:

- Front corner sensors:
  - The engine switch is turned on
  - Front corner sensor switch is turned on
  - The shift lever is in a position other than P and the vehicle speed is approximately 10 km/h or less
- Rear corner sensors:
  - The engine switch is turned on
  - The shift lever is in R and the vehicle speed is approximately 10 km/h or less
- The buzzer will sound once obstacles are detected when all operating conditions are met and the parking brake is not applied.

#### Sonar detection

- The sonar effective range is limited to the areas surrounding the sonar on the front and rear bumpers.
- The corner sensors take some time to activate after detecting obstacles. Even when driving at low speed, the buzzer may not sound if you get too close to the obstacles before the buzzer can sound.
- It may be difficult to hear the buzzer when using the audio and air-conditioner due to the music and sound from the fan.

#### If the buzzer beeps and corner sensor activated

- Corner sensor function decreases. Corner sensor function is suspended temporarily. Check if there are any rain drops or dirt on the sonars. Removing them will return the system to normal.
- If master warning indicator lights up at the same time, the system may be malfunctioning. Please have your vehicle inspected at an authorised Perodua Service Centre.

#### WARNING

#### Before using corner sensors

The following warnings must be observed.

It is dangerous as failure to do so may lead to unexpected accidents.

- Do not drive over 10 km/h.
- There is a limit to the sonar effective range and operating speed. Always check the safety around the vehicle, outside the sonar effective range, particularly the sides of the vehicle when starting to move or reversing. Control the speed sufficiently using brakes and drive slowly.
- Do not attach any accessories or fix any stickers on the sonars and the surrounding areas.

#### Corner sensors

Corner sensors may not work properly in the following situations and may lead to unexpected accidents. Please drive carefully.

- Road condition (curves, bumps, etc.)
- Vehicle maintenance condition (brake related, tyre wear, inflation pressure, using spare tyre, etc.)
- In bad weather (heavy rain or thick fog)
- The vehicle leans excessively, or the vehicle height changes significantly due to carrying goods or being on an uneven surface
- The distance, orientation and location to the obstacle (there is an obstacle near the middle of the vehicle)

## WARNING

- Driving on inclines with steep gradients
- Situation in which the sonars are unable to recognize obstacles correctly (particularly in the following situations)
  - When the obstacle is very close to the sonar (the buzzer may change from continuous beeping to intermittent beeping when approaching too close to the obstacle)
  - When the obstacle is higher than the ground
  - When the obstacle is low in height
  - When the obstacles are small (small animals and small children, etc.) or
     narrow
  - Moving obstacles (obstacles that appear suddenly or moving across the vehicle)
  - When the obstacles have soft surfaces that easily absorb sound waves, such as spongy objects
  - · When the obstacle surface is at an angle to the vehicle
  - When the walls is not vertical to the ground
  - · When the walls are not flat, such as uneven walls or rippling walls
  - When the obstacles are thin, such as wires, wire-netting, ropes, road signs and utility poles
  - When there are pillars or piping protruding from the wall
  - When there is an undetectable obstacle between the vehicle and detectable obstacle
  - · When the obstacles are outside the sonar effective range
  - When the area surrounding the sonar is extremely hot or cold, for example after being under the sun or in cold temperature
  - When there is rain or dirt on the sonar
  - During strong winds or when there are water sprays or drizzling rain
  - In a very noisy surrounding or there is an object emitting ultrasound nearby (For example, the sound of other vehicles' horn, motorbike engine, air brake from large vehicles, vehicle sensors, or other vehicle sonars)
  - When commercial electrical components, such as illuminated licence plate or wireless antenna are installed near the sonar
  - When sonar orientation is misaligned due to collision, etc.

## CAUTION

#### Corner sensors

In the following situations, corner sensors may activate even when the obstacles are not in the effective range.

- When driving in a place where the inclination of the road changes suddenly
- When passing under plastic curtains or flags
- When water is sprayed up from the road
- When passing very closely next to an obstacle
- When using vehicle elevator or mechanical parking
- When driving over a difference in level with an obstacle nearby
- When there is an obstacles near the side of the vehicle
- When the road surface is uneven with curb stones and objects protruding, or there are ruts or holes on the ground
- When entering a narrow space
- When there are water sprays or drizzling rain
- In bad weather (heavy rain or thick fog)
- When there are objects emitting ultrasound nearby, such as the sound of other vehicles' horn, motorbike engine, air brake from large vehicles, vehicle sensors, or other vehicle sonars
- When commercial electrical components, such as illuminated licence plate or wireless antenna are installed near the sonar
- When the vehicle is leaning significantly
- When the vehicle height changed significantly because of how it is loaded
- When the sonar orientation is misaligned due to collision, etc.
- When there is rain or dirt on the sonar

#### Corner sensors malfunction

The device may not work properly due to sonar malfunctioning, etc., in the following situations. Please have your vehicle inspected at an authorised Perodua Service Centre.

- When corner sensors activate without detecting obstacles
- When the sonars and the components around it are subjected to strong impacts or force.
- When the area surrounding the sonar is deformed due to an accident, etc.
- When Function OFF Code is displayed ( $\rightarrow$  P. 7-14, 7-25)

### Precautions when washing the vehicle

- Do not spray water directly to the sonar components when washing the vehicle using a high-pressure washer. The impact from high water pressure may cause the device to cease functioning properly.
- When washing the vehicle using steam, for example at a car wash, avoid the steam from getting too close to the sonar components. The steam may cause these components to malfunction.

# **Reverse camera\***

## The reverse camera is a device that assists the driver when parking, etc., by displaying images of the rear of the vehicle on the display audio or navigation system screen when the vehicle is reversed.

The screen illustrations used in this manual are examples. The actual projected images may vary from the illustrations, such as the vehicle reflection.

## Reverse camera screen display

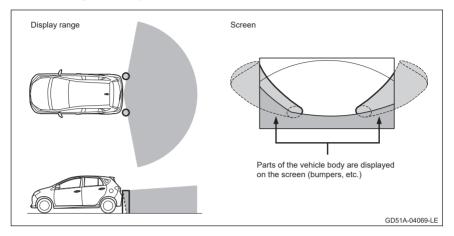
Images of the rear of the vehicle will be displayed on the display audio or navigation system screen if the shift lever is shifted to R while the engine switch is on.

The screen will return to its previous display when the shift lever no longer in R. Images from the reverse camera are prioritized and displayed before any other screen displays.

\* : The equipment may vary according to the vehicle grade and options.

## Precautions about reverse camera

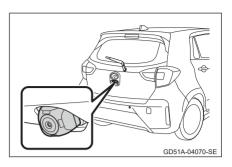
## The range displayed on the screen



- The display range may vary depending on the state of the vehicle and road surface.
- There is a limit to the reverse camera display range. Objects under the bumper or near both ends of the bumper are out of the range.
- Because the reverse camera uses a special lens, the actual distance to objects may vary from the distance shown in the images.
- The colour of images in the rear may be different from the actual colour.
- Objects located at a higher position than the reverse camera may not be displayed on the screen.
- Vehicles equipped with reverse camera cannot use illuminated number plates.

# About the camera

Reverse camera can be found in the following locations.



• Care and cleaning for the camera It is impossible to see clear images if there are foreign objects or dirt, such as rain drops or mud on the camera. When this happens, rinse off the dirt on the camera with water and wipe the camera using soft, damp cloth. If the camera is very dirty, please wash the camera using a neutral detergent.

- It may be difficult to see images on the screen in the following situations, but this is not a malfunction.
  - In dark places, such as at night
  - · When the temperature near the camera is high or low
  - When there are water drops on the reverse camera, or when the humidity is high (for example, in rainy weather)
  - When there are foreign objects, such as mud on the area near the reverse camera
  - When sunlight or headlights are shining directly on the reverse camera lens

## WARNING

#### About the reverse camera

Please observe the following warnings. Failure to do so may result in serious injuries, even death.

- Do not rely too much on the reverse camera. Similar to any other vehicle, please drive carefully while checking the safety at the rear and the surroundings yourself. Make sure that the vehicle does not come into contact with people, obstacles, and vehicles parked nearby in particular.
- When reversing, always do it carefully while checking the safety at the rear and the surroundings yourself.
- Never drive while looking only at the screen.

The actual situation may be different from the images displayed on the screen.

Never reverse the vehicle by looking only at the screen because there is a limit to the camera range. Doing so may lead to unexpected accidents, such as hitting another vehicle. Always drive carefully and check the safety around you visually and using rear view mirror and side-view mirrors.

- Do not use the function in the following situations.
  - On slippery road surfaces
  - When using spare tyre or tyre chains
  - · When the back door is not completely shut
  - On roads that are not flat, for example on slopes
- The screen may grow dark or the images may fade when ambient temperature is low. Images of moving objects in particular, may be distorted or lost on the screen. Therefore, always drive while checking the surrounding safety with your own eyes.

# 

### Handling the camera

- The reverse camera may not function properly if the following precautions are not taken.
  - Do not attach near the camera objects that may affect the camera field of view, for example objects that block the field of view, shining objects, or objects made with glossy materials.
  - Do not strongly strike the camera component, hitting it with objects, or subject it to strong impact. The camera position and angle may be misaligned.
  - The camera is water resistant. Do not remove, dismantle or modify it.
  - When washing the camera lens, wipe it dry using soft, damp cloth after rinsing the dirt on the camera with water. Wiping vigorously on the camera lens may scratch the lens and clear images can no longer be seen.
  - The camera cover is made of resin. Do not apply organic solvent, wax, oil film remover, or glass coating agent on it. If applied, immediately wipe it clean.
  - Do not subject the camera to rapid temperature change, for example pouring hot water on it in winter.
  - Do not apply water directly to the camera or near the camera when washing the vehicle using high pressure water jet. The impact from high water pressure may cause the camera to cease functioning properly.

The camera may be damaged if the camera component is subjected to an impact. Please have the vehicle inspected at an authorised Perodua Service Centre as soon as possible.

# **Driving assist**

The following systems operate automatically in response to various driving conditions to increase driving safety and performance. However, these systems are supportive in nature and should not be relied on too much. Please be very careful when driving.

# ABS (Anti-lock Brake System)

This system controls the vehicle from slipping and helps to prevent wheel lock when the brakes are applied suddenly, or when braking on slippery roads.

## Brake assist

Generates more braking force when the brakes are applied suddenly.

## VSC (Vehicle Stability Control)

The system helps to maintain the vehicle posture and controls skidding when swerving or making a turn on slippery roads.

## TRC (Traction Control)

Helps to maintain driving power and prevents tyre slippage when starting the vehicle or accelerating on slippery roads.

## • Hill-start assist system

Reduce the vehicle backward movement when starting on an uphill slope.

## • EPS (Electric power steering)

Reduces the amount of effort needed to turn the steering wheel using electrical motor.

## Advanced Safety Assist

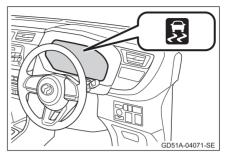
→P. 4-40

## Emergency stop signal

The system reduces the risk of collision by automatically flashing the hazard lights when the brakes are applied suddenly to alert the vehicle right behind you.

# When VSC/TRC systems are operating

The slip indicator light flashes when the VSC/TRC systems are operating.



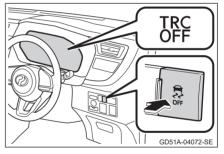
# **Disabling the TRC system**

It may be difficult to free your vehicle that is stuck in mud or sand if the TRC system is operating because the engine output does not increase even when you press the accelerator.

In such situations, pressing the  $\frac{3}{4}$  button may make it easier for you to free your vehicle.

Press  $\frac{1}{4}$  to disable the TRC system. TRC OFF indicator will light up.

Pressing the  $\frac{1}{4}$  again will turn the system back on.



### Disabling the VSC and TRC systems

To disable VSC and TRC systems, press and hold  ${\ensuremath{\ensuremath{\mathcal{R}}}\xspace}$  for 3 seconds or longer while the vehicle stops.

TRC OFF indicator and VSC OFF indicator will light up.

Pressing the k again will turn the systems back on.

# TRC OFF indicator lights up without pressing

TRC and hill-start assist system cannot operate. Please contact an authorised Perodua Service Centre.

#### About ABS and VSC systems operation

ABS and VSC systems do not operate at low speed. Braking operation will be the same as normal braking.

- Sounds and vibrations produced by ABS, brake assist, VSC, TRC and hill-start assist systems
  - Sounds may be heard from the engine compartment when the brake pedal is
    pressed repeatedly when starting the engine or right after the vehicle begins
    to move. It is not a malfunction.
  - The following conditions may occur when the above systems operate. These are not malfunction.
    - · Vibrations are felt through the vehicle body and steering wheel
    - A motor sound is heard after the vehicle stops
    - The brake pedal may pulsate slightly when the ABS is in operation
    - The brake pedal moves down slightly after the ABS finishes operating

#### EPS motor sound

A motor sound (whirring sound) may be heard when operating the steering wheel. This is not a malfunction.

#### Automatic reactivation of VSC and TRC systems

After disabling the VSC and TRC systems, the systems will be re-enabled automatically in the following situations.

When the engine switch is turned off

 When the speed increases (if only TRC system is disabled) However, if the VSC and TRC systems are disabled, speed will not automatically re-enable theses systems.

# When EPS effectiveness is reduced

The EPS system effectiveness is reduced to prevent the system from overheating when there is continuous steering wheel operation over an extended period of time while the vehicle stops or while driving at very low speed. When the system effectiveness is reduced, turning the steering wheel will feel heavy.

When this happens, stop using the steering wheel or stop the vehicle and turn off the engine.

The system will return to normal in about 10 minutes.

## Hill-start assist system operating conditions

The system will operate when all of the following conditions are met.

- Engine is operated
- The shift lever is in a position other than P or N (when moving forward or reversing on an uphill slope)
- The vehicle is stopped
- The accelerator is not pressed
- The parking brake is not applied
- Slip indicator is turned OFF

## Hill-start assist system automatic cancellation

The system will be cancelled in any of the following situations.

- The shift lever is shifted to P or N
- The accelerator is pressed
- The parking brake is applied
- About 2 seconds have passed after releasing the brake pedal
- When slip indicator flashes and warning message (→ P. 7-15) is displayed The system may be malfunctioning. Please contact an authorised Perodua Service Centre.

## Emergency stop signal operating conditions

The system will operate when all of the following conditions are met.

- The hazard lights are off
- The vehicle speed is 60 km/h or more
- The system determines from the vehicle deceleration and the pressed brake pedal that this is a sudden braking, or the ABS system is activated

## Emergency stop signal automatic cancellation

The system will be cancelled in any of the following situations.

- The hazard lights are turned on
- Brake pedal is released
- The system determines from the vehicle deceleration that this is not a sudden braking
- The ABS system is disabled

WARNING
When ABS do not operate effectively
<ul> <li>When the tyre gripping performance exceeds its limits (for example, whe driving with excessively worn tyres on wet roads)</li> <li>When hydroplaning, such as driving at high speed on slippery or wet roads</li> </ul>
Braking distance may be longer than normal when the ABS is operating
The ABS is not a system that shortens braking distance. Slow down your vehic and maintain a safe distance with the vehicle in front at all times, particularly the following situations.
<ul> <li>When driving on muddy or pebble roads</li> </ul>
<ul> <li>When using tyre chains</li> <li>When going over a height difference on a road, for example road joints</li> <li>When driving on bad roads, such as uneven roads or stone-paved roads</li> </ul>
When the VSC or TRC system does not operate effectively
The VSC or TRC system may not function accurately when tyre chains a installed.
When the TRC system does not operate effectively
Stability and driving force may not be achieved when driving on slippe roads, even when the TRC system is operating. Drive carefully particularly conditions where stability and driving force may be lost.
When the hill-start assist system does not operate effectively
<ul> <li>Do not rely too much on the hill-start assist system. The system may n operate effectively on steep slopes.</li> <li>The hill-start assist system is not a function to hold the vehicle stationary f an extended period of time like the parking brake. Do not use this system</li> </ul>
hold the vehicle stationary on a slope. It is dangerous as doing so may lea
<ul> <li>to unexpected accidents.</li> <li>The hill-start assist system may not activate depending on the load, the number of occupants, or the brake pedal is not sufficiently pressed when stopping the vehicle.</li> </ul>
When the slip indicator light flashes
The slip indicator light informs the driver that the VSC and TRC systems a in operation. Always practice safe driving. Driving recklessly is dangerous as may lead to unexpected accidents. Please drive carefully particularly when the indicator light flashes.
When ABS warning light or slip indicator light is on
The emergency stop signal ( $\rightarrow$ P. 4-138) may not operate.

## WARNING

#### When VSC and TRC systems are turned off

VSC and TRC systems help to secure driving force and vehicle directional stability. Therefore, do not disable the VSC and TRC systems except when necessary. When VSC and TRC systems are disabled, please drive very carefully at a speed suitable for the road conditions.

#### When replacing tyres or wheels

All four tyres used must be of the specified size, same manufacturer, same brand, same tread pattern, and inflated to the specified inflation pressure ( $\rightarrow$ P. 8-6). Using different tyres will cause the ABS, VSC and TRC not functioning properly.

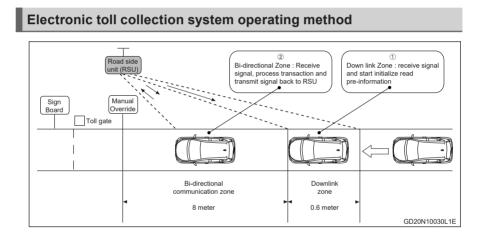
Please consult with an authorised Perodua Service Centre when replacing tyres or wheels.

#### Handling tyres and suspension

Using tyres with issues or modifying the suspension system will negatively affect the driving support systems and lead to damages to the systems.

# Electronic toll collection system\*

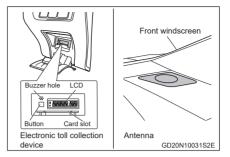
The electronic toll collection system is designed to enhance convenience for drivers by enabling cashless toll collection thus mitigating congestion at expressway toll gates. It uses an integrated electronic toll collection device which is located in a safe, hidden location and does not require to replace a battery. User however need to have a prepaid card to be inserted in the electronic toll collection device. Tolls are automatically collected via wireless communication between an antenna installed on the toll gate and the electronic toll collection device. It enables simple and speedy payment by allowing drivers to pass through toll gates without stopping to pay.



\* : The equipment may vary according to the vehicle grade and options.

# About the electronic toll collection device

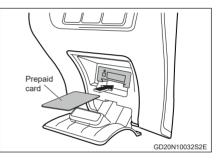
The electronic toll collection device is equipped at an instrument panel and located at the lower right corner and the antenna is located at the top right corner.



# Using the electronic toll collection device

Insert the prepaid card properly into the card slot.

In a case where the prepaid card is not inserted after the ignition is on, a buzzer will sound and LCD background light will turn on and <u>effed</u> will appear for about 2 seconds to alert the driver.



# Checking the balance of the prepaid card

You can check the balance of the prepaid card by pressing the button. LCD background light will turn on and display the balance value for 4 seconds. The value range are 0.00 – 9999.99

#### (1)2 unit (RSI Sign Manual Board Override Toll gate (2) 3 **Bi-directional** Downlink communication zone zone 8 meter 0.6 meter GD20N10033L1E

# Electronic toll collection system operating method

Buzzer will sound when the vehicle are at a dedicated location with these condition:

Location	Condition	Buzzer sound type	
1	No card (alter ignition ON)	2 short high beep sound 5 times	
2	Prepaid card value less than RM10 1. Alter ignition ON 2. Alter transaction	2 long high sound	
③ Transaction OK		2 times beep high sound	

# WARNING

- The driver is responsible for the electronic toll collection device. Do not operate the device while driving as it may lead to unexpected accident. If you need to operate the device, please stop the vehicle.
- Please ensure the prepaid card is inserted correctly into the device and confirm that it is in a working condition.
- Pay attention to the balance in the prepaid card as it will determine the opening/closing of the toll gate.
- The electronic toll collection device authenticates the prepaid card and it takes several seconds to do it. If you insert the prepaid card in front of the toll gate, error may appear and the toll gate may not open.
- When passing through a toll lane, keep the distance in between vehicles and ensure the toll gate has opened before passing through.

## WARNING

The toll gate installed in the toll lane will operate when there is a communication between the electronic toll collection device and its antenna with a road side unit (RSU). If the communication is not performed manually, the toll gate may not be opened. Be careful and observe the situation before passing through the toll lane.

 If you notice any malfunction, have the system checked immediately by an authorised Perodua Service Centre.

## CAUTION

- Do not use multiple electronic toll collection device in one vehicle. The device may not function properly and toll gate may not be opened.
- Do not place any object at the electronic toll collection antenna as it may cause an interference to communicate with the road side unit (RSU) and the toll gate may not be opened.
- If there is a dirt on the front windscreen, remove it to avoid any interference to the antenna.
- Do not use any other than the glass tinted agent specified by Perodua on the windshield, and do not use glass tinted with metal content.
- Do not place any foreign object into the toll collection device.
- Do not touch the electronic toll collection device with wet hands or allow water (liquid, etc.) to enter it as it may break down or damage.
- If there is dirt at the electronic toll collection device, wipe it off with a soft and dry cloth. Do not use wax, thinner or alcohol as it may deteriorate the material.
- Do not pull out the prepaid card when passing through the toll gate as it may cause interference to the data/system.
- Please decelerate your vehicle when approaching the toll gate and follow the recommended speed.
- Follow the guidance/message display at signboard when passing through the toll gate.
- If the toll gate does not open, follow the instructions of the toll booth attendant.

# Interior features

5

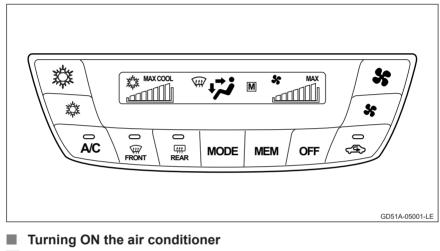
# Using the air conditioner

Air conditioning system	5-1
Using the audio systems	
Audio system	5-6
Steering wheel switches*	5-23
Using the interior lights	
Interior lights list	5-24
Storage features	
Storage features list	5-27
Using other interior features	
Other interior features	5-32

# Air conditioning system

The air conditioner blower operates with the ignition switch turned to "ON".

# **Control panel**



- 1 Press 😽 button.
- 2 Press A/C button.

# Turning off the air conditioner

- 1 Press A/C button.
- 2 Press OFF button.

# Adjusting the blower fan speed

Press and release St button for each level to increase the speed, and press St button to decrease it. You can also press and hold the button to continuously increase or decrease it.

## Adjusting the temperature

Press and release 🌣 button for each level to increase or decrease the temperature. You can also press and hold the button to continuously increase or decrease the temperature.

**MAX COOL** will appear after pressing the  $\$  button to the maximum/ end.

## Other functions

## Switching between outside air and recirculated air modes

Press the "< button.

The mode switches between outside air mode (the indicator off) and recirculated air mode (the indicator on) each time the " $\subset$ " button is pressed.

## Defogging the front and rear window

Defoggers are used to defog the front and rear window. Press the "@FRONT" or "@REAR" button.

The defoggers will automatically turn off after a period of time.

## Setting the air conditioning memory

You can set up one memory of your preferred air conditioner settings and the system returns to these setting next time you drive.

Press MEM to set the setting.

Press and release memory button to use the settings that has been stored.

# Air outlets

# Air flow location and volume

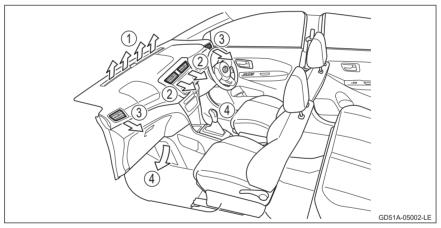
The air flow location and volume will change depending on the location of the air outlet mode as shown in the table below.

The air flow volume varies depending on the air outlet location.

Air outlet mode	فتر	+7.4	فہ ا		¥#
Air outlet Location	2 3	2 3 4	(3) ④ (1)	(3) (3)	(3)

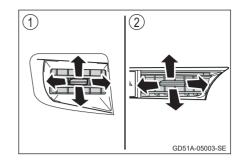
The position in parentheses () indicates the air outlets with low air flow volume. Rapidly-cooled air may cause fog from outlet ports. This is not a malfunction.

# Air outlet locations



# Adjusting air flow direction

- ① Front side outlets
- 2 Front centre outlets



## Outside/recirculated air mode

When driving on dusty roads such as tunnels or in heavy traffic, set the outside/ recirculated air mode switch to the recirculated air mode. This is effective in preventing outside air from entering the vehicle interior. During cooling operation, setting the recirculated air mode will also cool the vehicle interior effectively.

## Ventilation and air conditioning odors

- To let fresh air in, set the air conditioning system to the outside air mode.
- During use, various odors from inside and outside the vehicle may enter into and accumulate in the air conditioning system. This may then cause odor to be emitted from the outlets.
- To reduce potential odors from occurring:
  - It is recommended that the air conditioning system be set to outside air mode prior to turning the vehicle off.

### Air conditioning filter

→P. 6-59

Interior features

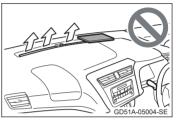
#### WARNING

#### Preventing foggy windscreen

- Do not select the air outlet mode button are or a with the air conditioner running at a low temperature setting when humidity is extremely high. The temperature difference between outside air and the windscreen will form condensation on the outside of the windscreen and may lead to poor visibility.
- Do not use recirculation for a long time. The glass may easily mist. Use outside air as a normal operation.
- To prevent blocking the windscreen defogger, do not place any objects that will block the air outlet. It may be difficult to defog if the air flow is interrupted.

#### When using the rear window defogger

The rear window surface will be extremely hot. Do not touch it because it may cause burn.



#### When switch on air conditioner

As the engine is equipped with the fast idle device, while the vehicle is idling, engine idling speed is slightly increased with the air conditioner on. Special attention must be paid in starting and stopping the vehicle.

#### CAUTION

#### To prevent battery discharge

Do not leave the air conditioning system and/or rear window defogger on longer than necessary when the engine is stopped.

If you use car fresheners or perfumes on the air conditioner centre outlet ports, do not spill the liquid onto the panel cluster. This could cause discoloring, staining and paint peeling of the surface. This may also cause the audio button to be stuck or loose. Proper care is required to prevent the panel cluster and audio system from damage.

#### Circulated air

Do not move the air mode lever to  $\iff$  position when the air outlet mode button  $\cancel{2}$  is selected. The windows will be foggy.

#### High cabin temperature

If your vehicle has been parked for a long time in intense sunlight and cabin temperature is extremely high, turn on the air conditioner with the windows fully open.

After the vehicle interior becomes cool, close the windows and set the temperature to your desired level.

# Audio system

This unit requires an automobile type 12 volt negative ground power source. Please read this owner's guide carefully before you start operating this unit.

#### Features

#### Tuner

- Digital PLL Tuning
- Manual UP/DOWN Tuning
- Seek UP/DOWN Tuning
- 18FM And 12AM Preset Memory
- Auto Store (AS)

#### General

- LCD Multi-Mode Full Information Display
- 12Hr Format Digital Clock
- Audible Level Beep Tone
- Welcome' Note

#### Audio control

- Electronic Volume/Bass/Mid/Treble/Fader and Balance Controls
- Power Output (20W x 4) Rms
- Mute
- Clear/Bass/Loud (Prefix Tone Controls)

#### USB

- Track UP/DOWN
- Folder UP/DOWN
- Repeat Play
- Intro Scan
- Random Play
- ID3 Tag Display

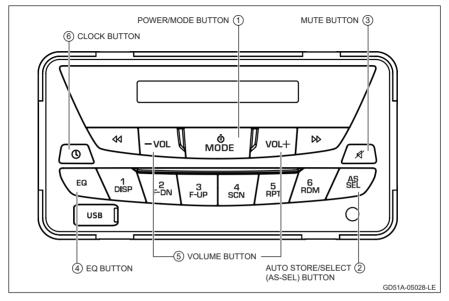
#### Bluetooth\*

- Full Duplex Conversation
- Handsfree Profile
- Music Streaming
- Incoming Caller Identification

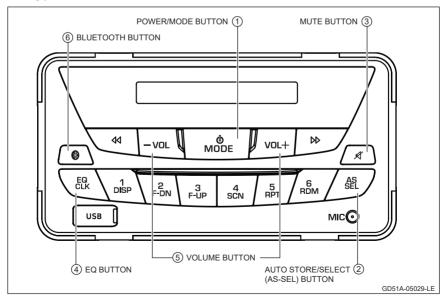
\* : The equipment may vary according to the vehicle grade and options.

# **General operation**

Type 1



Type 2



# ■ Power/Mode Button ( <sup>(</sup>) - MODE) - <sup>(</sup>)

System on/off

Press button 1 to switch ON the unit. Press button 1 more than 2 seconds to switch OFF the power.

Mode selecting

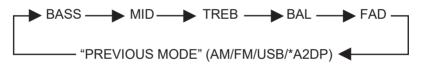
Press button  $\bar{(1)}$  to select the mode of radio and USB. The selection is in the following sequence:



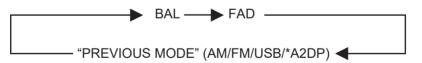
# Auto Store/Select Button (AS - SEL) - 2

During system is ON, press button ② to change the audio mode through bass, mid, treble, balance and fader function. When mode has not been adjusted, display returns to normal radio display.

During non EQ mode ("MANU"), press button ② to select audio mode in the following sequence:



During EQ mode ("CLEAR"/"BASS"/"LOUD"), press button ② to select audio mode in the following sequence:



# ■ Mute Button ( 🔏 ) - ③

Press button  $\widehat{(3)}$  to mute the audio sound. Press again to restore the previous volume level.

Press button 3 more than 2 seconds, system will pause the USB memory playing.

\* : The equipment may vary according to the vehicle grade and options.

### Equalizer/\*Clock Button (EQ - \*CLK) - ④

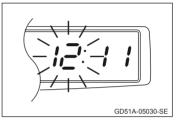
#### EQ selecting

Press button ④ to select "clear", "bass", "loud" (Prefix 3 pattern of tone) and "manual" (Non-prefix tone).

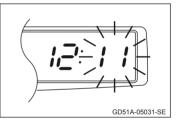
#### Clock adjustment

Press button 4 more than 2 seconds to enter the hour adjustment mode with hour display blinked.

Adjust the desired hour by pressing the volume button (5) to increase and decrease the hour.



Press button ④ again to enter the minute adjustment by pressing the volume button ⑤ to increase and decrease the minute.



# Volume Up Button (VOL + ) - (5)

Press button (5) to increase the Volume/Bass/Mid/Treble level. During system in Balance or Fader adjustment, press button (5) to set the right balance or set the front speaker sound.

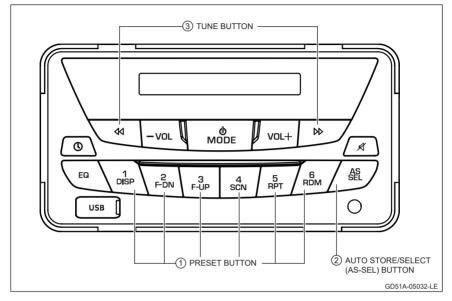
# Volume Down Button (VOL – ) - (5)

Press button (5) to decrease the Volume/Bass/Mid/Treble level. During system in Balance or Fader adjustment, press button (5) to set the left balance or set the rear speaker sound.

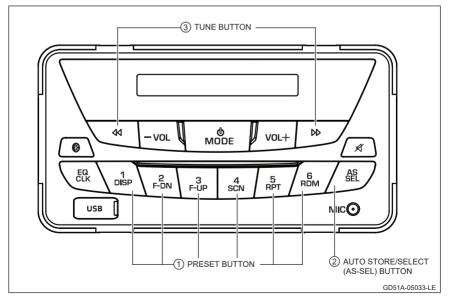
\* : The equipment may vary according to the vehicle grade and options.

### **Tuner operation**

# Type 1







# ■ Preset Button (1 to 6) - ①

These buttons are used for preset station function in tuner mode. With this system, a total of 24 stations can be stored in the memory 6 each for the FM 1, FM 2, FM 3 and AM.

Presetting Station
 Tune in the desired station manually or automatically and press button
 (1 to 6) at which you want to store that station for more than 2 seconds.

 Calling Up Stations

# After your favourite stations are preset at button 1 to 6, simply press buttons 1 to 6 to call up the stations in the preset memory.

# Auto Store/Select Button (AS - SEL) - 2

Press button ② more than 2 seconds to auto store 6 strongest stations in the preset memory button 1 to 6 at FM3 band.

# ■ Tune Button ( ◀◀ / ▶▶ ) - ③

Manual Tuning

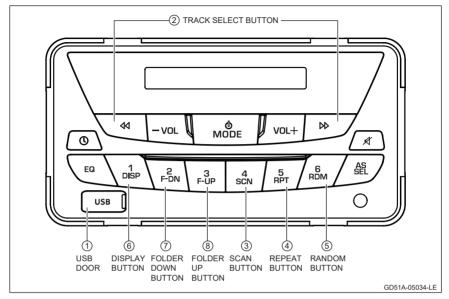
Press button  $\ensuremath{\textcircled{3}}$  in tuner mode to tune the frequency up or down manually.

Auto Tuning

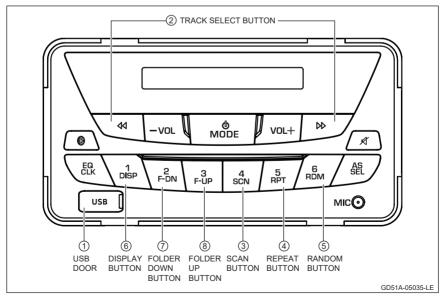
Press button 3 more than 2 seconds in tuner mode to auto tune the frequency up or down.

# Playing MP3/WMA from USB memory

# Type 1



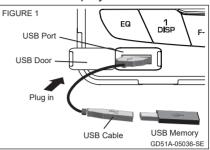
Type 2



### ■ USB Door ( 🖞 ) - ①

Open the USB door ① and plug in USB cable extension with USB memory into USB port (as shown in Figure 1). Press the POWER/ MODE button to switch to USB mode then start play MP3/WMA track.

To detach the USB memory, pull USB cable extension out from the unit. Removing the USB cable extension or USB memory will also stop play back.



# ■ Track Select Button ( ◀◀ / ►► ) - ②

- Press button ② to forward to the next track.
- Press button ② to backward to the previous track.
- Press button (2) more than 1 second to forward the track with 10 time speed acceleration.
- Press button (2) more than 1 second to backward the track with 10 time speed acceleration.

Track number will appear on the display.

#### Scan Button (SCN) - ③

Intro Scan function allows you to scan USB memory, by playing the first 10 seconds of each track in order. Press button ③ to activate intro scan whereby the " SCN " will appear on the display. Once you hear the desired track, press again to resume its normal playback.

# Repeat Button (RPT) - ④

To repeat the music you are listening to, press button ④. " **PPT** " will appear on the display and current track in the USB memory will be repeated continuously. Press again to cancel the repeat mode.

# **Random Button (RDM) -** (5)

#### Random Play

Press button 5 to select a song randomly from USB. Song will be randomly played within the selected folder.

Press button (5) to activate this function and "  $\mathbb{PDM}$  " will appears on the LCD. Press again to deactivate this function.

# Random All Play

Press button (5) more than 2 seconds to select a song randomly in different folder from USB.

# ■ Display Button (DISP) - ⑥

This allows the unit to change the MP3/WMA display information on LCD. Press button (6) to select the MP3/WMA display information with the following sequence:



# Folder Down Button (F-DN) - ⑦

When button  $\ensuremath{\overline{\mathcal{T}}}$  is pressed, the folder will be selected by down sequence.

# Folder Up Button (F-UP) - (8)

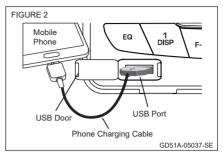
When button (8) is pressed, the folder will be selected by up sequence.

# Notes on playing MP3/WMA from USB memory

- This unit may be unable to play back some USB memories or some file due to their characteristics or recording conditions.
- Depending on the shape of the USB memories and connection ports, some USB memories may not be attached properly or the connection might be loose.
- If the connected USB memory does not have the correct files, "USB ERR" appears and the unit returns to the previous mode.
- This unit can show tags (version 1.x and 2.x) for MP3 and WMA files.
- This unit can play back MP3/WMA files meeting the conditions below:
  - File: MPEG 1/2/2.5 Layer II & III (MP3); Windows Media Audio standard 4/4.1/7/8/9/9.1 (WMA).
  - Bit rates: 32kbps 384kbps (MP3); 0kbps 320kbps (WMA).
  - Sampling Frequency (KHz): 48, 44.1, 32, 24, 22.05, 16, 12, 11.025, 8.
- This unit can play back USB memory's file recorded in VBR (variable bit rate).
- To play good quality music from MP3/WMA, the file bit rates shall be set at 128kbps or above and the converting source shall be origin CD format.
- This unit can display up to 50 characters for title name, artist name, album name, file name and folder name.
- This unit can recognize a total of 65,000 files and support up to 64GB USB memory.

# USB phone charging

Open the USB door and plug in phone charging cable into USB port (as shown in Figure 2). Press POWER/MODE button to switch to USB mode. The system will charge mobile phone battery.



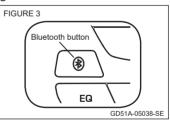
# Notes on USB phone charging

- This unit provide charging output of 5V ..... 1A.
- This unit may unable to charge mobile phone due to the compatibility of protecting charger interfaces inside mobile phone.

# **Bluetooth operation\***

### Bluetooth handsfree

- Step 1: Enter into pairing mode (Discoverable and connectable mode)
- 1 The pairing mode allows this audio system to be discoverable by your Bluetooth mobile phone. To enable pairing mode:
  - ① Car audio system
    - Press the Bluetooth button in your car (Figure 3) for about
       5 seconds until you hear 3 continuous beep sounds.
  - ② The audio system displays "PAIRING" and Bluetooth logo "≯" will flashing on LCD, indicates that the system is now ready to be paired with the mobile phone.

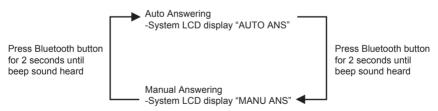


- 3 Mobile phone
  - Enable/switch on the Bluetooth feature in your mobile phone; the symbol ( ≯ ) indicates that the Bluetooth is turned "On".
  - Use mobile phone to search for new device in Bluetooth mode, mobile phone will found "BLUETOOTH CAR KIT".
    - \* : The equipment may vary according to the vehicle grade and options.

- Audio system default name is "BLUETOOTH CAR KIT" and passkey is "0000" (enter the number zero for 4 times). User is allowed to change default name to a user preferences name in it's mobile phone's Bluetooth memory.
- 3 The Audio System will connect to the Bluetooth mobile phone automatically after user key in passkey and LCD will displays "CONNECTED" and " ★ " will stop flashing. New Bluetooth System enter into stand by mode.
- 4 If connection is failed, the system LCD displays "FAILED".
- 5 If the Bluetooth is disconnected the system LCD displays "DISCONT".
- Step 2: Automatic connection mode & manual connection mode
- 1 The Audio System is enter into Automatic Connection mode whenever the ACC power is turned 'on'. The auto connection mode allows automatic connection between last connected Bluetooth mobile phone with Audio System.
- 2 To enable Manual Connection mode required to press Bluetooth button for about 2 seconds.
  - Remark: Above Auto & Manual connection mode is effective only for the last connected Bluetooth mobile phone & the Bluetooth on mobile phone must turn ON.

#### • Step 3: Auto answering and manual answering selection

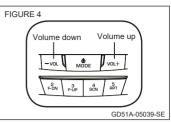
- 1 The Audio System allows the selection of "Auto Answering" and "Manual Answering" by just press the Bluetooth button for about 3 to 6 seconds until beep sound heard.
- 2 The sequence of selection is shown as below:



Remark: Above Auto Answering & Manual Answering selection is effective only for after the audio system is connected to the Bluetooth mobile.

# • Step 4: When there is an incoming call or outgoing call

1 At Standby mode (Manual Answering), if there is an incoming call, the audio output will be cut-off automatically. The incoming call can only be accepted if Bluetooth button is pressed for once. The receiving conversation can be heard from front right speaker.



At Standby mode (Auto-Answering), if there is an incoming call, the audio output will be cut-off automatically. The incoming call can be accepted automatically without pressing the Bluetooth button.

3 The volume level of telephone conversation can be adjusted by pressing the volume up (VOL +) or volume down (VOL -) button (Figure 4).

# • Step 5: Ending a call

1 User can choose to terminate the call by pressing bluetooth button for 1 second, the audio output system will resume immediately after ending a call. Consequently, the communication mode is change to Standby mode.

# • Step 6: Reject incoming call

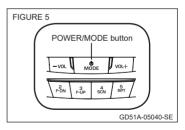
1 Press the Bluetooth button twice at once to reject an incoming call.

# Caller ID Display

The audio system is with caller ID ON, when the system detect incoming call, LCD will display "caller number".

# Bluetooth A2DP

- 1 Press POWER/MODE BUTTON (Figure 5) to switch on A2DP mode with condition of Bluetooth must be paired and connected.
- When A2DP is played with audio is transfer from mobile phone to the unit, LCD of the unit will show "BLUETOOTH MUSIC".



3 Volume of BT Music can be adjusted by volume buttons (Figure 4).

- 4 To play good quality music from mobile phone, the music file bit rates shall be set at 128 kbps or above and the converting source shall be origin CD format.
  - Remark: This features only applicable for mobile phone with Bluetooth A2DP feature.

Summary of Bluetooth button function

No.	Bluetooth button function	Bluetooth pressing time
1	<ul> <li>Receive / end call</li> <li>Activate / deactivate auto search mode</li> <li>Deactivate pairing mode</li> </ul>	1 second
2	- Reject incoming call	1 second (twice)
3	<ul> <li>Interchange between auto-answering mode and manual answering mode</li> </ul>	2 seconds
4	- Activate pairing mode	5 seconds

#### Notes on Bluetooth operation

- Use the mobile phone in areas with good reception condition.
- If talking volume is low or noisy (claim from the person on the other end of the line), close the window, change the air direction, or adjust air blower's level from air conditioner to lower level.
- If the mobile phone battery at low charge, the Bluetooth connection may occasionally be lost. To maintain good connectivity, ensure that the phone battery is adequately charged.
- This unit can store up to 8 phones pairing. If the memory is full, the first stored paired phone will be deleted.
- Echo will happen depend in mobile phone or service network.

#### 

- Telephone conversation during driving may result in consequences adverse to safety. Kindly follow the local laws and regulations.
- Appropriately pairing, connecting & adjusting the volume level of incoming calls in advance before start driving.
- Park your car in a safe place with parking brake used, and then you make a call.
- This audio system is designed only for receiving calls with taking account of safety.

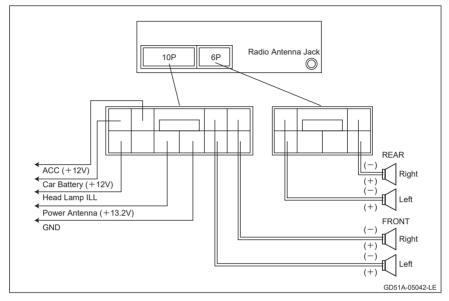
# Installation

Screw w/washer tapping x 4

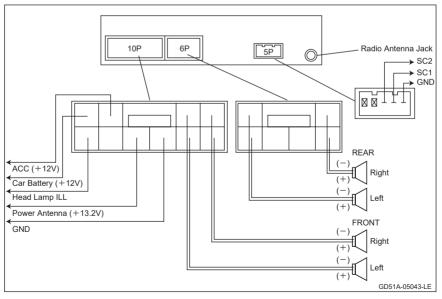
Install the radio set to the dashboard case with screw w/washer tapping x 4.

# Radio wire connection

# Type 1







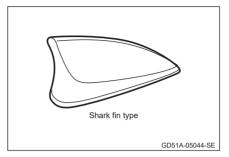
# Specification

General			
Power Supply Voltage	: DC 12.0V		
Rate	: 14.4V		
Audio Output	: (20W x 4) Rms.		
Weight	: 1.4kg		
Mute	: Decreased to -79dB		
Current Consumption	: Less than 10A		
Speaker Impedance	: 4 ohms		
Grounding System	: Negative Type		
FM TUNER			
Frequency Range	: 87.5 - 108MHz		
Usable Sensitivity	: 10dB		
-3dB Limiting Sensitivity	: 10dB		
Signal To Noise Ratio	: 50dB		
Stereo Separation	:30dB		
АМ			
Frequency Range	: 522 - 1620KHz		
Usable Sensitivity	: 28dB		
Signal To Noise Ratio	: 50dB		
USB			
Frequency Characteristics	: 10 - 20,000Hz (±3dB)		
Signal To Noise Ratio	: 70dB		
Dynamic Range	: 80dB		
BLUETOOTH	· Divete eth Ver 2.0 eenerlient		
Standard	: Bluetooth Ver 2.0 compliant		
Frequency Band Power of Radiation	: 2.4GHz - 2.4834GHz		
Frequency	: -6dBm ~ +4dBm (class 2)		
Frequency Hoping	: 1600 hops/sec		
Sensitivity	: -70dBm@0.1% BER		
Audio S/N	: >90dB		
	5000		
POWER AMPLIFIER			
Maximum Power Output	: (20W x 4) Rms.		
Tone Controls (Bass)	: ± 12dB (@100Hz)		

Tone Controls (Bass)	: ± 12dB (@100Hz)
Tone Controls (Treble)	: ± 12dB (@10KHz)

# Antenna

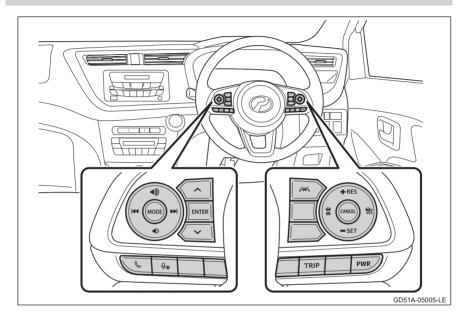
If there is a problem with your antenna, please consult with an authorised Perodua Service Centre.



# Steering wheel switches\*

The audio and navigation systems can be operated using the switches on the steering wheel.

For details, please refer to the Multimedia manuals.



The layout switch varies from grade to grade.

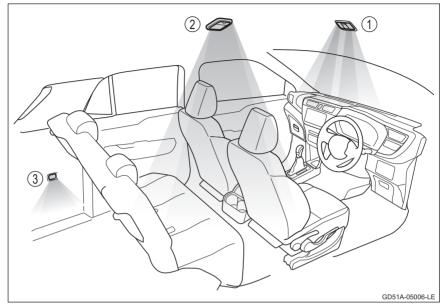
#### WARNING

#### To prevent an accident

Please be very careful when operating the steering wheel switches while driving.

\* : The equipment may vary according to the vehicle grade and options.

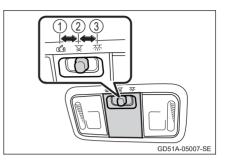
# Interior lights list



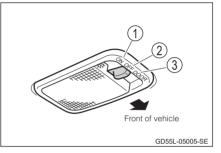
- ① Front personal light/Room light (front)
- 2 Room light (rear)
- ③ Luggage light

# **Room light**

- Front
- ① Door position (door activated) The lights turn on or off activated by opening or closing the door.
- ② Turning off the lights
- ③ Turning on the lights

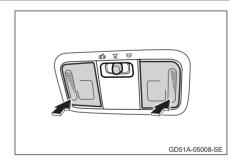


- Rear
- ① Turning on the lights
- ② Turning off the lights
- ③ Door position (door activated) The lights turn on or off activated by opening or closing the door.



# Front personal lights

Turning the lights on and off



#### Illuminated entry system

When the light switch is at door position, the lighting in each area will automatically turn on or off in the following situations.

- When approaching the vehicle carrying the smart key after locking the doors
- When locking or unlocking the doors
- When opening and closing the doors
- When operating the engine switch

If the light keeps on illuminating even after the doors have been closed, the door may be opened or may not be closed fully. Ensure that all the doors are closed.

#### To prevent battery depletion

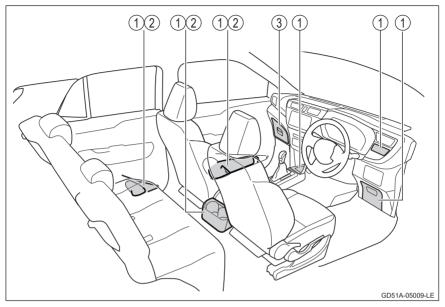
- The lights will automatically turn off after about 10 minutes when the door is left open with the light switch set at door position.
- The lights will automatically turn off after about 12 minutes if the lights remain on.

#### CAUTION

#### To prevent battery depletion

Do not leave the lights on for an extended period with the engine turned off.

# Storage features list



- ① Utility box ( $\rightarrow$ P. 5-29, 5-30)
- ② Bottle holders ( $\rightarrow$ P. 5-29)
- ③ Glove compartment ( $\rightarrow$ P. 5-28)

#### WARNING

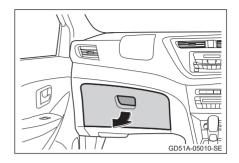
Do not leave glasses, lighters or spray cans in storage spaces.
 The following incidents may take place when these objects are left in the vehicle.

- Glasses may be deformed or cracked if they come into contact with other stored items when cabin temperature increases
- When cabin temperature is high, lighters and spray cans may explode, lighters may catch fire when come into contact with other stored items, spray cans may release gas causing a fire hazard
- Do not use storage spaces while driving. This may lead to unexpected accidents.

When not in use, keep storage lids on. In the event of sudden braking or swerving, unexpected accidents may occur due to an occupant being struck by an open lid or stored items spilling out.

# **Glove compartment**

Open by pulling the lever



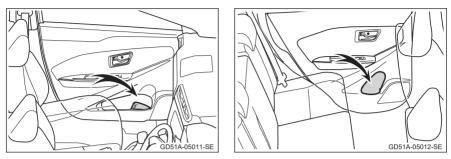
# WARNING

Keep the glove box lid closed while driving. This could help reduce the risk of serious bodily injury in an accident or hard braking.

# **Bottle holders**

Front side

Rear side



#### Bottle holders

- Always close the cap when storing bottles.
- Bottles may not be stored depending on its size and shape.

#### WARNING

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- Do not place anything other than plastic bottles in the bottle holders. Other items may fall off the holders causing injuries during sudden braking or in an accident.
- To prevent burns, close the lid when placing hot drinks in the cup holders and bottle holders.
- It is dangerous to place tall cups in the driver's side cup holder as it can block driver's field of view and lead to unexpected accidents.
- While you are using the bottle holder, the drink may spill over due to vibration. Be careful not to spill the drinks when the door is opened/closed or hard braking is applied.

 Always close the cup holders when not in use.
 Not closing the cup holders may lead to unexpected injuries as occupants may strike the open cup holders during sudden braking, etc.

#### CAUTION

- Always close the cap when storing bottles.
- Do not place paper cups or glass cups containing juice, etc. in the bottle holders.

The juice may spill or the glass cup may break.

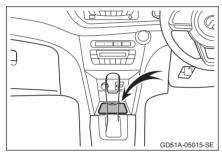
 To prevent malfunctions, immediately wipe any spilled drinks. Drinks spilled on switches or electrical components may cause malfunctions or vehicular fire hazard.

# Open tray

### Front doors



Front console tray



#### WARNING

A

Do not place easy to roll objects in the tray while driving. It is dangerous as the stored items may be thrown out causing unexpected accidents.

# Rear package tray

- To remove package tray
- ① Push up the package tray out.
- To install package tray
- ① Press down the package tray to install.



#### WARNING

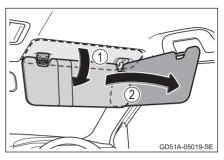
Δ

Do not place anything on the package tray. It may block driver's vision or damage the package tray.

# Other interior features

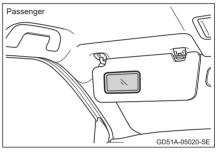
# Sun visors

- ① Pull down the visor for front shading
- ② For side shading, pull down the visor, unhook and swing it to the side

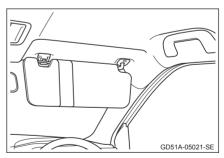


# Vanity mirror

Open the cover



Ticket holder



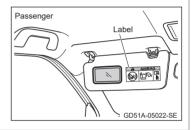
#### WARNING

- Do not lodge objects between the sun visors and the ceiling. It is dangerous as the objects may fall when the vehicle starts to move.
- Do not insert anything other than applicable objects in the ticket holder. It is dangerous as the objects may fall when the vehicle starts to move.
- Do not use the vanity mirror while driving. It is dangerous as doing so may lead to unexpected accidents.
- Return the sun visor to the original position when not in use. Your visibility may be hindered by the sun visor.

### 

#### SRS airbag warning label

Do not use or apply gasoline or toxic solvents on the label portion. This could damage the label.



# Shopping hook

Shopping hooks are provided to keep shopping bags upright and prevent items from falling over and spilling.

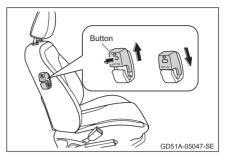


#### CAUTION

Do not hang item that is heavier than 3.0 kg. It could damage the shopping hook. Close the hook when not in use.

# Anti snatch hook

This hook is located at the right side of the front passenger seat and provide a safe place to hang things such as handbags. It can keep handbags away from reach and can withhold pull strength of 3.0 kg.



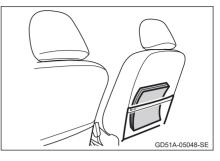
#### WARNING

Do not leave handbag or any valuable things in your vehicle. This can prevent your vehicle from being broken into.

# Seat pockets

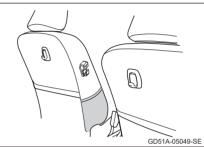
# Seatback pocket

Use this pocket to keep things such as magazines and maps.



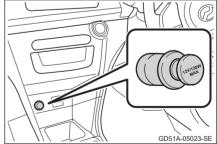
#### Side seat pocket

Use this pocket to keep small things.



#### **Power socket**

Please use power supply for electronic products that use less than 12 V (120 W power consumption). Open the lid and use



#### This component is enabled when:

The engine switch is in 'ACC' or 'ON' mode

When the engine is restared by eco IDLE The power outlet may not be available temporarily when the engine restarted. This is normal.

#### When the engine switch is set to 'OFF'

Please remove electrical products with charging function, such as power banks. It may be impossible to set the engine switch to 'OFF' properly if such products are left connected.

#### WARNING

#### Electric capacity

DC 12 V with maximum current of 10 A (maximum power consumption of 120W). Do not use electrical products exceeding this capacity. The fuses may short when using electrical products that exceed maximum capacitance.

#### To prevent short circuit and damage

Close the lid when not in use to keep foreign objects or liquids from entering the power outlet.

#### To prevent battery depletion

- Do not use the accessory socket when the engine is not running.
- Even when the engine is running, do not use the accessory socket for an extended period when idling.

# **USB** socket (for charging)

Please use power supply with maximum power consumption of 10.5 W (5V/2A). This USB socket is for charging only and not for sending data. Proper charging may not be possible depending on the device used. 1 Open the lid

Front ►

Rear 5V/2A 00 GD51A-05024-SE GD51A-05025-SE

- 2 Firmly insert the cable after aligning it with the socket orientation Secure the device and cable in a place that does not interfere with the driving.
- 3 Always remove the cable after use Make sure that the lid is closed.

5-38

- If the charging stopped temporarily when restarting the engine, the battery may be deteriorating. Please contact an authorised Perodua Service Centre.
- Some devices may start recharging after stopping temporarily. This is normal.

#### This component is enabled when:

The engine switch is in 'ACC' or 'ON' mode

#### Situations in which this function may not work properly

- When connecting devices requiring power that exceed maximum rating
  - Charging may be impossible because protective function activates.
  - Even if charging is possible, it may take time to finish charging.
- When inside the vehicle is hot, for example immediately after leaving the vehicle under the sun
  - Wait before starting to recharge after lowering the temperature inside the vehicle by ventilating the interior using the air-conditioner, etc.
  - Recharging while the temperature inside the vehicle is high may cause the temperature sensor to automatically stop the charging.

#### WARNING

- Inserting a finger into the USB socket may cause electric shock. Foreign objects such as metals or liquids entering the USB socket may cause damage or short circuit.
- Be careful not to trip over the connected cable. This may lead to unexpected accidents, such as falling down or damage to the device.

#### CAUTION

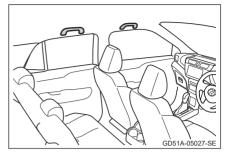
Do not apply strong impact or force.

#### To prevent battery depletion

- Do not use the USB socket for an extended period when the engine is not running.
- Always remember to remove the cable once recharging is no longer necessary even when driving.

# **Assist grips**

The assist grips installed on the ceiling can be used to support your body while sitting in the seat during a drive.



#### WARNING

- Do not use the assist grips when getting in or out of the vehicle, or rising from your seat.
  - Doing so may damage the assist grips, or cause injuries by falling over.
- Do not hang anything on the assist grip.
  - It could block the driver's vision or damage the assist grip.
- Driver should not use the assist grip while driving.

#### CAUTION

To prevent damage to the assist grips, do not hang any heavy objects or put excessive load on the grips.

### Maintenance and care

6

### Maintenance and care

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## Cleaning and protecting the vehicle exterior

# Cleaning and protecting the vehicle exterior involve the following actions.

- Working from top to bottom, apply sufficient water to the vehicle body, wheel wells and underside to remove any dirt
- Wash the vehicle body using a sponge or soft cloth, such as chamois
- If the vehicle is very dirty, use car shampoo and rinse it thoroughly with water
- Wipe away any water
- Wax the vehicle when water proofing is poor If water does not bead on a clean surface, apply wax when the vehicle body is cool (when its temperature is lower than a human body temperature)

### Automatic car washes

 Fold the side-view mirrors before washing the vehicle. Wash from the front of the vehicle.

Make sure to unfold the side-view mirrors before driving.

- The brushes may scratch body vehicle or damage the painted surface.
- Some washers may catch, scratch or damage the rear spoiler.

### High pressure car washes

Do not spray at the same place continuously or spray too close to the door or window edge. The water may get inside the vehicle.

- The doors may repeatedly lock and unlock when the vehicle is within the key effective range and the door handle request switch is wet when washing the vehicle. In this case, please take the following measures. (If the doors do not lock and unlock repeatedly, they are locked automatically about 30 seconds after being unlocked)
  - Place the keys 2 meters or more away from the vehicle (please be careful of theft)
  - Set the keys to battery saving mode and disable the keyfree system  $(\rightarrow P. 3-9)$
- If the smart key left inside the vehicle during washing the vehicle, the buzzer outside the vehicle may sounds when the water contacted with the request switch. The buzzer will stop when you lock all doors.

### Detergents and waxes

- Clean the vehicle correctly after carefully reading the product description that comes with the detergent or wax.
- Do not apply wax to unpainted resin components. These components may turn white or discoloured when the wax is applied.
- When waxing, if the wax adheres to the area around the request switch, do not clean the wax with a sharp tool. The request switch might be damage.

### Wheel and wheel caps

- Use a neutral detergent and quickly remove any dirt.
- Do not leave the detergent on these components. Rinse throughly with water.
- Please observe the following precautions to prevent damage to painted surface.
  - · Do not use acidic, alkaline or abrasive detergents
  - Do not use hard brushes
  - Do not use detergents when the wheels are hot after parking or driving in a hot weather
- Avoid applying hot water directly to the wheels, for example at a steam car wash since this may cause the wheels to lose their shine.

### WARNING

### Washing the vehicle

- Do not apply water inside the engine compartment. Getting the electrical parts wet can cause vehicle fire.
- Be careful not to touch the wheel wells and underneath when washing the vehicle.

### Exhaust system

The exhaust can be hot due to the exhaust fumes. Let the exhaust cool first before touching it, for example when washing the vehicle. Doing so may cause burns.

### Blind Spot Monitor\*

The system may not function properly if there are any scratches on the rear bumper paint. Please consult an authorised Perodua Service Centre.

### Applying wax to the aluminium wheels\*

Be careful not to apply wax to the nut bearing surface. The nuts may loosen, and the tyre comes off, leading to an unexpected accident. Tightening the nuts more than necessary may damage the nuts and bolts, as well as the wheels.

### To protect paint finish during waxing

- Do not rub the surface hard or rub with hard cloth.
- Do not use steel wool or abrasive cleanser.
- Follow the instructions of the wax manufacturer.

\* : The equipment may vary according to the vehicle grade and options.

6

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CAUTION
To prevent paint deterioration and corrosion on the body and components (wheels, etc.)
<ul> <li>Wash the vehicle immediately in the following situations:</li> <li>After driving near the seacoast</li> <li>After driving on salted roads</li> <li>When there are substances sticking to the vehicle, for example coal tar, pollen, tree sap, bird droppings, or dead insects</li> <li>After driving in an area contaminated with soot, oily smoke, mineral dust, iron powder, or chemical substances</li> <li>When the vehicle is very dirty with dust or mud</li> <li>When organic solvents, such as benzene or gasoline are on the paint</li> <li>Repair the paint surface as quickly as possible if it is scratched.</li> <li>To prevent the wheels from corroding when in storage, remove any dirt and store the wheels in a place with low humidity.</li> </ul>
Cleaning the lights
<ul> <li>Wash carefully. Do not use organic solvents or hard brushes. These may damage the lights.</li> <li>Do not apply wax to the lights. The lens may be damaged.</li> </ul>
To prevent damage to the side-view mirrors
At automatic car washes, always fold the side-view mirrors.
Precautions when washing the vehicle
<ul> <li>Make sure that the fuel filler door is closed and lock the driver's door. The fuel filler door can open suddenly under high water pressure, the vehicle body and fuel filler door may be damaged.</li> <li>Washing the vehicle with hot water may damage the resin components.</li> <li>When washing the vehicle using steam, for example at a car wash, avoid the steam from getting too close to the sonar components. The steam may cause these components to malfunction.</li> <li>Do not use detergents and waxes containing abrasive compound.</li> </ul>
When using automatic car washes
Switch the air-conditioner to 'interior air circulation'. Water entering the vehicle can cause damage.

### CAUTION

### When using high-pressure car washes

- When washing the vehicle at a high-pressure car wash, avoid applying the water directly to the camera or around the camera. The impact from high water pressure may cause the device to malfunction.
- Avoid from letting the nozzle getting too close to the joints, rubber or resin coating, and the connectors of the following components. Applying high pressure water may damage these components.
  - Drive train component
  - Steering component
  - Suspension component
  - Brake component
- Make sure the nozzle tip is not close to the request switch. The high pressure water could damage the request switch.
- Keep the cleaning nozzle at least 30 cm away from the vehicle body because high water pressure may deform or damage resin components, such as mouldings and bumpers. Also, do not continuously apply the water to the same place.
- Do not apply the water continuously to the lower part of the windscreen. The air intake for the air-conditioner is located in this part. The air-conditioner may not function properly if water enters the air intake.

## Cleaning and protecting the vehicle interior

Cleaning and protecting the vehicle interior involve the following actions.

### Cleaning the vehicle cabin

- Vacuum any dust and wipe the interior with a cloth dampened with water or warm water
- To remove tough stains, wipe with a soft cloth dampened with a neutral detergent diluted to about 1% with water. Wring out any excess water from the cloth and wipe away all the detergent and moisture left on the surface

### **Cleaning the leather areas**

- Vacuum any dirt and sand
- Dampened a soft cloth with diluted detergent and wipe away any dirt Dilute a neutral detergent for wool with water to about 5%.
- Wring out any excess water from the cloth and wipe away all the detergent and moisture left on the surface
- Wipe away any moisture on the surface with a dry, soft cloth and leave to dry in a well ventilated, shaded area

### Cleaning the synthetic leather areas

- Vacuum any dust
- Wipe the surface with a soft cloth dampened with a neutral detergent diluted to about 1% with water
- Wring out any excess water from the cloth dampened and wipe away all the detergent and moisture left on the surface

### Guide to cleaning leather areas

To maintain the quality, Perodua recommends regular cleaning twice a year.

### Cleaning the carpet

Carpet should be kept dry at all time. Commercial foam carpet cleaners can be used.

Using a sponge or brush, apply the foam to the carpet in a circular motion. Then, wipe and dry the carpet without applying water directly.

### Seat belts

Wash the seat belts using a mild detergent and warm water with a piece of cloth or sponge. Please check the seat belts regularly for wear and tear.

### WARNING

### Water entering the vehicle

- Do not apply water or spill any liquid inside the vehicle. Getting the electrical parts wet can cause damage or vehicle fire.
- Do not let any of the SRS airbag components or wiring in the vehicle get wet (→P. 1-12). An electrical malfunction may cause the SRS airbags to deploy or not function properly, resulting in serious injuries, even death.

### Cleaning the interior

Cleaning the interior (particularly the instrument panel). Do not use polish wax or polish cleaner. The instrument panel may be reflected on the windscreen and obstruct the driver's view, leading to an unexpected accident that may result in serious injuries, even death.

### The seats and its surroundings

When cleaning inside the vehicle or which picking up objects from under the seat, please be very careful when putting your hand under the seat. Your hand may be injured hitting the seat rail or seat base.

### CAUTION

### Detergents used for cleaning

- Do not use the following solvents to prevent discolouration, stains, and peeling paint.
  - Areas other than the seats: organic solvents and acidic or alkaline solvents, dyes, and bleaches, such as benzene and gasoline
  - The seats: thinner, benzene, alcohol, and other acidic or alkaline solvents
- Do not use polish wax or polish cleaner. The paint on the instrument panel and other interior equipment may peel off, dissolve, or deform.
- Do not use glass cleaner or alcohol to clean the meter glass cover. The cover may be discoloured or cracked.
- Do not use silicon-based spray around the switches. The silicon may stick to the interior electrical components and damage them.

### CAUTION

### To avoid damaging the leather

Please observe the following precautions to avoid damaging or deteriorating leather surfaces.

- Immediately remove any dust or sand on the leather surface.
- Do not expose the leather to direct sunlight for an extended period. Keep the vehicle in a shaded area.
- Do not leave vinyl materials, plastics, and materials containing wax on the upholstery because these materials can melt to the leather when temperature inside the vehicle increases.

### Water on the floor

Do not use water to clean.

The vehicle may be damaged if the audio or the electrical components under the floor carpet are wet, or the body may get rusty.

### Cleaning the inside of the windscreen

 Please be careful not to touch the stereo camera. Accidentally scratching or striking it may lead to Advanced Safety Assist malfunction or damage.

### Cleaning the inside of the rear window

- Lightly wipe along the heater wires with a cloth dampened with water or warm water without using glass cleaner as it may damage the heater wires.
- Be careful not to scratch or damage the heater wires.

### When using liquid air freshener

Firmly secure the container so that it will not spill. Do not place the container on top of the instrument panel or near the gauges.

Liquid spilled on the resin components, fabric or the gauges cover can cause discolouration and cracks.

### Maintenance requirements

### **General precaution**

- The scheduled maintenance service is important to ensure trouble-free, safe and economical driving. Failure to perform the scheduled maintenance may cause an accident or serious damage.
- If periodical maintenance is conducted, Perodua car owners may reduce the chance of accidents or car problems. Furthermore, it becomes possible to detect malfunction at an earlier stage which may lead to serious damages. Consequently, potential vehicle damage can be prevented or the degree of the damage can be minimized.
- Therefore, all Perodua car owners should be concerned to service their Perodua vehicles according to the periodical maintenance service in order to be protected from accidents or unexpected problems.
- To prevent malfunctions in advance, however, conducting the periodical maintenance service only is insufficient. It is essential that owners themselves perform maintenance, such as the pre-starting check described in the owner's manual, so that the vehicle exhibits no abnormal change or phenomenon.

Owners should obtain information from service advisor about the necessity of maintenance performed by themselves.

- However, malfunction may occur on those vehicles which are always checked by their owners. For instance, if a part which is instructed to be replaced periodically is used beyond its replacement interval and if the part is expired, there are cases where malfunction occurs suddenly despite the fact that no malfunction had taken place previously. To prevent such malfunction in advance, be sure to replace the parts recommended periodically at the specified replacement intervals.
- This section describe those items in the schedule maintenance service recommended by Perodua and their intervals. Be sure to observe the maintenance schedule.
- We at Perodua offer you a new-vehicle check when your new vehicle has been operated for 1,000 km since the registration date. Feel free to bring your new vehicle to an authorised Perodua Service Centre for this free but very important inspection service.

### **Pre-starting check**

For safe and comfortable driving, perform the pre-starting check.

- Engine oil quality and level
- Engine coolant level
- Brake fluid level
- Washer fluid level
- Drive belt
- Battery electrolyte level
- Tyre air pressure and wear
- Fluid leakage
- Lights operation
- Steering wheel
- Brakes
- Accelerator pedal

### While driving slowly:

- Speedometer and water temperature warning light
- Turning effort of steering wheel
- Brake function
- Other abnormal operations
- Whether the vehicle is pulling to one side while driving straight on a level road or when the brakes are applied.

### Scheduled maintenance

• Scheduled maintenance should be performed at specified intervals according to the maintenance schedule.

The interval for scheduled maintenance is determined by the odometer reading or the time interval, whichever comes first, shown in the schedule.

Maintenance beyond the last period should be performed at the same intervals.

Where to go for maintenance service? It makes good sense to take your vehicle to your local authorised Perodua Service Centre for maintenance service as well as other inspections and repairs.

Perodua mechanics are well-trained specialists receiving the latest service information through technical bulletins, service tips and in-dealership training programs. They learn to work on Perodua before they work on your vehicle, rather than while they are working on it. Doesn't that seem like the best way?

Your authorised Perodua Service Centre has invested a lot of money in special Perodua tools and service equipment. It helps them to do the job better and at less cost.

Your authorised Perodua Service Centre will perform all of the scheduled maintenance on your vehicle reliably and economically.

Rubber hoses (for cooling and heater system, brake system and fuel system) should be inspected by a qualified mechanic according to the Perodua maintenance schedule.

Rubber hoses are particularly important maintenance items. Have any deteriorated or damaged hoses replaced immediately. Note that rubber hoses will deteriorate with age, resulting in swelling, chafing or cracking.

### **Do-it-yourself maintenance**

What about do-it-yourself maintenance?

Many of the maintenance items are easy to do yourself if you have a little mechanical ability and a few basic automotive tools. Simple instructions for how to perform them are presented in this section.

Note, however, that some maintenance tasks require special tools and skills. These are best performed by qualified mechanics. Even if you are an experienced do-it-yourself mechanic, we recommend that repairs and maintenance be conducted by an authorised Perodua Service Centre who will keep a record of maintenance on your vehicle. This record could be helpful should you ever require Warranty Service.

Note that do-it-yourself maintenance service can affect your warranty coverage. See the Warranty Booklet for the details of warranty statements.

### Does your vehicle need repairs?

Be on the alert for changes in performance and sounds, and visual tip-offs that indicate service is needed. Some important clues are:

- Engine misses, stumbling or pinging
- Appreciable loss of power
- Strange engine noises
- A fluid leak under the vehicle (However, water dripping from the air conditioning system after use is normal.)
- Change in exhaust sound (This may indicate a dangerous carbon monoxide leak. Drive with the windows open and have the exhaust system checked immediately.)
- Flat-looking tyre, excessive tyre squeal when cornering, uneven tyre wear
- Vehicle pulls to one side when driven straight on a level road
- Strange noises related to suspension movement
- Loss of brake effectiveness, spongy feeling brake pedal, pedal almost touches the floor, vehicle pulls to one side when braking
- Engine coolant temperature continually higher than normal

If you notice any of these clues, take your vehicle to an authorised Perodua Service Centre as soon as possible. Your vehicle may need adjustment or repair.

### Maintenance records

Keep a copy of the invoice for any maintenance service performed on your Perodua.

It proves that all required maintenance had been performed for warranty coverage.

### WARNING

### If your vehicle is not properly maintained

Improper maintenance could result in serious damage to the vehicle and possible death or serious injury.

### Handling of the battery

Battery posts, terminals and related accessories contain lead and lead compounds which are known to cause brain damage. Wash your hands after handling.

## Scheduled maintenance

### Perform maintenance by the schedule as follows:

Maintenance schedule requirements

Your vehicle needs to be serviced in according to the normal maintenance schedule. (See "Maintenance schedule".)

### This maintenance schedule recommends the minimum required maintenance that you should perform to ensure trouble-free operation and to optimize the performance, reliability and safety of your vehicle. Follow the maintenance schedule provided.

If you mainly operate your vehicle under one or more of the special operating conditions below, some of the maintenance schedule items need to be serviced more frequently in order to keep your vehicle in good condition. (See "Maintenance schedule for SEVERE driving".)

Note that all the maintenance services are at owner's expense.

Severe driving conditions

- 1. Driving on rough roads, submerge roads or hilly areas
- Driving in a dusty area or in an area which is likely to be exposed to salty air
- 3. Engine idling for a long time
- 4. Use as a taxi or as a rental car
- 5. Towing of a trailer
- 6. Frequent application of brakes
- 7. Repeat short trips
- 50% or more operation time in heavy traffic in hot temperature of 32°C or higher

### Maintenance schedule for NORMAL driving

Follow the mileage and/or the period of the vehicle that has been driven, whichever comes first without any notice from an authorised Perodua Service Centre. Continue maintenance service after 100,000 km, following the schedule.

**NOTE**: PERODUA may change the contents without prior notification. Maintenance operations:  $\bigcirc$  = Inspect, correct or replace as necessary

	RVICE ERVAL			OD	OME.	FER F	READ	ING					
	ometer ding or months,	x1,000 km	1	10	20	30	40	50	60	70	80	90	100
	chever comes	Months	1	6	12	18	24	30	36	42	48	54	60
ENG	GINE												
1	Engine oil	Change		•		•	•	•	•	•	•	•	•
2	Drain Plug Gasket	Change		•	•	•	•	•	•	•	•	•	•
3	Engine oil filter	Change		•	•	•	•	•	•	•	•	•	•
4	Main unit	Condition of exhaust			0		0		0		0		0
4		Condition of air cleaner element			0		•		0		•		0
	Lubrication	Engine oil leakage	0		0		0		0		0		0
5	system	Engine oil condition and volume	0										
		Fuel filter				Re	eplace	e ever	y 6 ye	ears			
6	Fuel system	Fuel leakage	0				0				0		
		Coolant change					•				•		
		Coolant volume	0	0	0	0	0	0	0	0	0	0	0
7	Cooling system	Looseness and damage of drive belt			0		0		0		0		0
		Coolant leakage			0		0		0		0		0

• = Replace, change or lubricate

	RVICE ERVAL	ODOMETER READING											
	ometer ling or months,	x1,000 km	1	10	20	30	40	50	60	70	80	90	100
whic first.	chever comes .)	Months	1	6	12	18	24	30	36	42	48	54	60
STE	ERING SYSTEM												
8	Steering wheel	Abnormality during operation			0		0		0		0		0
9	Steering gear box	Loose installation steering gear box			0		0		0		0		0
10	Rod and arm	Looseness, damage and excessive play on the steering rod and arm			0		0		0		0		0
		Crack and damage on dust boots of ball joint			0		0		0		0		0
11	Front wheel	Wheel alignment					0				0		
BRA	AKE SYSTEM												
12	Brake fluid	Change									•		
13	Brake pedal	Free play and reserve travel	0	0	0	0	0	0	0	0	0	0	0
14	Parking brake	Working travel	0	0	0	0	0	0	0	0	0	0	0
15	Hose and pipe	Leakage, damage, installation condition of brake hose and pipe	0		0		0		0		0		0
16	Reservoir tank	Amount of brake fluid	0	0	0	0	0	0	0	0	0	0	0
	Master cylinder, wheel	Fluid leakage			0		0		0		0		0
17	cylinder and disc caliper	Function, wear and damage					0				0		

	RVICE ERVAL	ODOMETER READING											
	ometer ling or months,	x1,000 km	1	10	20	30	40	50	60	70	80	90	100
whic first.	chever comes	Months	1	6	12	18	24	30	36	42	48	54	60
BRA	AKE SYSTEM												
		Gap between brake drum and lining			0		0		0		0		0
18	Brake drum and brake shoe	Wear on sliding part and lining of brake shoe			0		0		0		0		0
		Wear and damage of brake drum					0				0		
		Gap between brake disc and pad			0		0		0		0		0
19	Brake disc and pad	Wear of brake pad			0		0		0		0		0
		Wear and damage of disc					0				0		
WH	EEL AND TIRE	-											
		Tire air pressure	0	0	0	0	0	0	0	0	0	0	0
20	Tire	Cracks and damages on tires	0	0	0	0	0	0	0	0	0	0	0
20	ine	Abnormal wear of tire	0	0	0	0	0	0	0	0	0	0	0
		Depth of tire groove	0	0	0	0	0	0	0	0	0	0	0
		Tightness of wheel nuts and bolts			0		0		0		0		0
21	Wheel	Excessive play of front wheel and bearing					0				0		
		Excessive play of rear wheel and bearing					0				0		
SUS	SPENSION SYST	EM											
22	Installation part and connecting	Looseness, damage on installation and connecting part of suspension					0				0		
23	Shock absorber	Oil leakage and damage on shock absorber					0				0		

	RVICE ERVAL		ODOMETER READING										
	ometer ling or months,	x1,000 km	1	10	20	30	40	50	60	70	80	90	100
	chever comes	Months	1	6	12	18	24	30	36	42	48	54	60
PO	VER TRANSMIT	TING SYSTEM											
		Change					Every	100,	000 k	m			
24	CVT fluid	Fluid leakage and fluid volume of transmission	0		0		0		0		0		0
25	Drain Plug Gasket	Change			Every	100,0	000 kr	n with	n CVT	fluid	chang	je	
26	Driveshaft	Looseness of drive shaft connecting part			0		0		0		0		0
20	Drivesnan	Crack, damage of universal joint dust boot			0		0		0		0		0
ELE	CTRICAL SYSTE	ĒM											
27	Ignition system	Spark plug				Repl	lace e	very	100,0	00 km	1		
		Volume of battery water	0	0	0	0	0	0	0	0	0	0	0
28	Battery	Connection condition of battery terminal		0	0	0	0	0	0	0	0	0	0
29	Electrical wiring	Looseness and damage on the connection part of electrical wiring					0				0		

	RVICE ERVAL		ODOMETER READING											
1.	ometer ling or months,	x1,000 km	1	10	20	30	40	50	60	70	80	90	100	
whic first.	hever comes	Months	1	6	12	18	24	30	36	42	48	54	60	
EMI	SSION PREVEN	TION DEVICE FOR TH	ON DEVICE FOR THE SOOTED, STENCHED GAS AND HARMFUL GAS											
	Blow-by gas	Metering valve condition					0				0			
30	recirculation device	Piping damage of the blow-by gas recirculation device					0				0			
	Fuel	Piping damage of fuel evaporized gas excretion suppression system					0				0			
31	evaporized gas excretion	Clog, damage of charcoal canister					0				0			
	suppression system	Check valve condition for fuel evaporated gas excretion suppression system					0				0			
32	Carbon monoxide emission prevention system	Looseness and damage on the installation part of the catalyst emission gas reducing system					0				0			

	RVICE ERVAL	ODOMETER READING											
1 -	ometer ling or months,	x1,000 km	1	10	20	30	40	50	60	70	80	90	100
whic first.	chever comes .)	Months	1	6	12	18	24	30	36	42	48	54	60
OTH	IERS												
33	Lighting device and direction indicator	Function of headlamp, stop lamp, winker lamp (lights on or blinking condition, dirt and damage)	0	0	0	0	0	0	0	0	0	0	0
		Horn operation		0	0	0	0	0	0	0	0	0	0
	Horn,	Wiper wiping condition		0	0	0	0	0	0	0	0	0	0
34	wiper and windshield washer, defroster and	Liquid volume and spraying condition of windshield washer		0	0	0	0	0	0	0	0	0	0
	steering lock	Defroster operation		0	0	0	0	0	0	0	0	0	0
		Steering lock operation		0	0	0	0	0	0	0	0	0	0
35	Exhaust pipe and muffler	Looseness and damage of the exhaust pipe and installation part of muffler			0		0		0		0		0
		Muffler function					0				0		
36	Body frame and vehicle body	Looseness and damage on frame body					0				0		
37	Air conditioner filter (cabin filter)	Change			•		•		•		•		•

### Additional maintenance schedule for SEVERE driving

**NOTE** : PERODUA may change the contents without prior notification.

	RVICE ERVAL	ODOMETER READING											
	ometer ding or months,	x1,000 km	1	10	20	30	40	50	60	70	80	90	100
	chever comes	Months	1	6	12	18	24	30	36	42	48	54	60
EN	GINE												
1	Engine oil	Change				Ever	y 5,00	0 km	or 3 r	nonth	s		
2	Drain Plug Gasket	Change				Ever	y 5,00	0 km	or 3 r	nonth	s		
3	Engine oil filter	Change				Ever	y 5,00	0 km	or 3 r	nonth	s		
4	Main unit	Condition of air cleaner element										•	
STE	EERING SYSTEM												
5	Steering gear box	Loose installation steering gear box		0	0	0	0	0	0	0	0	0	0
6	Rod and arm	Crack and damage on dust boots of ball joint		0	0	0	0	0	0	0	0	0	0
BR	AKE SYSTEM												
7	Hose and pipe	Leakage, damage, installation condition of brake hose and pipe	0	0	0	0	0	0	0	0	0	0	0
8	Brake drum and brake shoe	Wear on sliding part and lining of brake shoe		0	0	0	0	0	0	0	0	0	0
9	Brake disc and pad	Wear of brake pad		0	0	0	0	0	0	0	0	0	0

	VICE ERVAL			OD	OME.	TER F	READ	ING					
· ·	ometer ing or months,	x1,000 km	1	10	20	30	40	50	60	70	80	90	100
whichever comes first.)		Months	1	6	12	18	24	30	36	42	48	54	60
POV	VER TRANSMITT												
10	CVT fluid	Change	Every 50,000 km										
11	Drain Plug Gasket	Change	Every 50,000 km with CVT fluid change										

- 1. Driving on rough roads, submerge roads or hilly areas
- 2. Driving in a dusty area or in an area which is likely to be exposed to salty air
- 3. Engine idling for a long time
- 4. Use as a taxi or as a rental car
- 5. Towing of a trailer
- 6. Frequent application of brakes
- 7. Repeat short trips
- 8. 50% or more operation time in heavy traffic in hot temperature of 32°C or higher

## **Do-it-yourself service precautions**

# If you perform maintenance by yourself, be sure to follow the correct procedure as given in these sections.

### WARNING

The engine compartment contains many mechanisms and fluids that may move suddenly, become hot, or become electrically energized. To avoid death or serious injury, observe the following precautions.

### When working on the engine compartment

- If you are not well versed in servicing procedures given, do not attempt to check or adjust the components.
- Service your vehicle in a well-ventilated place.
- To help reduce the risk of serious bodily injury, remove any necklace, bracelet, ring, and so forth. Secure long hair behind your head. Also, keep hands, tools, clothes, and other objects away from the moving parts when the engine is running.
- Be careful not to touch the engine, radiator, exhaust manifold, drive belt, etc., right after driving as they may be hot. Oil and other fluids may also be hot.
- Do not leave anything that may burn easily, such as paper and rags, in the engine compartment.
- Do not smoke, cause sparks or expose an open flame to fuel or the battery. Fuel and battery fumes are flammable.
- Be extremely cautious when working on the battery. It contains poisonous and corrosive sulphuric acid.
- Take care because brake fluid can harm your hands or eyes and damage painted surfaces. If fluid gets on your hands or in your eyes, flush the affected area with clean water immediately.

If you still experience discomfort, consult a doctor.

- Keep children away from any fluid or oil.
- Check that any tool or cloth is not left when closing the hood. They may
  damage the components or even cause a fire while driving.
- Under no circumstances should the wiring be modified. Failure to follow this caution may cause malfunctioning components or even a fire.
- Use well-maintained tools to prevent bodily injury and damage to the components.

### WARNING

### When working near the electric cooling fan or radiator grille

 Be sure the engine switch is in off.
 With the engine switch in IGNITION ON mode, the electric cooling fan may automatically start to run if the air conditioning is on and/or the coolant temperature is high.

Do not touch or come close to the fan blades if you service your vehicle with the ignition turned "ON". The radiator fan switch is activated automatically when the coolant temperature reaches a certain level. Furthermore, the radiator fan will automatically start to rotate with the air conditioner on.

### Safety glasses

Wear safety glasses to prevent flying or falling material, fluid spray, etc. from getting in your eyes.

### CAUTION

- When checking the engine components, do not place things around the lower section of the windshield. If you place something, it may drop inside the engine, causing a malfunction.
- Before working on the electrical systems, wait at least 30 seconds after IGNITION OFF before disconnecting the battery terminal. Also, be careful not to short the terminals with a tool or other metal objects. It could cause battery damage.

### If you remove the air cleaner filter

Driving with the air cleaner filter removed may cause excessive engine wear due to dirt in the air.

### If the fluid level is low or high

It is normal for the brake fluid level to go down slightly as the brake pads wear or when the fluid level in the accumulator is high.

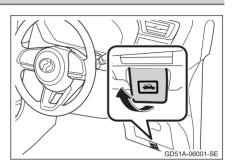
If the reservoir needs frequent refilling, it may indicate a serious problem.

## Hood

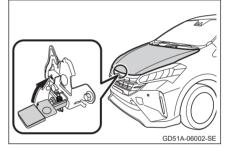
### The hood is opened by releasing the lock inside the vehicle.

### Opening the hood

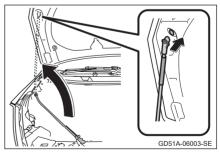
1 Pull the hood release lever The hood pops up slightly.



2 Open the hood by lifting the lever



3 Unlatch the supporting rod and insert it into the slot



### **Closing the hood**

- 1 Support the hood in one hand
- 2 Remove the supporting rod from its slot and latch it in place
- 3 Lower the hood gently and close by pushing it with your hands

### When disconnecting the battery

The information stored in the on-board computer system will be deleted when the battery is disconnected. Please consult an authorised Perodua Service Centre when disconnecting the battery.

### WARNING

### Pre-driving check

- Please make sure that the hood is securely locked. Driving without locking the hood may cause the hood to open suddenly, leading to serious injuries, even death.
- The supporting rod may be blown by strong wind causing the hood to close accidentally. Be careful when opening the hood, particularly on a strong windy day.

### While driving

If you notice that the hood is not securely locked, stop your vehicle immediately to the side of the road and latch the hood securely.

### To prevent injuries

The engine compartment will be very hot after driving. Coming into contact with hot components may cause serious injuries, including burns.

### Post inspection engine compartment check

Please make sure that there are no flammable materials left in the engine compartment before starting the engine. Make sure that there are no flammable materials in the engine compartment, for example small twigs brought in by small animals or birds, particularly if the vehicle is not in used for an extended period.

Flammable objects in the engine compartment may cause vehicle fire.

If there is a burning smell coming from the engine compartment while driving, stop the vehicle in a safe location immediately and contact an authorised Perodua Service Centre.

### Checking and replacing oil

Do not spill engine oil on other components, such as the alternator. Wipe the oil clean immediately if spilled. Spilled oil may lead to vehicle fire.

### WARNING

### When closing the hood

Please be careful not to trap your fingers. This may lead to serious injuries.



### CAUTION

### When opening the hood

- Do not open the hood with the front wipers up. The wipers may hit the hood and scratch it.
- Do not use tools to open the hood. It may damage the latch.

### When inspecting the engine compartment

Do not place objects around the bottom part of the windscreen. Objects dropped inside the engine component may cause damage.

### To prevent damage to the hood

Do not apply a strong force when closing the hood, for example by putting your weight on it.

The hood may be dented.

### When closing the hood

Remove the supporting rod from the slot and return it to its latch properly. Closing the hood with the supporting rod not properly latched may damage the hood and the rod.

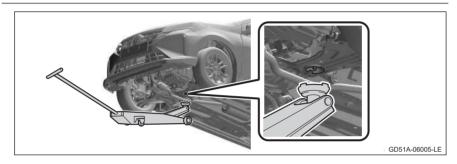
## Floor jack

When using a floor jack, follow the instructions in the manual provided with the jack and work safely.

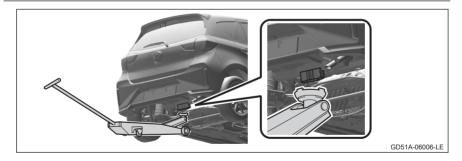
When raising the vehicle using a floor jack, position the jack correctly.

Incorrect placement may damage the vehicle or cause injuries.

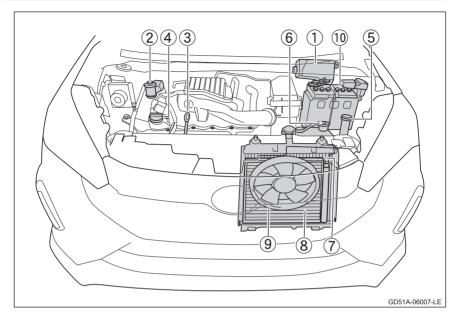
### Front



Rear



### **Engine compartment**



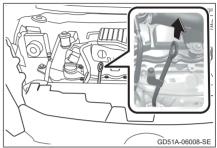
- ① Fuse box ( $\rightarrow$ P. 6-68)
- ② Brake fluid ( $\rightarrow$ P. 6-45)
- ③ Engine oil level dipstick ( $\rightarrow$ P. 6-29)
- ④ Engine oil filler cap ( $\rightarrow$ P. 6-30)
- (5) Washer fluid tank ( $\rightarrow$ P. 6-44)
- 6 Engine coolant reservoir ( $\rightarrow$ P. 6-34)
- ⑦ Radiator (→P. 6-36)
- (8) Condenser ( $\rightarrow$ P. 6-36)
- Electric cooling fan
- 10 Battery (→P. 6-40)

### Engine oil

With the engine at operating temperature and turned off, check the oil level on the dipstick.

### Checking the engine oil

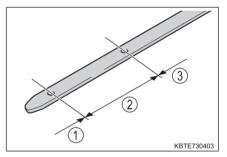
- 1 Park the vehicle on level ground. After warming up the engine and turning it off, wait more than 5 minutes for the oil to drain back into the bottom of the engine.
- 2 Holding a rag under the end, pull the dipstick out.



- 3 Wipe the dipstick clean.
- 4 Reinsert the dipstick fully.
- 5 Holding a rag under the end, pull the dipstick out and check the oil level.
  - $\textcircled{1} \quad \mathsf{Low}$
  - 2 Normal
  - ③ Excessive

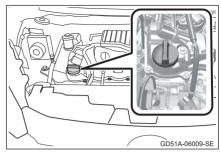
The shape of the dipstick may differ depending on the type of vehicle or engine.

<sup>6</sup> Wipe the dipstick and reinsert it fully.



### Adding engine oil

If the oil level is below or near the low level mark, add engine oil of the same type as that already in the engine.



Make sure to check the oil type and prepare the items needed before adding oil.

Engine oil selection	→P. 8-2
$\begin{array}{l} \text{Oil quantity} \\ (\text{Low} \rightarrow \text{Full}) \end{array}$	→P. 8-2
Items	Clean funnel

1 Remove the oil filler cap by turning it counterclockwise.

2 Add engine oil slowly, checking the dipstick.

Install the oil filler cap by turning it clockwise.

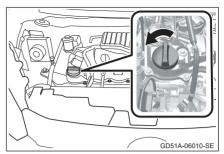
6

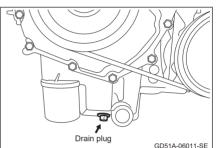
### Change engine oil

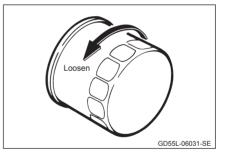
- 1 Park the vehicle on a level surface.
- 2 Remove the oil filter cap.

- 3 Place a container under the drain plug for draining engine oil.
- Remove the drain plug and gasket with a wrench, and allow the oil to drain completely.
   Wear protective glasses, if necessary.
- Loosen the oil filter with an oil filter wrench and remove it by hand.
- Apply a little new engine oil on the rubber gasket of the new oil filter.
- 7 Tighten oil filter 3/4 turn after gasket contacts mounting base. Tightening torque:  $10 \pm 2$  N.m ( $102 \pm 20$  kgf.cm)
- Reinstall the drain plug and new gasket.

Tighten the drain plug. Tightening torque: 29.5  $\pm$  5.9 N.m (301  $\pm$  60 kgf.cm)



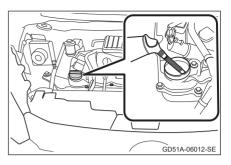




- Slowly pour engine oil.
   For recommended engine oil and its capacity. (→P. 8-2)
- 10 Install the oil filler cap by hand.
- 1 Wait for a few minutes and check the engine oil level.
- 12 Run the engine and check if engine oil is leaking from the oil filter or drain plug.

Any leak indicates improper installation of the oil filter or drain plug.

13 Turn the engine off and wait for a few minutes. Check the engine oil level again and add oil, if necessary.



### Engine oil consumption

A certain amount of engine oil will be consumed while driving. In the following situations, oil consumption may increase, and engine oil may need to be refilled in between oil maintenance intervals.

- When the engine is new, for example directly after purchasing the vehicle or after replacing the engine
- If low quality oil or oil of an inappropriate viscosity is used
- When driving at high engine speeds or with a heavy load, or when driving while accelerating or decelerating frequently
- When leaving the engine idling for a long time, or when driving frequently through heavy traffic

### WARNING

### Used engine oil

- Used engine oil contains potentially harmful contaminants which may cause skin disorders such as inflammation and skin cancer, so care should be taken to avoid prolonged and repeated contact. To remove used engine oil from your skin, wash thoroughly with soap and water.
- Dispose of used oil and filters only in a safe and acceptable manner. Do not dispose of used oil and filters in household trash, in sewers or onto the ground.

Call an authorised Perodua Service Centre, service station or auto parts store for information concerning recycling or disposal.

Do not leave used engine oil within the reach of children.

 Securely install the oil filler cap. If not, oil consumption may increase and engine oil may be splashed on the components, which may cause a fire.

### If engine oil is spilled

If oil is spilled on the alternator, wipe off the oil immediately. Oil spilled on the alternator will cause a fire.

### When the engine is hot

Be careful not to burn yourself with hot engine oil or hot engine components.

### CAUTION

### To prevent serious engine damage

Check the oil level on a regular basis.

### When replacing the engine oil

- Be careful not to spill engine oil on the vehicle components.
- Avoid overfilling, or the engine could be damaged.
- Check the oil level on the dipstick every time you refill the vehicle.
- Be sure the engine oil filler cap is properly tightened. Do not overtighten the oil filter and drain plug. It could cause oil leakage.
- Wash your hand thoroughly.

### Oil filter change

Use only Perodua genuine oil filter for your Perodua.

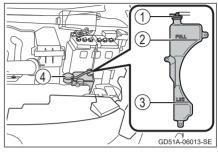
When it needs to be replaced, be sure to replace it at the authorised Perodua Service Centre.

### **Engine coolant**

### Checking the engine coolant

The coolant level is satisfactory if it is between the "FULL" and "LOW" lines on the reservoir when the engine is cold.

- ① Reservoir cap
- 2 "FULL" line
- ③ "LOW" line If the level is on or below the "LOW" line, add coolant up to the "FULL" line. (→P. 8-4)
- ④ Radiator cap



### Coolant selection

It is necessary to change the coolant at regular intervals.

For coolant capacity. ( $\rightarrow$ P. 8-4)

For more details about engine coolant, contact an authorised Perodua Service Centre.

### If the coolant level drops within a short time of replenishing

Visually check the radiator, hoses, engine coolant reservoir cap, drain cock and water pump.

If you cannot find a leak, have an authorised Perodua Service Centre test the cap and check for leaks in the cooling system.

# WARNING

#### When the engine is hot

Do not remove the radiator cap.

The cooling system may be under pressure and may spray hot coolant if the cap is removed, causing serious injuries, such as burns.

### When replacing the coolant

- To avoid coolant spilling on the alternator, do not remove the upper radiator hose from engine side (remove from the radiator side). Coolant spilled on the alternator will cause corrosion of the coil and a fire.
- Do not touch the cooling fan. The fan might rotate and it is dangerous.

## CAUTION

#### When adding coolant

- Follow the coolant manufacturer's instructions.
- To prevent aluminium corrosion, be sure to use a high-quality corrosion protection type (ethylene glycol base) long-life coolant.
- Refill the coolant mixture with the same volume drained from the vehicle.
- As for the coolant mixture concentration, keep it at ratio of 30% coolant and 70% soft water or demineralized water (reverse osmosis or distilled water).
- Coolant is neither plain water nor straight antifreeze. The correct mixture of water and antifreeze must be used to provide proper lubrication, corrosion protection and cooling. Be sure to read the antifreeze or coolant label.

### If you spill coolant

Be sure to wash it off with water to prevent it from damaging parts or paint.

## **Radiator and condenser**

Check the radiator and condenser and clear away any foreign objects. If either of the above parts is extremely dirty or you are not sure of their condition, have your vehicle inspected by an authorised Perodua Service Centre.



#### WARNING

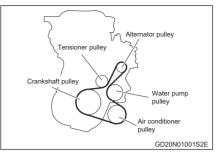
#### When the engine is hot

Do not touch the radiator or condenser as they may be hot and cause serious injuries, such as burns.

# **Drive belt check**

Turn the engine off and inspect the drive belt for cracks, excessive wear or oiliness.

Have any damaged belt replaced by an authorised Perodua Service Centre.



## WARNING

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Be careful not to burn yourself with hot engine components and radiator.

# Air filter cleaning and replacement

You can clean the air filter with compressed air.

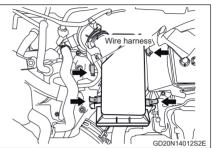
Apply compressed air only from the clean side of the air filter.

Replace the air filter, if necessary.

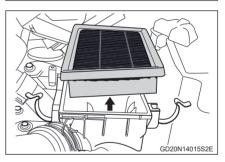
If the vehicle has been driven mainly in dusty areas, clean the air filter at intervals of 10,000 km.

Wipe the air filter case and seat with a soft cloth to remove dirt or dust.

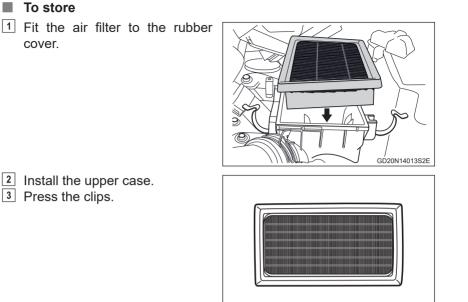
- 1 Detach the wire harness.
- 2 Unlock the 4 clips.
- 3 Lift the upper case.



4 Remove the air filter.



6



GD20N14014S2E

#### CAUTION

- Do not drive with the air cleaner element removed. Failure to observe this will cause excessive engine wear.
- Make sure the air filter is not exposed to oil. It may reduce the effectiveness of the element.

# Battery

## Check the battery as follows.

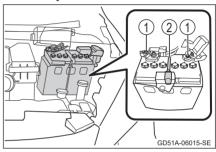
## Battery exterior

Make sure that the battery terminals are not corroded and that there are no loose connections, cracks, or loose clamps.

If the terminals of the battery are dirty, clean them with baking soda water and apply new grease on them.

If the terminals are loose, tighten them securely.

- 1 Terminals
- 2 Hold-down clamp



## Checking battery fluid

Check that the level is between the "UPPER LEVEL" and "LOWER LEVEL" lines.

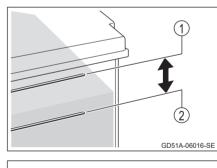
- ① "UPPER LEVEL" line
- (2) "LOWER LEVEL" line If the fluid level is at or below the "LOWER LEVEL" line, add distilled water.

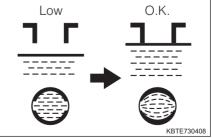
## Adding distilled water

- 1 Remove the vent plug.
- 2 Add distilled water.

If the "UPPER LEVEL" line cannot be seen, check the fluid level by looking directly at the cell.

3 Put the vent plug back on and close it securely.





#### Before recharging

When recharging, the battery produces hydrogen gas which is flammable and explosive. Therefore, observe the following before recharging:

- If recharging with the battery installed on the vehicle, be sure to disconnect the ground cable.
- Make sure the power switch on the charger is off when connecting and disconnecting the charger cables to the battery.

#### To prevent battery from running out

To prevent the battery from running out, observe the following precautions:

- Do not turn on the light or use the audio system for long periods when the engine is not running.
- Even when the engine is running, rev up the engine occasionally if the vehicle gets stuck in a traffic jam and does not move for long periods.

Low levels of battery fluid lowers the charging capacity of the battery and may result in a shorter service life. Check the battery fluid level occasionally and fill it up when necessary.

### WARNING

#### Chemicals in the battery

Batteries contain poisonous and corrosive sulfuric acid and may produce hydrogen gas which is flammable and explosive. To reduce the risk of death or serious injury, take the following precautions while working on or near the battery:

- Be very careful not to short the terminals of the battery with tools or other metal objects. If the battery terminals are shorted, it will cause the battery to overheat, and can cause damage or explosion.
- Do not cause sparks by touching the battery terminals with tools.
- Do not smoke or light a match near the battery.
- Avoid contact with eyes, skin and clothes.
- Never inhale or swallow electrolyte.
- Wear protective safety glasses when working near the battery.
- Keep children away from the battery.

#### Where to safely charge the battery

Always charge the battery in an open area. Do not charge the battery in a garage or closed room where there is insufficient ventilation.

### WARNING

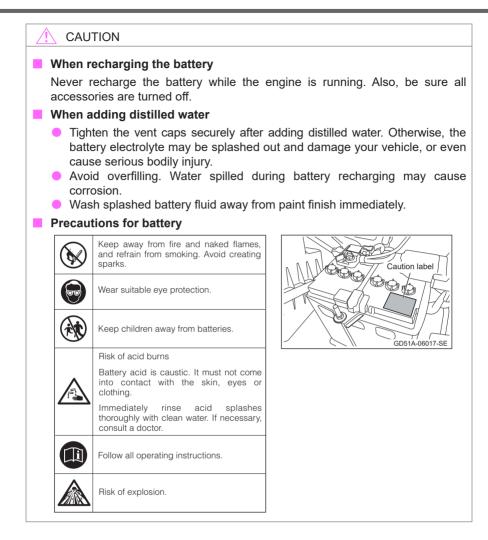
#### Emergency measures regarding electrolyte

If electrolyte gets in your eyes
Flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while traveling to the nearest medical facility.

If electrolyte gets on your skin
Wash the affected area thoroughly. If you feel pain or burning, get medical attention immediately.

If electrolyte gets on your clothes
It can soak through clothing on to your skin. Immediately take off the clothing and follow the procedure above if necessary.

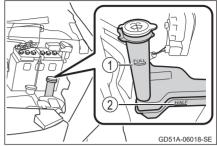
If you accidentally swallow electrolyte
Drink a large quantity of water or milk. Get emergency medical attention immediately.



# Washer fluid

The fluid level can be visually confirmed by looking at the side of the washer fluid reservoir. If the washer fluid is less than "HALF" line, add washer fluid to "FULL" line. ① "FULL" line

2 "HALF" line



## WARNING

### When adding washer fluid

- Always use clean washer fluid. Dirty fluid can cause clogging of the washer system or can block your vision.
- Do not add washer fluid when the engine is hot or running as washer fluid contains alcohol and may catch fire if spilled on the engine, etc.

#### CAUTION

#### Do not use any fluid other than washer fluid

Do not use soapy water instead of washer fluid.

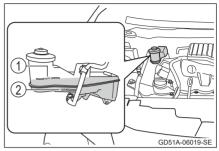
Doing so may cause streaking on the vehicle's painted surfaces, as well as damaging the pump leading to problems of the washer fluid not spraying.

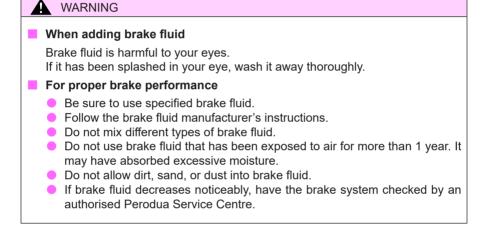
## Brake fluid

Check the brake fluid level is between the "MAX" and "MIN" lines.

- ① "MAX" line
- 2 "MIN" line

If the fluid level is at or below the "MIN" line, add brake fluid to the "MAX" line.



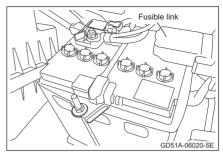


## CAUTION

Wipe away spilt fluid thoroughly to prevent paint damage.

# **Fusible link check**

If excessive amount of current should run from the positive terminal of the battery to the headlight circuit or the ignition switch circuit, the fusible link will blow to prevent a fire. Immediately call an authorised Perodua Service Centre to repair the system.



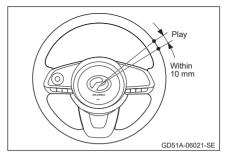
## WARNING

Never install anything in place of a fusible link even temporarily. It may cause extensive damage to the vehicle and a fire.

# Steering wheel free play check

Move the steering wheel lightly from straight-ahead position to right and left until you feel resistance, and measure the free play.

Check to see that the free play is within the specification.



## WARNING

If the free play is not within the specification, have the system checked immediately by an authorised Perodua Service Centre.

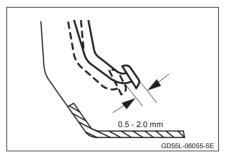
# Brake pedal

## Brake pedal free play check

Turn the engine off and depress the brake pedal more than five times to release vacuum in the brake booster.

Measure the play of the pedal by pulling the brake pedal toward your side.

Check to see that the free play is within the specification.

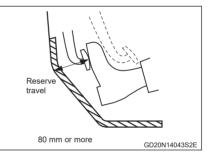


# Brake pedal reserve travel check

- 1 Park the vehicle on a level surface.
- 2 Shift the lever to P.
- 3 Release the parking brake.
- With the engine running, depress the brake pedal several times.
- Depress the brake pedal with a force of 294 N (66 lbf, 30 kgf), and measure the distance between the top of the brake pedal and the bulkhead.
- 6 Check to see that the reserve travel is within the specification.
- 7 Check also to see that the reserve travel remains the same.

## WARNING

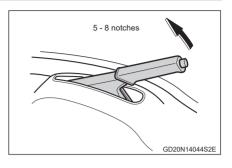
If the free play and reserve travel is not within the specification, have the system checked immediately by an authorised Perodua Service Centre.



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## Parking brake reserve travel check

- 1 Park the vehicle on a level surface.
- 2 Shift the lever to  $\mathbb{P}$ .
- 3 Firmly depress the brake pedal.
- 4 Fully release the parking brake.
- Full the parking brake lever up slowly, and count the notches with a force of 196 N (44 lbf, 20 kgf).
- Check that the number of notch is within the specification (5 - 8 notches).



#### WARNING

If the number of notches is not within the specification, have the system checked immediately by an authorised Perodua Service Centre.

# Brake booster operation check

- 1 Park the vehicle on a level surface.
- 2 Shift the lever to  $\mathbb{P}$ .
- 3 Stop the engine and depress the brake pedal several times until the travel distance does not change.
- 4 Start the engine with the brake pedal depressed. The brake pedal should move down slightly.
- 5 Stop the engine with the brake pedal depressed. Hold the pedal for about 30 seconds. The pedal should not move.
- 6 Start the engine and stop it after about a minute. Firmly depress the brake pedal several times. The pedal travel distance should decrease with each application.

## WARNING

If you notice any malfunction, have the system checked immediately by an authorised Perodua Service Centre.

# Tyres

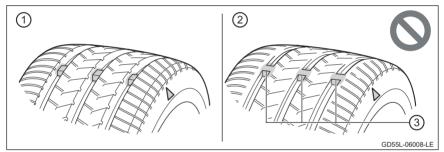
The vehicle owner is responsible for inspecting the tyres. Please check the tyres as a routine inspection.

To equalize tyre wear and extend tyre life, rotate the tyres (change the tyre positions) every 10,000 km.

## **Checking the tyres**

Please check the tyres for the following items.

- Tyre inflation pressure Inflation pressure should be checked when the tyres are cold.
- Check the tyres for cracks and damage
- Check the depth of the tread
- Abnormal wear and tear on the tyres. For example, only one side of the tyre is extremely worn, or the wear varies significantly from other tyres



- ① New tread
- 2 Worn tread
- ③ Treadwear indicator

The location of treadwear indicators is shown by a " $\Delta$ " mark, etc., molded into the sidewall of each tyre.

Replace the tyre if the treadwear indicators are showing on a tyre.

## How to rotate the tyres

Tyre rotation is done as shown in the diagram.

To equalize tyre wear and extend tyre life, Perodua recommends tyre rotation at every regular maintenance.

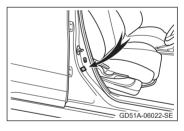
After rotating the tyres, adjust the pressure to the specified inflation pressure.

Front	
	KBTC620401

#### Tyre inflation pressures

Tyre size	Inflation pressure when the tyre is cold kPa (kg/cm²)	
	Front wheels	Rear wheels
175/65R14	250 (2.5)	250 (2.5)
185/55R15	220 (2.2)	220 (2.2)

The specified tyre inflation pressure can be confirmed by referring to the tyre inflation pressure sticker located on the opening of the driver's door.



### Tyre inflation pressure inspection

- Once a month, using inflation pressure gauge.
- Always adjust the pressure to the appropriate specified inflation pressure.

#### When to replace your vehicle's tyre

Tyre should be replaced if:

- The treadwear indicators are showing on a tyre.
- You have tyre damage such as cuts, splits, cracks deep enough to expose the fabric, and bulges indicating internal damage.
- A tyre goes flat repeatedly or cannot be properly repaired due to the size or location of a cut or other damage.

If you are not sure, consult with an authorised Perodua Service Centre.

#### Tyre life

Any tyre over 6 years old must be checked by a qualified mechanic even if it has seldom or never been used or damage is not obvious.

## When replacing tyre related components

Please consult an authorised Perodua Service Centre when replacing the tyre, disc wheel and wheel nuts.

## Tyre rotation

Please consult an authorised Perodua Service Centre to perform the tyre rotation.

WARNING
<ul> <li>When inspecting and replacing tyres         The following warnings must be observed.         Failure to do so may cause damage to the drive train components and unstable handling features that can lead to serious injuries, even death.         All tyres should be of the same make, brand and tread pattern without any difference in treadwear     </li> </ul>
<ul> <li>Do not use tyres and wheels in different size than the size specified by the manufacturer</li> <li>Do not mix and use radial tyres, bias belted tyres, and bias ply tyres</li> <li>Do not use tyres used on other vehicles Do not use tyres that are not clearly known how they were used previously</li> <li>Drive at a moderate speed for the first 160 km as a new tyre does not have maximum traction</li> </ul>
Use of faulty tyres is prohibited
<ul> <li>Installing faulty tyres may cause the driver to lose control of the steering or feel abnormal vibration while driving. It may also lead to the following incidents that can result in unexpected accidents.</li> <li>Cause irreparable damage, such as ruptured tyres</li> <li>Skidding</li> </ul>
<ul> <li>The vehicle unable to display its potential performance (for example, fuel consumption, vehicle safety and braking distance)</li> </ul>

## 

## If the air leaks while driving

Do not continue driving. The tyre or wheel may be damaged.

### Driving on rough roads

Please be careful when driving on bumpy or rough roads. The air may leak out of the tyre, reducing the tyre cushioning effect. Driving on rough roads may also damage the tyres, wheels, and vehicle body.

# Tyre inflation pressure

In order to maintain appropriate tyre inflation pressure, tyre inflation pressure should be checked at least once a month. However, Perodua recommends that tyre inflation pressure be checked once every two weeks. ( $\rightarrow$ P. 8-5)

### Tyre inflation pressure is not proper

Driving with tyre inflation pressure not properly adjusted may lead to the following situations.

- Deteriorating fuel consumption
- Decreased riding and handling stability
- Decreased tyre life due to wear
- Reduced safety
- Damage to the drive train

If the tyre inflation pressure drops frequently, please have the tyre inspected at an authorised Perodua Service Centre.

#### How to check tyre inflation pressure

Please observe the following precautions when checking tyre inflation pressure.

- Check the pressure when the tyres are cold If your vehicle has been parked for at least 3 hours or has not been driven for more than 1.5 km or 1 mile, you will get an accurate cold tyre inflation pressure reading.
- Always use tyre inflation pressure gauge
   It is impossible to determine whether the inflation pressure is appropriate or
   not just by looking at the tyres.
- The tyre inflation pressure will increase after driving because of the heat. This
  is normal, do not depressurize.
- Avoid applying uneven load when loading baggage or when there are many occupants.

## WARNING

## To display tyre performance

Please maintain proper tyre inflation pressure.

Not maintaining proper tyre inflation pressure may lead to the following situations, resulting in serious injuries, even death.

- Excessive wear
- Uneven wear
- Reduced handling stability
- Ruptured tyre caused by excessive heat
- Air leaking between the tyre and wheel
- Deformed wheels and damaged tyres
- Increased risk of tyre damage while driving (Obstacles on the road, road joints, bumps, etc.)

## CAUTION

## After checking and adjusting tyre inflation pressure

Be sure to put the tyre valve caps back on.

Without the valve cap, dust and water may get into the valve causing the air to leak and reduce the tyre inflation pressure.

# Wheels

If a wheel is bent, cracked or heavily corroded, it should be replaced. Otherwise, the tyre may separate from the wheel or cause a loss of handling control.

# Wheel selection

When replacing wheels, care should be taken to ensure that they are equivalent to those removed in load capacity, diameter, rim width and inset\*.

Replacement wheels are available at an authorised Perodua Service Centre.

\*: Conventionally referred to as "offset".

Perodua does not recommend using the following:

- Wheels of different sizes or types
- Used wheels
- Bent wheels that have been straightened

## Aluminium wheel precautions

- Use only Perodua wheel nuts and wrenches designed for use with your aluminium wheels.
- When rotating, repairing or changing your tyre, check that the wheel nuts are still tight after driving 1,600 km (1000 miles).
- Use only genuine balance weights or equivalent and use a plastic or rubber hammer when balancing your wheels.

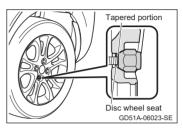
# WARNING

## When replacing wheels

- Do not use wheels that are a different size from those recommended in the Owner's Manual, as this may result in a loss of handling control.
- Never use an inner tube in a leaking wheel which is designed for a tubeless tyre. Doing so may result in an accident, causing death or serious injury.

## When installing the wheel nuts

Be sure to install the wheel nuts with the tapered ends facing inward. Installing the nuts with the tapered ends facing outward can cause the wheel to break and eventually cause the wheel to come off while driving, which could lead to an accident resulting in death or serious injury.



Never use oil or grease on the wheel bolts or wheel nuts.

Oil and grease may cause the wheel nuts to be excessively tightened, leading to bolt or disc wheel damage. In addition, the oil or grease can cause the wheel nuts to loosen and the wheel may fall off, causing an accident and resulting in death or serious injury. Remove any oil or grease from the wheel bolts or wheel nuts.

### Use of defective wheels prohibited

Do not use cracked or deformed wheels.

Doing so could cause the tyre to leak air during driving, possibly causing an accident.

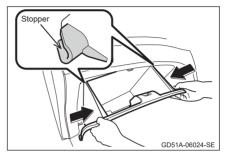
6

# Changing air conditioner filter

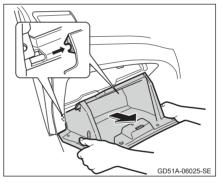
The air conditioner filter should be changed regularly for comfortable air conditioner use.

# How to change

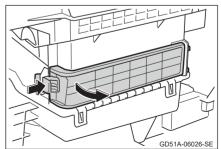
- 1 Set the engine switch to 'OFF'
- 2 Open the glove box door and pull it out further while squeezing the sides until the stoppers on both ends are released.



3 Remove the glove box by disengaging the claws at the bottom.

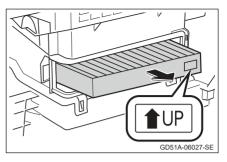


4 Remove the filter cover.



5 Remove the air conditioning filter and replace it with a new one.

The "<sup>1</sup>UP" mark shown on the filter should be pointing up.



# Changing the air conditioner filter Air conditioner filter should be changed based on the following interval. Every 20,000 km If the air flow from the air conditioner decreases The filter may be clogged. Please change the filter. When installing the glove box Ensure that the claws are completely engaged. Then, close the box. If the lower claw is not completely engaged, the box will not open. WARNING Δ When using the air conditioner • Using the air conditioner without filter may damage the air conditioner. Always install the filter. The filter is a replaceable filter. Do not clean it by washing it with water or blowing air. When replacing the air conditioning filter Do not mistake the front side and back side of the filter.

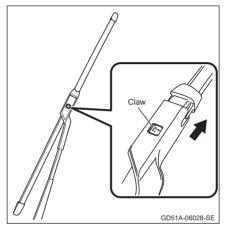
# **Replacing wipers**

When replacing the wiper rubber, please operate each of the wiper part as follows

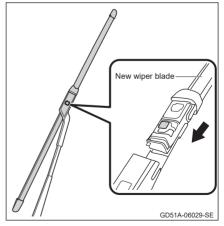
# **Front wipers**

## Removing and attaching front wiper blades

- 1 Raise the wiper arm from the windshield.
- Press the claw and unlock the wiper blade to separate it from the arm.

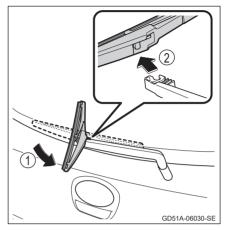


- 3 Install the new wiper blade by mounting it into the same end where the old wiper was pulled out.
- 4 Make sure the claw snaps into place to secure it.



# **Rear wiper**

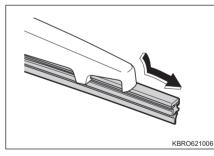
- Removing and attaching rear wiper blade
- 1 Lift the wiper arm and remove the wiper blade
  - ① Turn the wiper blade until the claw interlock slid off
  - ② Remove the wiper blade from the wiper arm



To reattach the wiper blade, repeat procedure 1 in a reverse order To return the wiper arm to its original position, hold it in your hand and return it gently. After attaching the wiper blade, make sure that the connecting part is securely locked.

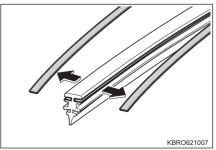
## Replacing rear wiper rubber

1 Pull out the wiper rubber from the wiper blade latch and continue pulling



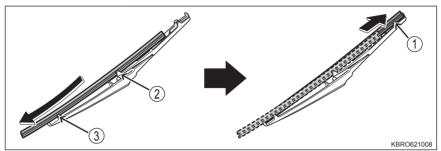
Detach the 2 pieces of metal plates from the old wiper rubber and attach them to the new wiper rubber

Attach the metal plates while paying attention to the direction of the curve.

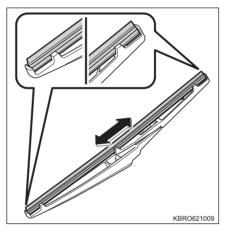


Insert the wiper rubber through claw ② on the wiper blade. After passing through claw ③, squeeze the rubber from the latch and pass it through the remaining claw ①

Coating the wiper rubber with a small amount of washer fluid will make it easier to insert it into the groove.



- 4 Check whether the wiper blade claw is inserted into the wiper rubber groove
  - If the wiper blade claw is not inserted into the wiper rubber groove, grab the wiper rubber and slide it several times to insert it into the groove.
  - It is easier to slide the wiper rubber by lifting it slightly in the middle.



#### Handling the wiper blades and rubber

Mishandling the wiper blades and rubber may damage them. If you are unsure about replacing the wiper blades or wiper rubber yourself, please consult an authorised Perodua Service Centre.

## WARNING

Make sure the ignition switch is in "OFF", before replacing the wiper blades.

### 

- To prevent damage to the wiper arm, raise the driver's side first, then the passenger's side. Conversely, when setting down the wiper arms, set the passenger's side down first.
- Do not open the hood when the wiper arms are raised. This could damage the hood and the wiper arms.
- Lifting the wipers by holding only the blade may deform the blade. Always lift the wipers by holding the wiper arm.
- Be careful not to damage the claw when changing the wipers.
- After removing the wiper blade from the wiper arm, place a piece of cloth between the rear window and the wiper arm so that the rear window will not be scratched.
- Do not pull the wiper rubber unnecessarily. Be careful not to deform the wiper rubber metal plates.

# Replacing smart key battery

Replace the battery with a new one when it is depleted.

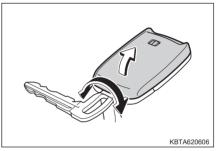
# You will need:

- A thin flathead screwdriver (wide enough to fit into the recess)
- Emergency keys
- Lithium battery CR2032

# How to change the battery

- 1 Take out the emergency key ( $\rightarrow$ P. 3-1)
- Remove the cover Remove with the brand logo facing downward. Securely and fully insert the emergency key.

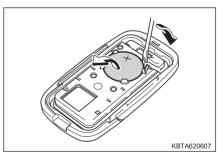
To prevent scratches, protect the emergency key, etc. by wrapping it with cloth or something similar.



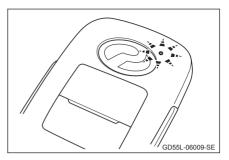
3 Take out the depleted battery To prevent scratches, wrap the sharp end of the flat-head screwdriver with cloth or something similar.

> The battery may be hidden because the module (substrate) of the smart key is attached to the upper cover when the cover is removed. In this case, turn over the module (substrate) of the smart key so that the battery is visible as shown in the diagram. Then, continue the removal.

Place the new battery with the + pole facing up.



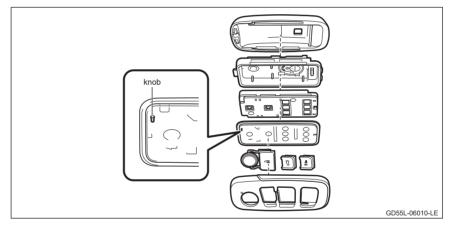
Install the cover Check that the indicator flashes when the button is pressed



### Replacing the battery

Mishandling may damage the key. If you are unsure about replacing battery yourself, please consult an authorised Perodua Service Centre.

#### If the smart key components come apart Assemble them by referring to the diagram. When assembling, place the knob downward.



#### Purchasing Lithium battery CR2032

The battery can be purchased at an authorised Perodua Service Centre, watch or camera shops.

#### When the smart key battery is depleted

The following signs can be seen.

- The key-free system and wireless function are not working.
- Effective range becomes shorter.
- The indicator does not flash.

6

# WARNING

## Removed battery and other parts

Keep away from children.

These parts are small and if accidentally swallowed by children can cause choking, resulting in serious injuries, even death.

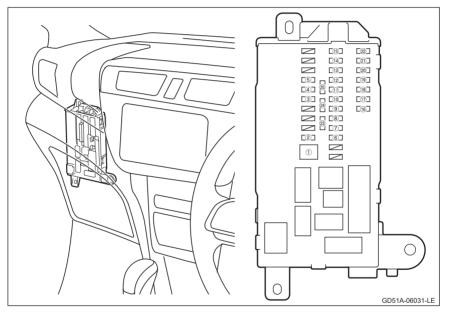
CAUTION			
Things to keep in mind about replacing the battery			
<ul> <li>Be sure to use the correct battery. Wrong battery can cause the smart key to malfunction.</li> </ul>			
Always discharge the static electricity on your body or clothes when replacing the battery. Static electricity may damage the key. If static electricity discharges, either prepare something that can eliminate static electricity beforehand or touch something metal.			
For proper function after replacing the battery			
<ul> <li>The following warning must be observed.</li> <li>Do not replace the battery with wet hands. Wet hands can cause rust.</li> </ul>			
<ul> <li>Do not touch or move other components than the battery.</li> <li>Do not bend the battery terminals.</li> </ul>			

# Checking and replacing fuses

If the lights do not turn on or any electrical components are not working, a fuse may have blown. When replacing the fuse, use the specified fuse shown in the label attached on the rear of the glove box and/or on the cover of the fuse box (engine compartment).

# Fuse location and fuse arrangement

#### Main fuse block

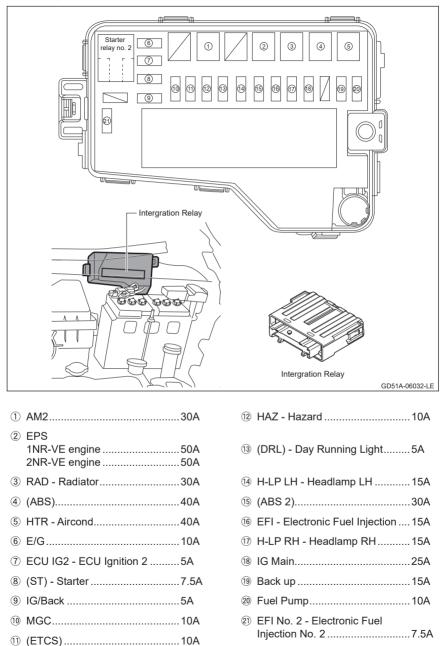


6

1	P/W No. 2	30A
2	DEF - Defogger	20A
3	ACC	10A
4	Washer	15A
(5)	HORN	10A
6	BACK UP2 No. 2	10A
7	Strg Lock	10A
8	AM 1	5A
9	P/W	20A
10	D/L No. 2	5A
11	P/Outlet	15A
(12)	STOP	10A
(13)	D/L - Door Lock	15A

(14	Meter - IG1	.10A
(15	ECU - IG1	.7.5A
(16	Wiper	.25A
17	IG1 No. 2	.7.5A
(18	OBD	.10A
(19	DOME	.10A
20	WIPER RR	.10A
21	AM2	.7.5A
22	TAIL	.10A
23	Spare	.10A
24	Spare	.15A
25	Spare	.20A

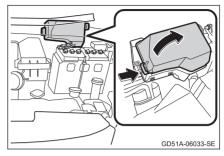
# Relay and fuse box



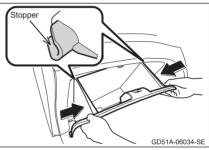
(): The equipment may vary according to the vehicle grade and options.

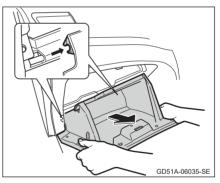
# Fuse check and replacement

- 1 Set the engine switch to 'OFF'
- 2 Open the fuse box
- Engine compartment Lift the cover while pressing the tab

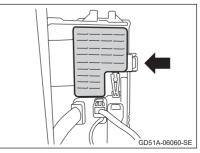


- Passenger's side instrument panel
  - Open the glove box door and pull it out further while squeezing the sides until the stoppers on both ends are released.
  - ② Remove the glove box by disengaging the claws at the bottom.

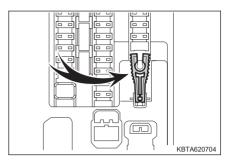




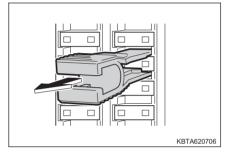
3 Remove the fuse cover by pressing the claw as shown in the illustration.



4 Take out the fuse puller from the fuse box at the passenger seat foot space



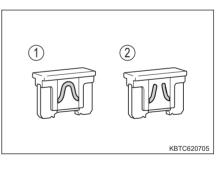
5 Clamp on the fuse with the fuse puller and pull to remove



- 6 Check to see if the fuse has blown
  - $\textcircled{1} \quad \text{Normal fuse} \quad$

The problem may be somewhere else. Please have your vehicle inspected at an authorised Perodua Service Centre.

② Blown fuse Following the direction on the fuse box, replace using a fuse with specified capacitance.



Attach the fuse by repeating the procedure for removal in a reverse order



#### After replacing the fuse

- Replace the bulbs if the lights do not turn on even after replacing the fuse. (→P. 6-74)
- After replacing the fuses, if the fuses blow again or any electrical components are not working, please have the vehicle inspected at an authorised Perodua Service Centre.

#### Excessive load on the battery circuit

The fuses are designed to blow before the wiring is damaged.

#### When replacing the bulbs

Use Perodua genuine bulbs specific for the vehicle. Some of the bulbs are connected to circuits designed to prevent overload. Therefore, non-genuine parts or parts not specified for this vehicle may be unusable.

#### WARNING

#### Preventing vehicle damage and vehicle fire

Please observe the following warnings.

- Failure to do so may result in vehicle damage and fire.
- Never install anything in place of a fuse even temporarily.
- Do not use fuses with different capacitance or objects other than fuses.
- Always use genuine Perodua parts or its equivalent.
- Do not modify the fuse or fuse box.

## 

#### Before replacing the fuse

- Locate the cause and rectify the problem before installing a new fuse. If you cannot, have the system checked by an authorised Perodua Service Centre.
- If it is necessary to disconnect the battery negative terminal, wait at least 30 seconds after IGNITION OFF before disconnecting the battery terminal. This is to avoid any engine abnormality due to lost of memorized data from EFI-ECU. The preset data of the clock and radio, will be lost too. Service information will disappear for several seconds. Please have the vehicle checked at an authorised Perodua Service Centre.
- If it is determined that electrical overload is causing the fuse to blow, please have the vehicle checked at an authorised Perodua Service Centre.

# **Replacing light bulbs**

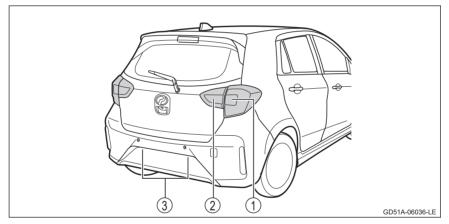
You may replace the following bulbs yourself. The difficulty level of replacing the light bulbs vary depending on the bulb. However, Perodua recommends having the bulbs replaced at an authorised Perodua Service Centre to prevent damage to the parts.

# Prepare the bulbs

Check the wattage (W) of the bulb to be replaced. ( $\rightarrow$ P. 8-6)

# **Bulb locations**

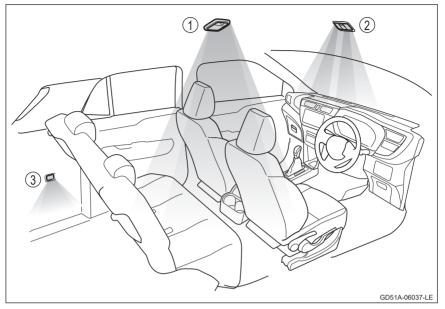
#### Rear



- ① Rear turn signals/hazard lights
- 2 Reversing lights/back up lights
- ③ License plate light

6

# Interior



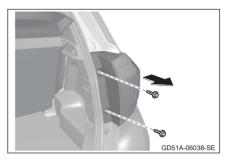
- ① Room light (rear)
- Front personal light/room light (front)
- ③ Luggage light

# How to replace the bulbs

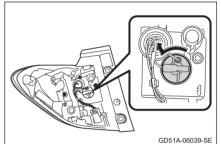


#### Rear turn signals/hazard lights

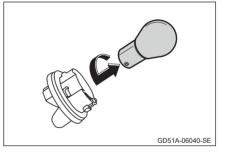
- 1 Open the back door.
- 2 Remove the bolts, and then remove the light unit by pulling it straight toward the rear of the vehicle.



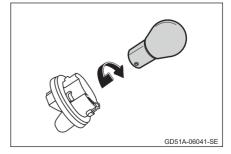
3 Turn the bulb base counterclockwise.



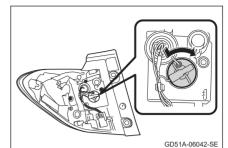
4 Remove the light bulb.



5 Attach a new light bulb.

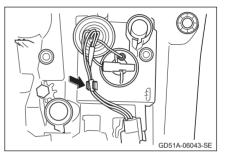


Install the light bulb by turning its bulb base.

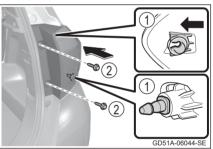


7 Check that the electrical wires are securely fastened to the light unit.

If the wires are loose, fasten them with the clamp as shown in the illustration.

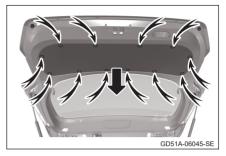


- 8 Install the light unit.
  - Position the light unit on the vehicle body by engaging the positioning pins and tabs.
  - ② Push the light unit straight toward the front of the vehicle and secure it in place using the 2 bolts.

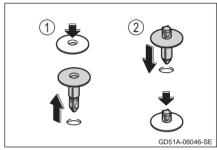


# Reverse lights/Back-up lights

- 1 Open the back door.
- Remove the clips and then remove the back door trim cover.



- 1 Remove the clips.
- 2 Insert the clips.



3 Turn the bulb base counterclockwise.



4 Remove the light bulb. 1 PE GD51A-06048-SE 5 Attach new light bulbs. FE GD51A-06049-SE 6 Install the light bulb by turning its bulb base.

GD51A-06050-SE

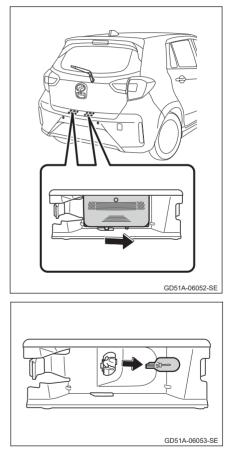
7 Secure the back door trim cover using the clips.



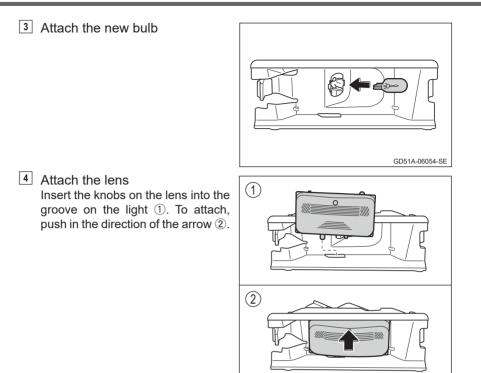
# License plate lights

<sup>2</sup> Detach the bulb

1 Slide and remove the lens

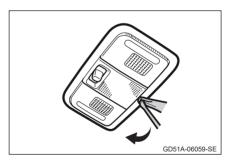


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## Room light (front)

1 Remove the lens by pushing it in the arrow headed direction.



GD51A-06055-SE

2 Remove the light bulb



3 Attach a light bulb and install the lens



- Room light (rear) Room light (rear)
- 1 Remove the lens by pushing it in the arrow headed direction.



2 Remove the light bulb



3 Attach a light bulb and install the lens

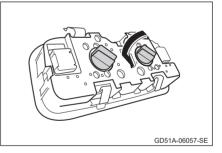


# Front personal light

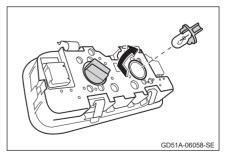
1 Remove the front personal light assembly by pushing it in the arrow headed direction.



2 Remove the bulb socket by turning it counterclockwise about 45 degrees.

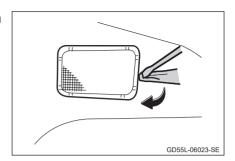


- Remove the bulb from socket by pulling it.
- 4 Change the bulb.
- 5 Attach the bulb socket by turning it clockwise about 45 degree.

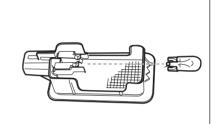


# Luggage light

1 Remove the lens by using a suitable tool.

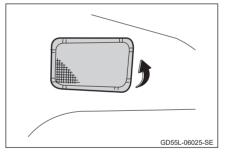


2 Pull the bulb to remove.



GD55L-06024-SE

3 Change the bulb and install the lens.



# Other bulbs

Replace the following bulbs at an authorised Perodua Service Centre.

- Headlight high beam/low beam
- Clearance lights
- Front turn signals/hazard lights
- Side turn signals/hazard lights
- Day Running Lights (DRL)\*
- Brake light/tail lights
- High mount stop light

# LED lights

The headlight high beam/low beam, clearance lights, front turn signals/hazard lights, side turn signals/hazard lights, Day Running Lights (DRL)\*, brake light/tail lights and high mount stop light consist of several units of LED. If even one of the LEDs does not turn on, please have it replace at an authorised Perodua Service Centre.

## Condensation build-up inside the lens

Temporary condensation build-up inside the lens does not affect functions. However, please consult an authorised Perodua Service Centre in the following situations:

- Large water drops inside the lens
- Water accumulating inside the lights
- When replacing the bulbs

→P. 6-74

# WARNING

## When replacing the bulbs

- Turn the engine off before replacement.
- Please turn off the lights. Do not replace the bulbs right after turning the lights off because the bulbs are hot.

This may lead to burns or electric shock.

Do not touch the glass part of the bulb with bare hands. If holding the glass part is unavoidable, hold it using a dry, clean cloth or something similar to prevent leaving moisture and oils on the bulb. Dropping or scratching the bulb may cause it to blow or crack.

Firmly attach the bulbs and the components securing the bulbs. Not attaching these parts firmly may cause the bulb to heat up and ignite, or the inside of the headlights may be damaged by water seeping in and condensation build-up inside the lens.

Do not repair or disassemble the bulbs, socket, electrical circuits and their components.

Electrical shock may lead to serious injuries, even death.

- Keep children away from a bulb.
- Be careful not pinch the wire connector when you reinstall.

## Preventing vehicle damage and fire

- Make sure that the bulbs are securely installed in their correct positions.
- To prevent damage caused by heat build-up, check the bulb wattage before replacing the bulb.

# CAUTION

After replacement, turn the light switch on to see that the light will be illuminated. If a bulb requires frequent replacement, have the system checked by an authorised Perodua Service Centre.

We recommend keeping a set of spare bulbs. Bulbs are available at an authorised Perodua Service Centre.

# In the event of an emergency

7

# **Essential information**

If the vehicle breaks down	. 7-1
Hazard lights	
(Emergency flashers)	. 7-2
If the vehicle has to be	
stopped in an emergency	. 7-3
If the vehicle is trapped in	
rising water	. 7-4
Steps to take in an emergency	
Towing	. 7-5
If a warning light lights up	. 7-12
When warning messages	
are displayed*	. 7-20
If "Function OFF Code"	
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If you have a flat tyre	
If the engine will not start	
If the smart key does not	
operate properly	. 7-55
If the battery is depleted	. 7-57
If the vehicle overheats	. 7-61
If the vehicle is stuck	

# If the vehicle breaks down

# If the vehicle breaks down, please follow these instructions immediately.

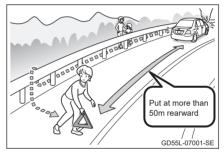
Turn on the hazard lights ( $\rightarrow$ P. 7-2), pull over to the side of the road and stop the vehicle.

The hazard lights are used to warn other drivers when the vehicle has to be stopped on the road due to reasons, such as a breakdown.



Follow these instructions if you are on an expressway or motorway

- Evacuate the occupants
- Place a triangle hazard sign at 50 m or more from the rear of the vehicle
- Then, evacuate to a safe place, for example over the guardrail



#### Triangle hazard sign

 Displaying a triangle hazard sign is required by the law if the vehicle has to be stopped on an expressway or a motorway.

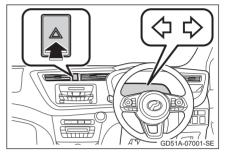


# Hazard lights (Emergency flashers)

# Please use the hazard lights to warn other drivers if the vehicle has to be stopped on the road for reasons, such as a breakdown.

Push the button.

All turn signals will flash. Pushing the button again will turn off the lights.



## CAUTION

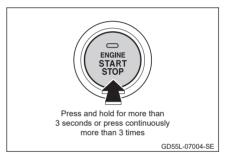
#### Hazard lights

If the hazard lights are used for an extended period while the engine is not running, the battery may be depleted.

# If the vehicle has to be stopped in an emergency

# The following procedure can only be used to stop the vehicle in an emergency when the vehicle cannot be stopped in the usual way.

- 1 Continuously press the brake pedal firmly with both feet Do not press the brake pedal repeatedly. Stronger force is required than usual and the braking distance will be longer.
- 2 Shift the shift lever to N
- If the shift lever is already in N
- 3 After deceleration, pull the vehicle over to a safe location and stop the vehicle
- 4 Turn off the engine
- If the shift lever is not in N
- 3 Reduce speed as much as possible by continuously pressing the brake pedal with both feet
- Press and hold the engine switch for more than 3 seconds or quickly and continuously press the switch more than 3 times to stop the engine



5 Stop the vehicle in a safe location and turn the hazard warning light ON.

#### WARNING

#### If the engine has to be turned off while driving

The vehicle will be difficult to control as the brake will be less effective and the steering wheel will be heavier to operate. Decelerate as much as possible before turning off the engine.

# If the vehicle is trapped in rising water

# If the vehicle is trapped in rising water, stay calm and take the following steps.

- First of all, release the seat belt.
- If the door can be opened, open the door and get out of the vehicle.
- If the door cannot be opened, open the window by pressing the power window button and get out of the vehicle through the window.
- If the window cannot be opened using the power window button, stay calm and wait for the water to rise inside the vehicle until the water pressure inside the vehicle equals to the water pressure outside the vehicle. Then, open the door and get out of the vehicle.

## WARNING

#### Emergency escape

The front side windows and rear side windows, as well as the rear window can be shattered with several ways. If you do not have glass-breaking tool (such as a center punch or glass breaking hammer) on hand, remove a headrest from one of the seats and strike the lower corner of a window several times with the tong on the bottom.

You also can use your feet, elbow or fist. Kick near the front of the window or along the hinges rather than the center.

## Escaping the vehicle through the window

There are cases where escaping the vehicle from the window is not possible due to seating position, passenger body type, etc.

When using an emergency escape, consider your seat location and the size of the window opening to ensure that the opening is accessible and large enough to escape.

# Towing

If towing is necessary, we recommend having your vehicle towed by an authorised Perodua Service Centre or a commercial towing service using a tow truck or a flatbed truck.

If the vehicle must be towed by another vehicle using a rope, please keep the towing distance as short as possible, for example moving the vehicle to a loading truck.

# Situation where it is necessary to contact Perodua Service Centre before towing

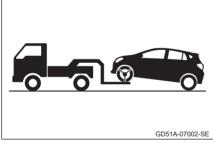
The following situation may indicate a problem with the drive train system. Please contact an authorised Perodua Service Centre or mechanic.

- The engine is running but the vehicle does not move.
- The vehicle makes an abnormal sound.

#### Towing with a tow truck

From the front

From the rear



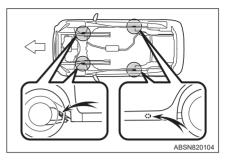
Release the handbrake

GD51A-07003-SE Use a towing dolly under the rear wheels

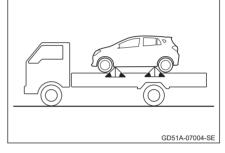
# Using a flatbed truck

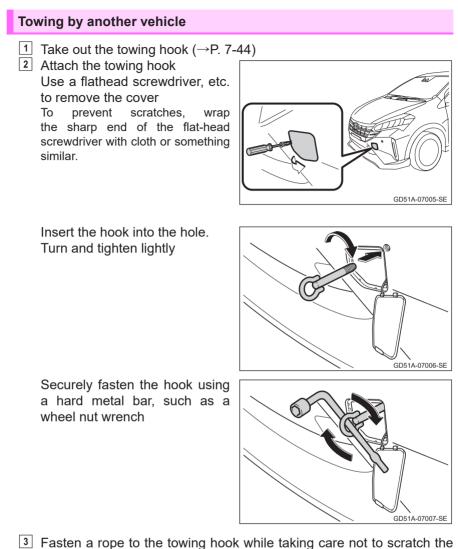
When transporting the vehicle using a flatbed truck, secure the vehicle at the locations shown in the diagram

After transporting, return the cover attached to the rear to its original place.



If chains or cables are used to secure the vehicle, the angle shown in the diagram in black must be 45°





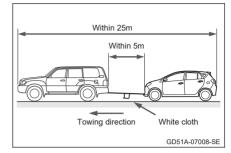
vehicle body

Be careful not to scratch the vehicle body. Always tow from the front.

If the a piece of white cloth at the middle of the rope

Cloth size:

 $0.3 \text{ m}^2$  (30 cm × 30 cm) or more



- 5 The driver must be in the towed vehicle and start the engine If the engine is not running, please turn the engine switch to 'ON'.
- Release the parking brake after shifting the towed vehicle shift lever to N.

Please match the towing vehicle speed, even when slowing down so that the rope does not sag while towing.

If the shift lever cannot be moved:  $\rightarrow$  P. 4-17

#### Intended use of the towing hook

The towing hook is used when the vehicle is towed by another vehicle. It is not intended for towing another vehicle.

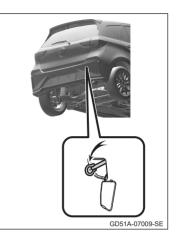
## **Towing by another vehicle** If the engine is not running, the brake will not be effective, and the steering will be heavier than usual.

# Wheel nut wrench

The wheel nut wrench is located under the front passenger seat. ( $\rightarrow$ P. 7-44)

#### Rear hook

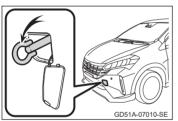
The rear hook can be used to tow another vehicle that is lighter than your vehicle using a rope on a normal road if necessary.



#### Transport hook

This hook is used to secure the vehicle in a ship during transport. The hook at the rear cannot be used to tow the vehicle.

Front



Rear



#### After towing

Remove the towing hook and fasten the cover securely.

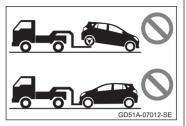
## WARNING

The following warning must be observed.

Failure to do so may result in serious injuries, even death.

#### Towing with a tow truck

- For safety reasons, do not allow anyone to be in the vehicle being towed.
- Always transport the vehicle with the front wheels or all four wheels raised off the ground. Towing with the front wheels touching the ground may damage the drive train component.



# Driving while being towed by another vehicle

 Avoid applying excessive stress to the towing hook and rope, for example by sudden start.

The towing hook and rope may fail, and its pieces may hit people in the vicinity, resulting in serious injuries.

- Do not turn the engine switch to 'OFF'. The steering will be locked, and the steering wheel cannot be used.
- This vehicle does not have the capacity to tow other vehicles. Do not tow the vehicle by fastening rope to any body parts.
- Do not exceed the maximum towing speed regulated by the local regulation.

## Attaching the towing hook to the vehicle

Securely attach the towing hook to the designated locations.

If the hook is not securely attached to the designated locations, it may come off while towing.

## CAUTION

#### Towing by another vehicle

- Do not tow the vehicle in this manner unless the wheels, axles, drive train, steering, or brakes are in good condition.
- Always pull the hook straight-ahead to prevent it from being damaged. Do not pull it from the side or in a vertical direction. Also, do not pull it sharply.
- If you attach a rope or a cable to the axle or any other place, it may damage the components.

In the event of an emergency

# WARNING

#### Towing with a tow truck

To prevent damage to the vehicle, do not tow with a sling-type tow truck shown in the diagram.

#### Securing the vehicle to a flatbed truck

Do not overtighten the cable. The vehicle may be damaged.



#### To prevent damage to the vehicle

- The following precautions must be observed while being towed by another vehicle.
  - Do not use a wire rope
  - Tow at 30 km/h or lower within 50 km distance
  - Tow from the front
  - Do not fasten the rope to any parts of the suspension
- Do not tow other vehicles or boats (trailers) with this vehicle.

#### If the engine switch malfunctions

Towing using a rope is impossible because the steering lock is not released.

#### Towing on a long downslope

Tow using a tow truck with the front wheels raised off the ground or with all four wheels raised off the ground. Not using a tow truck may cause the brake to overheat and lose its effectiveness.

#### Rear hook

Do not use the rear hook unless necessary. Using the rear hook may lead to vehicle damage or deformed components.

#### Transport hook

Do not tow the vehicle using the transport hook or tow another vehicle with the front hook. Doing so may lead to vehicle damage or deformed components.

# If a warning light lights up

Warning light and warning buzzer list

If a warning light lights up or continues flashing, stay calm and take the following measures. The warning lights will go on when the ignition switch is turn "ON" for initial check and go out a few seconds later, this is not a malfunction. However, if the same thing occurs again, please have the vehicle checked at an authorised Perodua Service Centre.

Warning light and warning buzzer list		
Warning light	Warning light, details, handling measures	
	<ul> <li>Brake system warning light (warning buzzer <sup>×1</sup>)</li> <li>Low brake fluid</li> <li>Malfunction in the brake system</li> <li>→ Immediately stop the vehicle in a safe place and contact an authorised Perodua Service Centre. Continue driving is dangerous.</li> </ul>	
Ē	Battery charge warning light Malfunction in the vehicle charging system → Immediately stop the vehicle in a safe place and contact an authorised Perodua Service Centre.	
qr.	Low engine oil pressure warning light (warning buzzer) The engine oil pressure is too low → Immediately stop the vehicle in a safe place and contact an authorised Perodua Service Centre.	
(Red)	<ul> <li>High engine coolant temperature warning light</li> <li>The engine coolant malfunction</li> <li>(As the coolant temperature rises, the light changes from flashing to lights up: →P. 7-61)</li> <li>→ Immediately stop the vehicle in a safe place and contact an authorised Perodua Service Centre.</li> </ul>	
۲Ţ.	<ul> <li>Engine malfunction warning light</li> <li>Malfunction in the electronic engine control system</li> <li>Malfunction in the electronic throttle control system</li> <li>→ Please have the vehicle inspected at an authorised Perodua Service Centre immediately.</li> </ul>	

Warning light	Warning light, details, handling measures	
CVT	CVT warning light Malfunction in the electronic CVT control system → Please have the vehicle inspected at an authorised Perodua Service Centre immediately.	
	<ul> <li>SRS airbags/pretensioner warning light</li> <li>Malfunction in the SRS airbag system</li> <li>Malfunction in the seat belt pretensioner and force limited</li> <li>→ Please have the vehicle inspected at an authorised Perodua Service Centre immediately.</li> </ul>	
(ABS)	ABS warning light ABS malfunction → Please have the vehicle inspected at an authorised Perodua Service Centre immediately.	
(Red)	Electric power steering system warning light (warning buzzer) Malfunction in the EPS (electric power steering) → Please have the vehicle inspected at an authorised Perodua Service Centre immediately.	
×2 (Yellow)	Electric power steering system warning light (warning buzzer) Low voltage or power steering overheating → Restrain from using the steering wheel for a while because the steering wheel will feel heavy to turn. The weight will return to normal after about 10 minutes.	
<b>Å</b>	<ul> <li>Keyfree system warning light</li> <li>Keyfree system malfunction</li> <li>(If the keyfree system warning light flashes →P. 7-18)</li> <li>→ Please have the vehicle inspected at an authorised</li> <li>Perodua Service Centre immediately.</li> </ul>	
(Yellow)	<ul> <li>AHB warning light*</li> <li>AHB malfunction*</li> <li>→ Please have the vehicle inspected at an authorised Perodua Service Centre.</li> </ul>	

Warning light	Warning light, details, handling measures	
(Flashing) (Flashing) (Flashing) (Flashing)	Advanced Safety Assist OFF indicator Lane Departure Warning OFF indicator Master warning light Malfunction in one of the Advanced Safety Assist functions → Please have the vehicle inspected at an authorised Perodua Service Centre.	
OFF OFF IC	Advanced Safety Assist OFF indicator Lane Departure Warning OFF indicator Function OFF Code is display Advanced Safety Assist function is cancelled → Handle each of the displayed function cancellation code. (→ P. 7-38)	
(Yellow)	<ul> <li>ACC warning light*</li> <li>Malfunction in the ACC</li> <li>→ Please have the vehicle inspected at an authorised Perodua Service Centre.</li> </ul>	
(Yellow)	<ul> <li>LKC warning light*</li> <li>LKC malfunction</li> <li>→ Please have the vehicle inspected at an authorised Perodua Service Centre.</li> </ul>	

Warning light	Warning light, details, handling measures	
	<ul> <li>Slip indicator</li> <li>Malfunction in the assisted braking system</li> <li>Malfunction in the VSC system</li> <li>Malfunction in the TRC system</li> <li>(Flashes when VSC or TRC activates → P. 4-136)</li> <li>Malfunction in the Hill-Start Assist system</li> <li>→ Please have the vehicle inspected at an authorised Perodua Service Centre.</li> </ul>	
OFF (Flashing)	<ul> <li>eco IDLE OFF indicator</li> <li>eco IDLE system malfunction</li> <li>Time to replace the starter (The eco IDLE OFF indicator will light up when the system is cancelled → P. 4-117)</li> <li>→ Please have the vehicle inspected at an authorised Perodua Service Centre</li> </ul>	
×4 OFF (Flashing → Turn off)	eco IDLE OFF indicator Time to replace the battery (The eco IDLE OFF indicator will light up when the system is cancelled → P. 4-117) → Please have the vehicle inspected at an authorised Perodua Service Centre	
BSM OFF (Flashing)	<ul> <li>BSM OFF indicator*</li> <li>Rain or dirt on the rear bumper (→P. 4-115) around the radar sensor</li> <li>→ Remove the rain or dirt. If the light continues to flash after a while, please have the vehicle inspected at an authorised Perodua Service Centre.</li> </ul>	
(Flashing)	RCTA OFF indicator* Rain or dirt on the rear bumper (→P. 4-115) around the radar sensor → Remove the rain or dirt. If the light continues to flash after a while, please have the vehicle inspected at an authorised Perodua Service Centre.	

Warning light	Warning light, details, handling measures	
(Flashing)	Brake override system warning light* Malfunction in the Brake Override System → Please have the vehicle inspected at an authorised Perodua Service Centre.	
Û.	Brake override system warning light When the brake override system is activated → Release the accelerator pedal	
	Hands-free driving warning light (warning buzzer <sup>∞5</sup> ) The steering wheel is released while driving → Firmly hold and operate the steering wheel.	
	Door ajar warning light <sup>%6</sup> (warning buzzer <sup>%7</sup> ) Any of the doors or the hood is not securely closed. → Close all doors	
	Low fuel warning light The fuel in the tank is 5.6 L or less $\rightarrow$ Refuel	
	Driver seat belts reminder light <sup>※9</sup> (warning buzzer <sup>※8</sup> ) Remind the driver to wear their seat belts → Wear the seat belts	
A PASSENGER	Front passenger seat belts reminder light <sup>×s, 10</sup> (warning buzzer <sup>×s</sup> ) Remind the front passenger to wear their seat belts → Wear the seat belts	
A ····	Rear passenger seat belts reminder light <sup>×10, 11</sup> (warning buzzer <sup>×12</sup> )         Remind the rear passengers to wear their seat belts         → Wear the seat belts	
	Parking brake warning light (warning buzzer <sup>※13</sup> ) When the parking brake is set → Release the parking brake	

#### <sup>×1</sup> Brake fluid warning buzzer:

The warning buzzer will sounds when the vehicle speed reaches about 5 km/h or higher with the warning light lights up. If the buzzer sounds, the brake fluid may be low.

- <sup>※2</sup> Electric power steering system warning light (yellow): Please have the vehicle inspected at an authorised Perodua Service Centre if the light does not flash repeatedly.
- \*3 Advanced Safety Assist Malfunction warning light will be shown on the multi-information display when the stereo camera malfunctions.
- <sup>×4</sup> eco IDLE OFF indicator: flashes for a few seconds when starting the engine.
- <sup>\*\*5</sup> Hands-free driving warning buzzer: The buzzer will sounds if there is still no steering wheel operation after the warning light went on.
- \*6 Open door warning light: The opened doors or back door are shown on the multi-information display\*. Stop the vehicle and close all doors.
- \*7 Driving with opened doors warning: The buzzer will sounds when the vehicle speed is over 5 km/h with any of the doors or the hood not closed properly.
- <sup>x8</sup> Driver and front passenger seat belts reminder buzzer: The buzzer will sound continuously for 30 seconds when the vehicle speed reaches 20 km/h or higher with the driver and the front seat passenger not wearing their seat belts. If the driver and the front seat passenger still forget to wear their seat belts, the buzzer tone will change and sound for 90 seconds.
- \*9 Seat occupant sensor for front passenger seat belt reminder light: Even if the front passenger seat is empty, the warning light still may flash if the sensor can detect the weight of objects placed on the seat. When a seat cushion or something similar is placed on the front passenger seat, the sensor may not detect the occupant and the reminder light may not activate.
- <sup>×10</sup> This reminder will be displayed on center panel.
- \*11 Rear seat belts reminder light: The reminder will light up when the rear seat belts are released or when the engine switch is turned on with the rear seat belts not fastened. The reminder will go out when the rear seat belts are fastened or after driving for about 60 seconds (after about 30 seconds if the buzzer sounds).
- <sup>×12</sup> Rear seat belts reminder buzzer:

The buzzer will sound continuously for about 30 seconds if the rear seat passengers release their seat belts when the vehicle speed is about 20 km/h or higher. Once the reminder buzzer sounds, it will continue sounds for about 30 seconds even when the speed is about 20 km/h or lower. The buzzer will stop when the rear seat belts are fastened.

<sup>×13</sup> Parking brake warning buzzer: The buzzer will sound if the vehicle speed reaches about 5 km/h or higher with the handbrake applied.

## Take immediate action (Vehicle not equipped with a TFT colour multi-information display)

Make sure that the key-free warning light is off after following the respective troubleshooting instructions.

Warning buzzer (in the vehicle)	Warning light	Warning details and handling measures
_	(Fast flashing)	<b>Key-free system warning light</b> Trying to turn on the engine without carrying the smart key → <b>Carry the smart key</b> <sup>%1</sup>
5 times	(Fast flashing)	Key-free system warning light One of the doors is opened, the smart key is taken out of the car, and the door is shut while the engine switch is in 'ACC' or 'ON' mode → Get in the vehicle while carrying the smart key
3 times	(Flashing)	Key-free system warning light Turning the engine switch to 'OFF' when the smart key is almost out of battery → Replace the battery <sup>※2</sup> (→P. 6-65)

※1 The battery may be depleted if the engine does not start even when the smart key is inside the vehicle. (→P. 6-65)

\*\*2 The warning light will flash when turning the engine switch to 'ACC' or 'ON' if the key battery continues to be low.

### Take immediate action

Make sure that the eco IDLE indicator is off after following the respective troubleshooting instructions.

Warning buzzer (in the vehicle)	Warning light	Warning details and handling measures
Sound continuously (for about 5 seconds)	(Fast flashing)	eco IDLE indicator The driver's door is opened while the engine is turned off by eco IDLE $\rightarrow$ Close the driver's door
Sound continuously (for about 5 seconds)	(Fast flashing)	eco IDLE indicator The driver's seat belt is released while the engine is turned off by eco IDLE $\rightarrow$ Fasten the driver's seat belts
Sound continuously (for about 5 seconds)	(Flashing)	eco IDLE indicator The hood is opened while the engine is turned off by eco IDLE → After closing the hood, put the shift lever in P and start the engine using the engine switch

### If the door open warning light is lights up

The warning light turns off automatically after the door is left opened for about 10 minutes with the engine switch in 'ACC' or 'OFF' mode to prevent battery depletion.

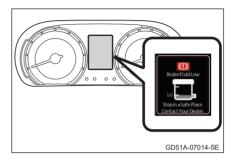
### WARNING

### If the electric power steering warning light is lights up

The assisted steering is restricted when the light lights up in yellow and the assisted steering is disabled when the light lights up in red, resulting in heavier than usual steering. Firmly hold the steering wheel and operate it stronger than usual.

# When warning messages are displayed\*

If a warning message is displayed on the TFT colour multi-information display\*, stay calm and take the following measures.



If the message is displayed again after taking the measures, please contact an authorised Perodua Service Centre.

### Messages and warning activation

Warning messages	Warning details and handling measures
Brake Fluid Low Lo Stop in a Safe Place Contact Your Dealer	Low brake fluid The warning buzzer will sound when the vehicle speed exceeds 5 km/h. → Immediately stop the vehicle in a safe place and contact an authorised Perodua Service Centre. Continue driving is dangerous.
Brake System Malfunction Event Malfunction Stop in a Safe Place Contact Your Dealer	Malfunction in the brake system → Immediately stop the vehicle in a safe place and contact an authorised Perodua Service Centre. Continue driving is dangerous.

Warning messages	Warning details and handling measures
Charging System Malfunction Stop in a Safe Place Contact Your Dealer	Malfunction in the battery charging system → Immediately stop the vehicle in a safe place and contact an authorised Perodua Service Centre.
Oil Pressure Low Stop in a Safe Place Contact Your Dealer	The engine oil pressure is too low A warning buzzer will sounds. → Immediately stop the vehicle in a safe place and contact an authorised Perodua Service Centre.
Engine Coolant Temp High Stop in a Safe Place Contact Your Dealer	Engine coolant temperature high → Immediately stop the vehicle in a safe place and contact an authorised Perodua Service Centre.
Engine Control System Malfunction Visit Your Dealer	<ul> <li>Malfunction in the electronic engine control system</li> <li>Malfunction in the electronic throttle control system</li> <li>→ Please have the vehicle inspected at an authorised</li> <li>Perodua Service Centre immediately.</li> </ul>

Warning messages	Warning details and handling measures
CVT Transmission System Malfunction Visit Your Dealer	Malfunction in the electronic CVT control system → Please have the vehicle inspected at an authorised Perodua Service Centre immediately.
SRS Airbag Malfunction Visit Your Dealer	<ul> <li>Malfunction in the SRS airbag system</li> <li>Malfunction in the seat belt pretensioner and force limiter</li> <li>→ Please have the vehicle inspected at an authorised</li> <li>Perodua Service Centre immediately.</li> </ul>
(GBS) ABS System Malfunction Visit Your Dealer	ABS malfunction → Please have the vehicle inspected at an authorised Perodua Service Centre immediately.
Power Steering Malfunction Vsit Your Dealer	<ul> <li>Malfunction in the EPS (electric power steering)         <ul> <li>A warning buzzer will sounds.</li> <li>→ Please have the vehicle inspected at an authorised Perodua Service Centre immediately.</li> </ul> </li> </ul>

Warning messages	Warning details and handling measures
Steering Performance is Reduced Steering Power Low (Yellow)	Low voltage or power steering overheating A warning buzzer will sound. → Restrain from using the steering wheel for a while because the steering wheel will feel heavy to turn. The weight will return to normal after about 10 minutes.
Smart Entry & Start System	Key-free system malfunction
Malfunction	→ Please have the vehicle inspected at an authorised
Visit Your Dealer	Perodua Service Centre immediately.
Dil Deterioration Warning	The engine oil replacement is due soon
Dil Maintenance Required	→ Please have the vehicle inspected at an authorised
Visit Your Dealer	Perodua Service Centre immediately.

Warning messages	Warning details and handling measures
AHB Malfunction Visit Your Dealer	Auto High Beam (AHB) malfunction* → Please have the vehicle inspected at an authorised Perodua Service Centre.
Front Camera Malfunction Visit Your Dealer Visit Your Dealer (Flashing) (Flashing) (Flashing)	Advanced Safety Assist malfunction → Please have the vehicle inspected at an authorised Perodua Service Centre.

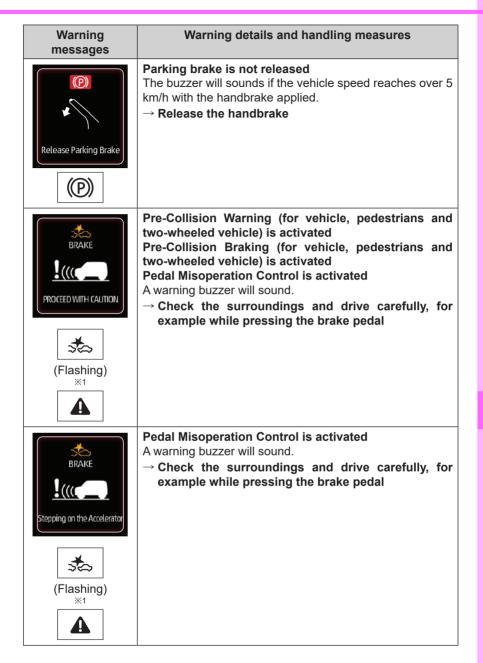
Warning messages	Warning details and handling measures
ACC Malfunction Visit Your Dealer	Malfunction in the ACC → Please have the vehicle inspected at an authorised Perodua Service Centre.
UKC Malfunction Visit Your Dealer	LKC malfunction* → Please have the vehicle inspected at an authorised Perodua Service Centre.

Warning messages	Warning details and handling measures
VSC System Malfunction Visit Your Dealer	<ul> <li>Malfunction in the assisted braking system</li> <li>Malfunction in the VSC system</li> <li>Malfunction in the TRC system</li> <li>Malfunction in the Hill-Start Assist system</li> <li>→ Please have the vehicle inspected at an authorised Perodua Service Centre.</li> </ul>
Stop & Start System Malfunction Visit Your Dealer	eco IDLE system malfunction Time to replace the starter Time to replace the battery The message will be displayed for a few seconds if it is time to replace the battery. → Please have the vehicle inspected at an authorised Perodua Service Centre.
BSM Malfunction Visit Your Dealer (Flashing) (Flashing) (Flashing)	Faulty BSM* → Please have the vehicle inspected at an authorised Perodua Service Centre.

Warning messages	Warning details and handling measures
BSM Temporary Unavailable BSM OFF (Flashing) (Flashing) (Flashing)	Reduced BSM functions* If you use the function in and extremely hot or cold environment or if the battery voltage is lower or higher than the specified level, the display is turned on. → When the above causes are resolved, the display will disappear. If the display persists for a long time, please have the vehicle inspected at an authorised Perodua Service Centre.
BSM Radar Obstructed Temporary Unavailable (Flashing) (Flashing) (Flashing)	Dirty BSM radar* → Check for and remove anything on the bumper sensors, for example rain drops or dirt.

Warning messages	Warning details and handling measures
Check Vehicle	Malfunction in the vehicle communications system
Communication	→ Please have the vehicle inspected at an authorised
Visit Your Dealer	Perodua Service Centre.
<b>Prake Override System</b>	Malfunction in the brake override system
Malfunction	→ Please have the vehicle inspected at an authorised
Visit Your Dealer	Perodua Service Centre.
Brake & Accelerator Pressed	Brake override system is activated
Simultanecusly	→ Remove your feet from the accelerator.
Hold Steering Wheel	Driving without holding the steering wheel The warning buzzer will sounds if the steering wheel remains free after the message is displayed. → Firmly hold and operate the steering wheel.

Warning messages	Warning details and handling measures
Open	Any of the doors or the hood is not securely closed The opened door is displayed. The buzzer will sounds when the vehicle speed is over 5 km/h with any of the doors or the hood not securely closed. $\rightarrow$ Close all doors
Fuel Low	The fuel in the tank is 5.6 L or less $ ightarrow$ Refuel
Fasten Seat Belt	Driver or front passenger seat belts reminder A warning buzzer will sounds. The message is displayed when the vehicle speed is over 20 km/h. → Wear the seat belts
Fasten Seat Belt	Rear passenger seat belts reminder A warning buzzer will sounds. The message is displayed if the seat belts are released when the vehicle speed is over 20 km/h. $\rightarrow$ Wear the seat belts



In the event of an emergency

Warning messages	Warning details and handling measures
Front Camera in Operation Front Camera in Operation Vehicle Ahead Moving	Front Departure Alert is activated A warning buzzer will sound. → Drive after making sure that the surrounding is safe
LDW in Operation	Lane Departure Warning is activated A warning buzzer will sounds. → Return the vehicle to its lane by operating the steering wheel after making sure that it is safe to do so
PROCEED WITH CAUTION	<ul> <li>Approach alarm for ACC is activated*         <ul> <li>A warning buzzer will sounds.</li> <li>→ Maintain an appropriate distance between the vehicles by pressing the brake pedal.</li> </ul> </li> </ul>
VSC in Operation	VSC is activated → Drive cautiously
(Flashing)	

Warning messages	Warning details and handling measures
Turn Lights OFF	The driver's door is opened when the headlights are on A warning buzzer will sounds. → Turn off the headlights
Steering Angle Left	The steering wheel is turned left or right when the vehicle is not moving $\rightarrow$ Check the tyre direction and start the vehicle safely
Steering Angle Right	

<sup>\*\*1</sup> The signal will light up when the Pre-Collision Braking and engine output control and brake control for Pedal Misoperation Control (front) are activated.

### Warning messages

The warning messages displayed in this manual may be different from the actual display depending on usage and vehicle specifications.

### Warning message displays

- Pressing the ENTER switch when turning the engine switch on will disable the warning message display.
- The following warning messages will still be displayed for several seconds even after pressing the ENTER switch and disabling the warning message display.
  - Low brake fluid
  - Faulty brake system
  - Faulty electric charging system
  - · Low engine oil pressure
  - Engine coolant malfunction

### When the 'Door open' warning message is displayed

The message turns off automatically after about 10 minutes the door is left opened with the engine switch in 'ACC' or 'OFF' mode to prevent battery depletion.

### Lane Departure Warning

The warning message may not be displayed even if the vehicle departs from its lane in the following situations.

- Driving at a speed outside the operating condition
- The system is unable to recognize the white (yellow) lines while driving or the system may not function properly (→P. 4-77)

### Take immediate action

Make sure that the key-free warning message is turned off after following the respective troubleshooting instructions.

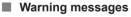
Interior warning buzzer	Exterior warning buzzer	Warning messages	Warning details and handling measures
_	_	Key NOT Detected	Trying to start the engine without carrying the smart key $\rightarrow$ Carry the smart key <sup><math>\times</math>1</sup>
5 times	3 times	Key NOT Detected	<ul> <li>One of the doors is opened, the smart key is taken out of the car, and the door is shut while the engine switch is in 'ACC' or 'ON' mode</li> <li>A warning buzzer will sounds.</li> <li>→ Get in the vehicle while carrying the smart key</li> </ul>
_	Once	Key Detected in Vehicle	Trying to lock any doors using request switch with the smart key left in the vehicle → Relock after taking out the smart key from the vehicle
_	Once	Key Detected in Vehicle	Opening and closing any door except the driver's door with its lock knob set to lock and all the doors locked while the smart key is left in the vehicle and the engine switch is in 'OFF' mode → Lock the vehicle while carrying the smart key

Interior warning buzzer	Exterior warning buzzer	Warning messages	Warning details and handling measures
	Once	Key Detected in Vehicle	Trying to lock the vehicle by opening the driver's door, setting the lock switch to lock and closing the door while pulling the door handle with the smart key left in the vehicle and the engine switch is set to 'OFF' mode → Relock after taking out the smart key from the vehicle
		Press Brake Pedal and Touch Engine Switch with Key	Trying to turn on the engine twice without carrying the smart key → <b>Carry the smart key</b> <sup>※1</sup>
		L Auto Power OFF to Conserve Battery	The engine switch is turned off automatically <ul> <li>If the engine switch is set to 'ACC' mode, this message will be displayed after one hour or more has passed. If the engine switch is set to 'ON', the message will be displayed after 20 minutes or more have passed.</li> </ul> → Charge the battery when starting the engine the next time by slightly increasing the engine rotation and maintaining that rotation for about 5 minutes
3 times		Key Battery Low Replace Key Battery	<ul> <li>Turning the engine switch to 'OFF' when the smart key is almost out of battery <sup>※2</sup></li> <li>A warning buzzer will sound → Replace the battery (→P. 6-65)</li> </ul>

Interior warning buzzer	Exterior warning buzzer	Warning messages	Warning details and handling measures
		Press Engine SW while Turning Steering Right and Left	Unable to release the steering wheel lock after pressing the engine switch → Press the engine switch while pressing the brake pedal and turning the steering wheel right and left
		Shift to P and Turn Power OFF	Trying to turn the engine switch off with the shift lever in a position other than P $\rightarrow$ Shift the shift lever to P
	Once	L U U U U U U U U U U U U U	Trying to lock any doors using door request switch when the engine switch is in 'ACC' or 'ON' mode → Lock the doors after turning the engine switch to 'OFF'

※1 The battery may be depleted if the engine does not start even when the smart key is inside the vehicle. (→P. 6-65)

<sup>2</sup> The warning message will be displayed when turning the engine switch to 'ACC' or 'ON' if the key battery continue to be low.



→P. 7-33

Warning message displays  $\rightarrow$  P. 7-33

### Warning buzzer

In some cases, the buzzer may not be heard because of noise, such as from the radio or being in a noisy place.

### Take immediate action

Make sure that the eco IDLE warning message is out after following the respective troubleshooting instructions.

Warning buzzer (in the vehicle)	Warning messages	Warning details and handling measures
Sound continuously (for about 5 seconds)	(Flashing)	<ul> <li>The driver's seat belt is released while the engine is turned off by eco IDLE</li> <li>A warning buzzer will sound → Fasten the driver's seat belts</li> </ul>
Sound continuously (for about 5 seconds)	(Fast flashing)	The driver's door is opened while the engine is turned off by eco IDLE • A warning buzzer will sound → Close the driver's door

Warning messages

→P. 7-33

- Warning message displays  $\rightarrow$  P. 7-33
- Warning buzzer  $\rightarrow$  P. 7-34

# If "Function OFF Code" is displayed

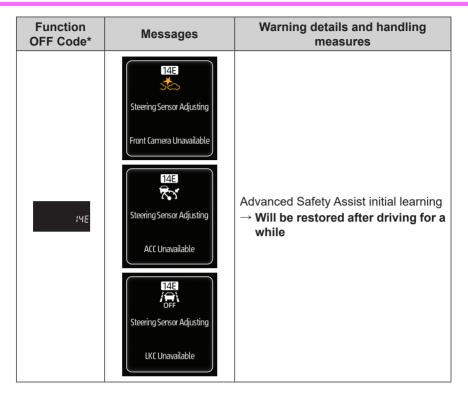
Function OFF Code will be displayed on the screen and Advanced Safety Assist OFF indicator and Lane Departure Warning OFF indicators will light up if the Advanced Safety Assist function is not working. In this case, please take the following measures. Vehicles equipped with TFT colour multi-information display are able to show function off messages. ( $\rightarrow$ P. 2-30)

### **Function** Warning details and handling Messages **OFF Code\*** measures 2E $\sim$ Brake System Overheated ACC Unavailable Brake pads overheat $\rightarrow$ Will be restored after solving the cause and turning the engine 2E switch to 'ON' again Brake System Overheated LKC Unavailable

### **Function OFF Code list**

Function OFF Code*	Messages	Warning details and handling measures
105	TOE Camera Low Visibility ACC Unavailable	The camera cannot recognize the front due to poor visibily (for ACC/LKC) → Will be restored after solving the cause
; ;E	Camera Low Visibility Front Camera Unavailable	The stereo camera cannot recognize the area in front due to poor visibility → Will be restored after solving the cause

Function OFF Code*	Messages	Warning details and handling measures
125	12E Camera Overheated Front Camera Unavailable 12E Camera Overheated ACC Unavailable 12E Camera Overheated LKC Unavailable	Internal temperature of the stereo camera (at the front of the vehicle) increased → Will be restored after solving the cause



\* : The text displayed may vary according to the vehicle grade and options.

### Function OFF Codes

- If the Function OFF Code is still displayed even after taking measures, the system may be malfunctioning. It will not affect normal driving, but please have your vehicle inspected at an authorised Perodua Service Centre.
- 10E and 11E will be displayed when the shift lever is in a position other than R.
- There may be Function OFF Codes not displayed depending on the available features that come with the vehicle grade and options.

# If you have a flat tyre

The flat tyre can be replaced with the provided spare tyre. (For detailed explanation on the tyre, please see page 6-51.)

### **WARNING**

### If you have a flat tyre

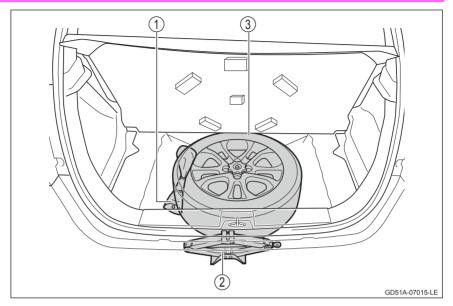
Do not continue driving with a flat tyre.

Even driving for a short distance may damage the wheels and tyres beyond repair and lead to unexpected accidents.

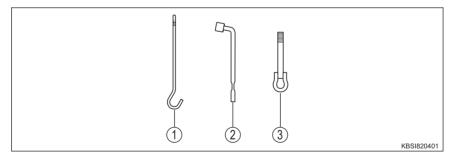
### Before jacking up the vehicle

- Move to a safe place with flat and hard surface
- Apply the handbrake
- Put the shift lever in P
- Turn off the engine
- Turn on the hazard lights

## Tools and jack locations



- ① Tool bag\*
- 2 Jack
- ③ Spare tyre



- 1 Jack handle
- Towing hook
- ③ Wheel nut wrench

### WARNING

### Using the jack

Please observe the following warnings.

Mishandling the jack may cause the vehicle to fall off the jack leading to serious injuries, even death.

- Do not use the jack for other purposes than replacing tyres, attaching and removing tyre chains
- The provided jack can only be used for your vehicle. Do not use it on other vehicles or use another vehicle's jack on your vehicle
- Place the jack properly in the jack set location (between the notches)
- Do not put any part of your body underneath the vehicle supported by the jack
- Do not start the engine or drive the vehicle while it is supported by the jack
- Do not jack up the vehicle with occupants inside and unload any heavy luggage from the vehicle.
- Do not place any objects on or under the jack when jacking up the vehicle.
- Do not jack up the vehicle higher than the height required to replace the tyre.
- Use a jack stand if it is necessary to work underneath the vehicle.
- When lowering the vehicle, make sure that there is no one near the vehicle. If there are people nearby, warn them verbally first.

### CAUTION

### Maintenance instruction during using the jack

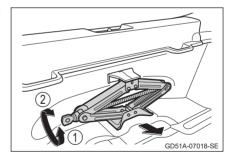
- Apply chassis grease to all the sliding parts and screw threads.
- Ensure that there is no distortion or crack on the jack. If there is, replace it with a new one.

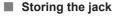
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GD51A-07017-SE

# How to take out the jack and tools 1 Lift the deck board 2 Loosen the center fastener that secures the spare tyre

- **3** Take out the spare tyre
- 4 Take out the tool bag
- 5 Turn the jack joint to take out the jack
  - 1 Loosen
  - ② Tighten





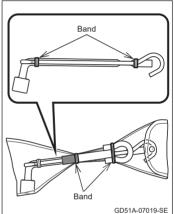
After using the jack, return it to its original position and firmly secure it.

### Storing the tools

1 As shown in the diagram, the jack handle and hub nut wrench are secured together with rubber bands and stored in the tool bag



2 Secured the tool bag and towing hook with two bands as shown in the diagram



### **WARNING**

### Storing the spare tyre

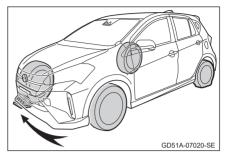
Be careful not to trap your fingers, etc. between the vehicle body and spare tyre.

### Replacing a flat tyre

1 Chock the tyres\*

Chock the tyre, located diagonally opposite to the flat tyre, at the opposite end. This is the most effective location for a chock.

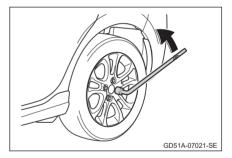
For improved safety, chock front and back of the tyre, if possible.



\* The wheel chock is not included with the vehicle, please prepare it if necessary. Alternately, objects capable of immobilizing the tyres, such as a large rock can be used as a wheel chock.

Flat tyre to be replaced		Wheel chock positions
Front tyres	Left-hand side	Behind the rear right-hand side tyre
	Right-hand side	Behind the rear left-hand side tyre
Rear tyres	Left-hand side	In front of the front right-hand side tyre
	Right-hand side	In front of the front left-hand side tyre

2 Loosen the nuts slightly (rotate them once)



3 Turn the A part of the jack by hand.

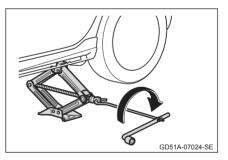
Place the jack groove securely at the jack set location (between the notches)

4 Take out the wheel nut wrench and jack handle from the tool bag and assemble them.

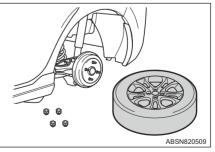




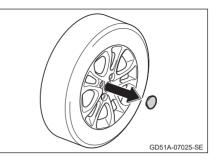
 Jack up the vehicle until the tyre is slightly raised off the ground. Use the jack handle together with the wheel nut wrench as shown in the diagram.



6 Remove all the nuts and the tyre When placing the tyre directly on the ground, place the tyre with the wheel surface facing up to avoid scratching the wheel surface.



7 Remove the ornament by pushing it from the reverse side.



### WARNING

### Replacing the tyre

- Do not touch the areas around the disc wheel and brake right after driving. The areas around the disc wheel and brake may be very hot right after driving and touching these areas with hand or foot may cause burn.
- Be careful not to get injured by slipping the hub nut wrench.
- Place the spare tyre under the vehicle body at a point near the tyre to be changed.

This is a precautionary measure that may be helpful to avoid danger in the event that the jack is detached.

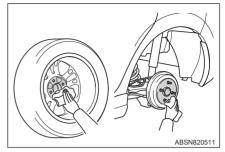
The jack should be used on level firm ground whenever possible. Place a flat and wide board underneath the jack, if necessary, to stabilize the jack.

- Lay the removed flat tyre so that it may not fall down accidentally.
- We recommend wearing gloves. The flat tyre may still be hot.
- Failure to observe the following warnings may cause the nuts to loosen and the wheel to come off, leading to serious injuries, even death.
  - Do not oil or grease the threaded and tapered end of the nuts Tightening the nuts more than necessary may damage the bolts or damage the disc wheel. The nuts may also loosen causing the wheel to come off. If there is oil or grease on the threaded part, please wipe it clean.
  - After replacing the wheel, immediately tighten the nuts with a torque of 103 N.m (10.5 kgf.m, 76 ft.lbf)
  - · Use the nuts for the wheels in use when attaching the tyre
  - If there are any defects, for example wear and tear in the threaded part of bolts and nuts or the wheel bolt holes, have them inspected at an authorised Perodua Service Centre
  - When fastening the nuts, always attach them with the tapered ends inside

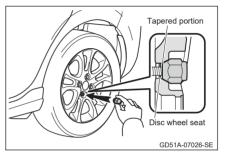
### Installing the spare tyre

1 Remove any dirt or foreign objects from the wheel contact surface

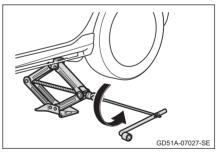
If the wheel contact surface is dirty, the nuts may become loose while driving, causing the tyre to come off.



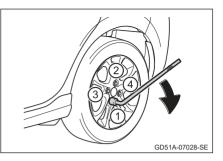
Install the spare tyre. Loosely tighten the nuts by hand until the tyre is no longer rattling Turn the nuts until the tapered ends come slightly into contact with the disc wheel seat



3 Lower the vehicle



 Tighten the nuts securely twice or three times in the order shown in the diagram Tightening torque: 103 N.m (10.5 kgf.m, 76 ft.lbf)



5 Reinstall the wheel ornament



6 Store all tools, jack and the flat tyre

### The spare tyre

• Always check the tyre inflation pressure. ( $\rightarrow$ P. 8-6)

### WARNING

If you notice any vibration or abnormal noise after changing a wheel, have them checked by an authorised Perodua Service Centre immediately.

### CAUTION

Do not tighten the hub nuts with other tools or by foot. It may damage the thread.

# If the engine will not start

If the engine will not start even after following correct starting procedure ( $\rightarrow$ P. 4-11), please check the following points.

# The engine will not start even though the starter motor is working normally

One of the following may be the cause of the problem:

- The fuel tank may be empty. Please refuel.
- The engine may be flooded. Try to start the engine again following correct starting procedures (→P. 4-11).
- There may be a malfunction in the engine immobilizer system.
   (→P. 1-44)

# The starter motor rotates slowly, the interior lights and headlights are dim, or the horn does not sound or sounds at a low volume

One of the following may be the cause of the problem:

- The battery may be depleted. ( $\rightarrow$  P. 7-57)
- The battery terminal connections may be loose.

### The starter motor does not rotate

- There may be a malfunction in the electrical components, for example a blown fuse or disconnected electrical components. Depending on the malfunction, the engine can be started with a temporary measure.
   (→P. 7-55)
- The steering wheel lock may be malfunctioning.

# The starter motor does not rotate, the interior lights and headlights do not turn on, or the horn does not sound

One of the following may be the cause of the problem:

- The battery terminal may be disconnected.
- The battery may be depleted. (→P. 7-57) Please contact an authorised Perodua Service Centre if repair methods are unknown or if the problem cannot be solved.

### CAUTION

If the engine still won't start, or if the malfunction indicator light (MIL) flashes or goes on, contact an authorised Perodua Service Centre immediately.

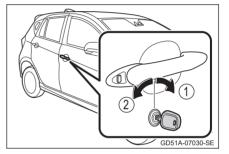
## If the smart key does not operate properly

The key-free system and remote control cannot be used if communication between the smart key and vehicle is interrupted ( $\rightarrow$ P. 3-9) or the smart key battery is depleted. In such situation, the doors can be opened and the engine can be started with the following procedures.

#### Locking and unlocking the doors

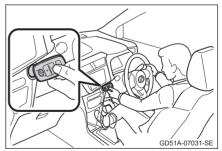
Perform the following operations using the emergency key  $(\rightarrow P. 3-1)$ .

- ① Lock all doors
- Unlock all doors
  - The alarm will be activated if the alarm is set. (→P. 1-45)
  - When you lock or unlock the driver side door, the other door(s) will not automatically be locked or unlocked.



#### Starting the engine

- 1 Press the brake pedal with the shift lever in P
- Touch the smart key to the engine switch as shown in the diagram
  - The engine switch indicator will light up in green.
  - The alarm will be deactivated.
     (→P. 1-45)



3 Press the engine switch

If the engine does not start even after taking these measures, please contact an authorised Perodua Service Centre.

#### How to turn off the engine

Similar to the usual way of turning off the engine, press the engine switch with the shift lever in P.

#### Replacing the battery

How to start the engine explained here is a temporary measure. If the battery is depleted, it should be replaced immediately. ( $\rightarrow$ P. 6-65)

#### Changing the engine switch mode

Release the brake pedal and press the engine switch in step 3 of how to start the engine. The mode will change each time the switch is pressed without starting the engine. ( $\rightarrow$ P. 4-12)

#### If the smart keys do not operate properly

Make sure that the smart key is not in power save mode. If it is in power save mode, deactivate the mode ( $\rightarrow$ P. 3-9)

## If the battery is depleted

# If the battery is depleted, the engine can be jump-start with the following steps.

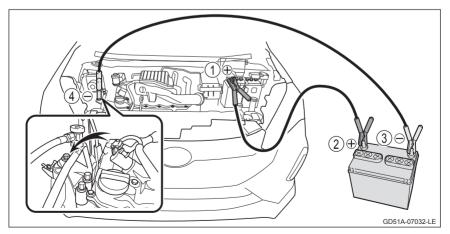
The engine can be jump-start by following the steps below if you have a set of jumper (booster) cables and a rescue vehicle with 12 V battery.

1 If the booster battery is installed on another vehicle, keep vehicles apart.

Turn off all unnecessary lights and accessories on the vehicles. Place the transmission lever in P or N.

Fully apply the parking brake.

- 2 Start the engine on the vehicle with a booster battery and let it run for a few minutes at about 2,000 rpm.
- 3 Make sure that the ignition on the vehicle with discharged battery is in "OFF".
- Remove the cover on the battery + terminal and connect the booster cable in the following order
  - ① Clamp the red booster cable on the battery + terminal on your vehicle
  - ② Clamp the other red booster cable on the battery + terminal in the rescue vehicle
  - ③ Clamp the black booster cable on the battery terminal in the rescue vehicle
  - ④ Clamp the other black booster cable on the location shown in the diagram



- 5 Crank the engine of the vehicle with the discharged battery. After the engine has started, run it at 2,000 rpm for several minutes.
- **6** Carefully disconnect the cables in the exact reversed order; the negative cable first and then the positive cable.
- 7 For non maintenance-free battery, check the battery electrolyte level. Add distilled water up to the "UPPER" mark.

If the engine will not start despite of a few attempts or you are unsure of the cause of battery discharging, have your vehicle checked by an authorised Perodua Service Centre.

#### Starting the engine when the battery is depleted

The engine in this vehicle cannot be started by push-starting.

- When the battery is depleted
  - Use a 12-volt booster battery. Application of higher voltage may cause serious damage to the electrical equipment such as relays and radio. Do not jump-start the vehicle unless you are sure of the booster battery voltage.
  - The capacity (AH rating) of the booster battery must not be lower than the discharged battery.
  - The information stored in the on-board computer system will be deleted. Please have the vehicle inspected at an authorised Perodua Service Centre if the battery is depleted.

#### Recharging the battery

The electricity stored in the battery is gradually depleted even when the vehicle is not in use due to natural discharge and the draining effects of certain electrical components. Consequently, the battery may be depleted and the engine cannot be started if the vehicle is left for a long time.

(The battery recharges automatically during driving.)

#### When the battery is depleted or disconnected

- In some cases, the doors cannot be unlocked using the keyfree system right after the battery is depleted. If the doors cannot be unlocked, use the remote control or emergency key to lock and unlock them.
- The first attempt to start the engine after the battery is depleted may fail. This
  is not a problem because the engine will start as usual on the second and
  following attempts.
- The vehicle remembers the engine switch mode at all time. If the battery is depleted or after disconnecting the battery, the engine switch will be in the mode before the battery depletes or before the battery is disconnected. Please turn the engine switch to 'OFF' when disconnecting the battery. Be particularly careful when connecting the battery if the conditions prior to battery depletion are not known.

#### WARNING

#### Preventing battery fires or explosions

Please observe the following warnings to prevent producing flame or sparks that may ignite the flammable gas produced by the rescue vehicle and causing an explosion.

- Connect the booster cable to the correct terminal and do not let the booster cable unintentionally come into contact with any other parts
- Do not let the other end of the booster cable connected to the + terminal come into contact with any unpainted metal surfaces or brackets nearby
- Never let the + and clamps of the booster cable to come into contact with each other
- Do not smoke or use open flame, such as lighting up a match or cigarette lighter near the battery
- Do not jump-start the vehicle if the battery fluid is lower than the LOWER LEVEL indicated at the side of the battery

#### Handling the battery

The battery contains poisonous and corrosive acidic electrolyte and the related parts contain lead and lead compounds. Therefore, the following warnings must be observe when handling the battery.

- Wear protective goggles when handling the battery. Do not let the fluid (acid) to come into contact with the skin, clothing and vehicle body
- Do not lean over the battery more than necessary

#### WARNING

- If the battery fluid accidentally comes into contact the skin or eyes, immediately wash with plenty of water and seek medical attention Place a wet sponge or cloth over the affected area while waiting for medical attention.
- If the battery fluid is accidentally swallowed, drink plenty of water and seek medical attentional immediately.
- Wash your hands after handling the battery or its parts
- Keep the battery away from children.

After removing the battery terminal nuts and the latch securing the battery Fasten them securely. Disconnected battery while driving may cause shortcircuit leading to a fire.

#### To prevent damage to the vehicle

Do not pull or push-start the vehicle. The three-way catalytic converter may overheat and become a fire hazard.

#### CAUTION

#### To prevent battery depletion

- Turn off the lights and air conditioner when the engine is not running.
- Turn off the unnecessary electrical components when the vehicle is not moving for an extended period, for example in a congested traffic.

#### When replacing the battery

The battery installed in this vehicle is specifically designed for use with an eco IDLE system.

Please replace with a battery with equivalent performance.

If an appropriate battery is not used, the battery may deteriorate early or in the worst case, the engine cannot be restarted.

Please consult an authorised Perodua Service Centre for details.

#### Handling the battery

Do not directly connect electrical components to the battery terminals. Idling stop by eco IDLE may not work properly.

#### Handling booster cables

When connecting or removing the booster cables, be very careful that they do not become entangled in the cooling fans or engine drive belt.

#### Battery weak jump-start

Performing the jump-start may cause the alarm system to be damage. However, if the jump-start cannot be avoided, ensure to follow correct procedure of jump-starting.

## If the vehicle overheats

The following signs may indicate that the vehicle is overheating.

- The high engine coolant temperature warning light ( $\rightarrow$ P. 7-12) flashes or light up in red
- Vehicles equipped with TFT colour multi-information display: warning message 'high engine coolant temperature (→P. 7-20) is displayed
- Reduced engine output (e.g unable to speed up)
- Steam comes out from the engine compartment

#### Steps to take

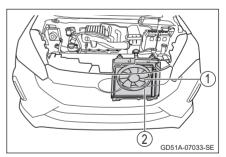
- If high engine coolant temperature warning light flashes or lights up
- 1 Stop the vehicle in a safe place, turn off the air conditioner and the engine
- If the hood is steaming: Wait until the steam stops and carefully open the hood If the hood is not steaming:

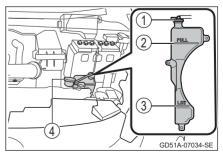
Open the hood carefully

- After the engine has cooled down sufficiently, check for coolant leaking from the hoses and radiator core (radiator)
  - ① Fan
  - 2 Radiator

If a large amount of coolant leaks, immediately contact an authorised Perodua Service Centre.

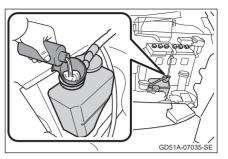
- Check if the coolant level in the reservoir is between the 'FULL' and 'LOW'
  - 1 Reservoir
  - 2 'FULL'
  - 3 LOW
  - ④ Radiator cap





5 Add coolant if the coolant level is low

As an emergency measure, water can be used if coolant is unavailable



Start the engine and turn on the air conditioner to check if the radiator cooling fan is working. Recheck the radiator core and hoses for any coolant leaks

The fan operates when the air conditioner is turned on immediately after a cold start. Confirm that the fan is operating by checking the fan sound and air flow. If it is difficult to check, turn the air conditioner on and off repeatedly.

#### 7 If the fan is not operating:

Immediately stop the engine and contact an authorised Perodua Service Centre

If the fan is operating:

Please have the vehicle inspected at the nearest authorised Perodua Service Centre

#### WARNING

#### Before taking corrective measures

Do not remove the radiator cap when the temperature is high. The radiator cap will be pressurized by the coolant. Removing the cap may cause steam and hot liquid to spray out leading to serious injuries, including burns.

## Preventing accidents and injuries while inspecting the engine compartment

The following warnings must be observed. Failure to do so may lead to serious injuries, including burns.

- If steam is coming out from under the hood, do not open the hood until the steam subsides. The engine compartment will be very hot.
- Keep your hands and clothing (particularly neckties, scarves, and mufflers) away from the fans and belts. Trapped hands and entangled clothing can lead to serious injuries.
- If the engine and radiator are hot, do not open the radiator cap and the coolant reservoir cap. Pressurized high temperature steam and coolant may spray out.

In the event of an emergency

#### CAUTION

#### When adding the coolant

Add the coolant when the engine has cooled down sufficiently. Add the coolant slowly.

Adding cold coolant suddenly when the engine is hot may damage the engine.

#### To prevent damages to the cooling system

Please observe the following warnings.

- Make sure the coolant is free of foreign objects, such as sand and dust.
- Do not use commercially available coolant additives.

## If the vehicle is stuck

## Try the following steps if the tyres spin or the vehicle is stuck and unable to move in mud or dirt.

- 1 Apply the parking brake, shift the shift lever to P and turn off the engine
- 2 Remove the soil or mud in front and back of the tyres
- 3 Place wood, stones or some other materials under the tyres
- 4 Restart the engine
- 5 Put the shift lever in D or R, and press the accelerator carefully If the VSC/TRC function makes it difficult to free the vehicle, deactivate the TRC or VSC/TRC functions. (→P. 4-136, 4-137)

#### WARNING

#### When attempting to free a stuck vehicle

When attempting the free a stuck vehicle by pushing it back and forth, make sure the surrounding area is clear to avoid hitting other vehicles, objects of people.

Be very careful when attempting to free a stuck vehicle because the vehicle may lunge forward or back.

#### When shifting the shift leve

Be careful not to shift the shift lever while pressing the accelerator. This may cause the vehicle to accelerate rapidly, resulting in serious damage to the transmission and unexpected accidents.

#### To avoid damage to the transmission and other components

- Avoid spinning the tyres and pressing the accelerator more than necessary. The transmission may be damaged resulting in unexpected accidents.
- Do not spin the tyres at high speed. The tyres may tear or overheat, resulting in unexpected accidents.

#### CAUTION

If the vehicle remains stuck after performing these steps, the vehicle may require towing.

## Vehicle specifications

## 8

### Specifications

Vehicle specification8	-1
Maintenance data	
(specified fuel, oil level, etc.)8	-2
Initial settings	
Items requiring initial settings8	-7

## Vehicle specification

## Vehicle dimension

Overall length		3,895 mm		
Overall width			1,735 mm	
Overall height		1,515 mm		
Wheelbase		2,500 mm		
1NR-VE	Front	14" tyre	1,485 mm	
	Rear	14" tyre	1,475 mm	
2NR-VE		Front	15" tyre	1,475 mm
	Rear	15" tyre	1,465 mm	

## Engine

Model	1NR-VE	2NR-VE
Туре	Gasoline, 4-cycle DOHC	
Number of cylinder & arrangement	4-cylinder in line	
Bore x stroke	72.5 x 80.5 mm	72.5 x 90.6 mm
Displacement	1,329 cc	1,496 cc
Max. output	70/6,000 kw/rpm	76/6,000 kw/rpm
Max. torque	121/4,000 Nm/rpm	136/4,200 Nm/rpm

## Engine tune-up

Firing order	1-3-4-2	
	CVT	
Engine idling speed (in neutral)	$700\pm50$ rpm	

## Maintenance data (specified fuel, oil level, etc.)

The life span of your vehicle is greatly influenced by the oil and type of fluids you use. Perodua recommends using our Perodua genuine oil and fluids (referred to here as 'specified brand') that are optimal for your vehicle.

If you use other brands, please use the brand with equivalent quality to the specified brand.

#### Fuel

Specified fuel	Capacity (L) (Reference)
Unleaded gasoline having RON 95 or higher	36

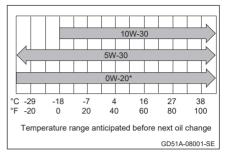
#### **Engine oil**

	Capacity (L) (Reference*)	
Specified brand	Changing engine oil only	Changing engine oil and oil filter
Perodua Fully Synthetic 0W20-SN	3.3	3.5

\* Engine oil capacity is a reference when changing the oil. To check the oil level, turn off the engine after warming it up. Wait for more than 5 minutes before using the level gauge to check the oil level.

#### Recommended engine oil viscosity

Please use engine oils with viscosity suitable based on the following diagram.



\* SAE 0W-20 is the best choice for good fuel economy

Oil viscosity:

- The 0W in 0W-20 indicates engine starting properties in low temperature. The lower the value before the W, the easier it will be to start the engine in cold weather.
- The 20 in 0W-20 indicates viscometric properties in high temperature. Oils with high viscosity (high value) are suitable for high-speed or heavy load driving.

## Radiator

Specified brand	Capacity (L) (Reference)	Reserve tank LOW/FULL (L)
Perodua Coolant 30:70 ratio of coolant : water	3.1	0.2 / 0.9

#### 

#### Coolant dilution

To dilute the coolant, be sure to use soft water or demineralized water (reverse osmosis or distilled water).

#### Ignition system

Spark plug		
Туре	DENSO SC16HR11	
Gap	1.1 <sup>+0</sup> <sub>-0.1</sub> mm	

#### CAUTION

#### Iridium tipped spark plugs

Use only iridium tipped spark plugs. Do not adjust the spark plug gap.

#### Battery

Engine	Туре
1NR-VE	M42R
2NR-VE	M42R

### Transmission

Specified brand	Capacity (L) (Reference*)	Fluid replacement amount (L)
Perodua CVT Fluid	6.0	2.25

\* The capacity is a reference. Please consult an authorised Perodua Service Centre when it is necessary to change the fluid.

#### 🚺 CAUTION

#### CVT fluid type

Using CVT fluid other than "Perodua CVT Fluid" may cause major malfunction, for example vehicle breakdown.

#### Fan belt

This is a self-adjusting fan belt and does not require maintenance.

#### Brakes

#### Brake fluid

Specified brand Perodua Brake Fluid (DOT3)

#### Brake pedal

Item	Standard value (mm)
Recess	0.5 - 2
The gap between the pedal and floor when pressed*	80 mm or more

Minimum gap between the pedal and floor when the brake pedal is pressed with 294 N (66 lbf, 30 kgf) force while the engine is rotating

#### Parking brake

Item	Standard value (frequency)
Pulling Number of notches* at an operating force of 196 N (44 lbf, 20 kgf)	5 - 8

\* Notch refers to the restraint (the catching sound) when applying the handbrake.

### Washer tank

Capacity (L) (Reference)
2.0

### Tyres and wheels

Tyre size	Wheel size	Inflation pressure when the tyres are cold kPA (kg/sm²)	
	5120	Front wheels	Rear wheels
175/65R14 82T	14 x 5J	250 (2.5)	250 (2.5)
185/55R15 82V	15 x 6J	220 (2.2)	220 (2.2)

### **Bulbs**

	Bulbs	Wattage
	Rear turn signals/hazard lights	21
Exterior	Reversing lights	16
	License plate light	5
	Front personal lights	5
Interior	Room light (Front and rear)	8
	Luggage compartment light	5

Lights not listed in the table are LED lights.

## Vehicle specifications

Model	Engine	Drive train system
M804RS	1NR-VE	FF (forward drive)
M806RS	2NR-VE	FF (forward drive)

## Weights

Gross vehicle weight	1,425 kg
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Vehicle specifications

## Items requiring initial settings

The following items require initial settings in order for the systems to work properly, for example after reconnecting the battery or after a service

Item	Future details	Refer to
Power windows	<ul><li>Reconnecting the battery after charging or replacing the battery</li><li>When replacing fuses</li></ul>	P. 3-41

Index	9
	What to do if (symptom index)9-1

When the vehicle is making

## What to do if ... (symptom index)

When in trouble, please check for the following items before contacting an authorised Perodua Service Centre.

#### Unable to lock, unlock, open or close the door



#### The key is lost

- If the key or emergency key is lost, new genuine Perodua key or emergency key can be made at an authorised Perodua Service Centre. (→P. 3-1)
- Please contact an authorised Perodua Service Centre immediately if you lose the key or smart key because the risk of theft will be extremely high. (→P. 3-3)



#### Unable to lock or unlock

- Is the key battery depleted or dead? ( $\rightarrow$ P. 6-65)
- Is the engine switch set to 'ON'? Turn the engine switch to 'OFF' when locking the vehicle. (→P. 4-12)
- Is the smart key left in the vehicle? Check if you carry the smart key with you when locking the vehicle
- The feature may not work properly due to radio wave.
   (→P. 3-9)



#### Rear doors cannot be opened

 Are child locks applied? Rear doors cannot be opened from inside when child lock is applied. Open the doors from outside and release the child lock.

(→P. 3-16)

#### Is this a breakdown?



#### The engine will not start

- Did you press the engine switch while firmly pressing the brake pedal? (→P. 4-11)
- Is the shift lever in P? ( $\rightarrow$ P. 4-11)
- Is the key inside the vehicle and can be detected? ( $\rightarrow$ P. 3-6)
- Is the steering wheel locked? ( $\rightarrow$ P. 4-14)

 Is the key battery depleted or dead? In this case, the engine can be started using a temporary measure. (→P. 7-55)

• Is the battery depleted? ( $\rightarrow$ P. 7-57)



# The shift lever will not shift from P even when the brake pedal is pressed

Is the engine switch set to 'ON'?

Please see page 4-17 if the shift lever is not released even when pressing the brake while the engine switch is on.



#### Cannot turn the steering wheel after stopping the engine

The steering wheel is automatically locked to prevent theft. ( $\rightarrow$ P. 4-13)



## The windows do not open or close even when operating the power window switch

Is the window lock switch pressed? Power windows except the driver's power window cannot be operated if the window lock switch is pressed. (→P. 3-41)



## The engine switch is turned off automatically

Automatic power off function activates when the engine switch is set to ACC or ON for a certain period of time (engine is not running). (→ P. 4-13)



### The alarm goes off

If the alarm goes off, please see 'When the vehicle is making noises (noise index)' (→P. 9-4).



### If a warning light or warning message\* is displayed

 Please check (→P. 7-12, 7-20) if a warning light or warning message\* is displayed.

#### When trouble occurs



## Flat tyre

Vehicles equipped with a spare tyre Stop the vehicle at a safe place and replace the flat tyre with the spare tyre. (→P. 7-43)



### Stuck

- Try release methods if the vehicle is stuck in mud, sand or dirt.
   (→P. 7-64)
  - \* : The equipment may vary according to the vehicle grade and options.

## When the vehicle is making noises (noise index)

The alarm will sound to alert you of the vehicle condition or misoperation in the following situations.

#### When getting on or off the vehicle

Situation	Cause	Details
When opening and closing the doors	The front position lights/headlights are on.	P. 4-26

#### When driving

Situation	Cause	Details
When pressing the brake pedal (squeaking or scratching sound)	The brake pad may be worn	P. 4-6

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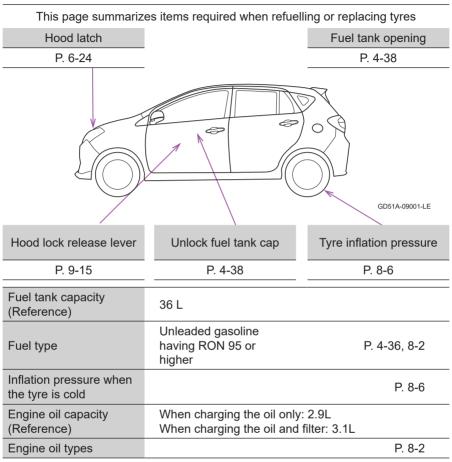
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#### **USEFUL INFORMATION AT PETROL STATIONS**

The following Wireless Communication products in this vehicle is certified (Type Approved) by SIRIM under Communication and Multimedia Act 1998





Immobilizer equipment (body ECU)



Keyless entry systems / immobilizer (smartkey transmitter) Blind spot monitor systems



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