

User Guide Subaru 2018 Legacy 2.5i Premium

Table of contents

- EyeSight
- About EyeSight
- Pre-Collision Braking System
- Adaptive Cruise Control
- Lane Keep Assist
- Pre-Collision Throttle Management
- Lane Departure Warning
- Lane Sway Warning
- Lead Vehicle Start Alert
- Conventional Cruise Control
- List of buzzer sounds
- EyeSight malfunction and temporary stop
- Customizing functions
- Message screen list
- Troubleshooting

EyeSight™.

- EyeSight incorporates the latest driver assistance features available from SUBARU, including such features as Adaptive Cruise Control, a Lead Vehicle Start Alert and a Lane Departure and Lane Sway Warning, all of which are designed to assist the driver in making decisions and increase driver comfort and convenience. Initially, the operation and use of the various EyeSight features may be unfamiliar to you.
- That is why we urge you to read this manual carefully before using EyeSight. We also recommend that you first take the time to test EyeSight in order to experience its features for yourself so that you can become familiar with their operation.
- Please keep in mind that it is the responsibility of drivers to operate their vehicles safely at all times. Drivers should always remain alert and should never become complacent while operating their vehicles because of the presence of EyeSight.
- EyeSight is never a substitute for active driver involvement and it may not operate optimally under all driving conditions.
- This booklet is a supplement to the Owner's Manual for your SUBARU vehicle and contains a detailed description of EyeSight. It should be read in conjunction with your Owner's Manual so that you will gain a thorough understanding of the proper operation of your vehicle.

- The information, specifications and illustrations found in this booklet are those in effect at the time of printing. SUBARU CORPORATION reserves the right to change specifications and designs at any time without prior notice and without incurring any obligation to make the same or similar changes on vehicles previously sold.
- Please keep this booklet together with your Owner's Manual and leave it in the vehicle at the time of resale. The next owner will need the information it contains.

SUBARU CORPORATION

1. Drivers are responsible for driving safely. Always comply with all traffic rules and regulations regardless of the fact that your vehicle is equipped with EyeSight. Always maintain a safe following distance between your vehicle and the vehicle in front of you. pay attention to your surroundings and driving conditions. and take necessary actions in order to maintain a safe following distance.
2. Never attempt to drive relying on EyeSight alone.
3. EyeSight is intended to assist the driver in making decisions in order to reduce the risk of accidents or damage and lessen the burden on the driver.
4. When an EyeSight warning is activated. pay attention to what is in front of you and to your surroundings. and take necessary actions.
5. This system is not designed to support driving in poor visibility or in extreme weather conditions. or to protect against careless driving when the driver is not paying complete attention to the road ahead. It also cannot prevent collisions from occurring in all driving conditions.
6. There are limits to the EyeSight recognition performance and control performance. Be sure to read the instructions for each function before using the system. and always use it properly. Improper use may lead to failure of control performance. which could cause an accident.

Refer to the following pages for each function:

- For the Pre-Collision Braking System. refer to page 21.
- For Adaptive Cruise Control. refer to page 33.
- For Lane Keep Assist. refer to page 57.
- For Pre-Collision Throttle Management. refer to page 65.
- For Lane Departure Warning. refer to page 71.
- For Lane Sway Warning. refer to page 74.
- For Lead Vehicle Start Alert. refer to page 77.
- For Conventional Cruise Control. refer to page 78.

About EyeSight

- The system may not operate correctly under the conditions listed below.
- When these conditions occur, turn off the Pre-Collision Braking System.
- Also, do not use Adaptive Cruise Control or Conventional Cruise Control.
- The tire pressure is not correct.*1
- The temporary spare tire is installed.*1
- Tires that are unevenly worn or tires with uneven wear patterns are installed.*1
- Tires that are the wrong size are installed.*1
- Flat tires that have been fixed temporarily with a tire repair kit.
- The suspension has been modified (including a genuine SUBARU suspension that has been modified).
- Any object that obstructs the stereo camera's view are installed on the vehicle.
- The headlights are dirty or they have snow and ice or dirt on them. (Objects are not correctly illuminated and are difficult to detect.)
- The optical axes are not aligned correctly. (Objects are not correctly illuminated and are difficult to detect.)
- The lights including headlights and fog lights have been modified.
- Vehicle operation has become unstable due to an accident or malfunction.
- The brake system warning light is illuminated in red.*2
- A heavy cargo is loaded onto or inside the vehicle.
- The maximum number of occupants is exceeded.
- The combination meter is not operating properly; such as when the lights do not illuminate, the beeps do not sound, the display is different from when it is normal, etc.*3

Odometer reading

1. Data related to ABS, Vehicle Dynamics Control and Traction Control Function SUBARU and third parties contracted by SUBARU may acquire and use the recorded data for the purpose of vehicle research and development.
 2. SUBARU and third parties contracted by SUBARU will not disclose or provide the acquired data to any other third party except under the following conditions.
- The vehicle owner has given his/her consent.
 - The disclosure/provision is based on a court order or other legally enforceable request.
 - Data that has been modified so that the user and vehicle cannot be identified is provided to a research institution for statistical processing or similar purposes.

CAUTION

- The stereo camera monitors and detects smears or blurs on the front of the camera. However, detection is not 100% accurate.
- Under certain conditions, the function may fail to detect smears or blurs on the front of the stereo camera accurately.
- In addition, this function may not detect that there is snow or ice on the windshield close to the stereo camera. In such conditions, be sure to keep the windshield clean at all times (indicated by). Otherwise the system may not operate correctly.
- When this function detects that the front of the stereo camera is smeared or blurred, no EyeSight functions can be activated except for Conventional Cruise Control.
- The stereo camera lenses are precision components. Always observe the following precautions when handling them.
- Never touch the stereo camera lenses, and do not attempt to wipe or clean the lenses. Doing so could damage or soil the lens, and lead to improper system performance. If you ever touch a lens for any reason, be sure to contact a SUBARU dealer.

Troubleshooting

1. Lane Keep Assist was unexpectedly canceled.
2. Did you take your hands off the steering wheel? Did you just lightly put your hands on the steering wheel while driving?
3. If the system cannot detect the steering operation of the driver, it will temporarily cancel Lane Keep Assist.
4. Did you turn a tight corner?
5. Lane Keep Assist does not operate while turning a tight corner.

Did you perform one of the following operations?

- Operating the turn signal lever
- Operating the steering wheel to depart from a lane
- Operating the windshield wiper in a high speed
- Driving your vehicle at a speed less than approximately 34 MPH (55 km/h) or more than approximately 93 MPH (150 km/h)
- Depressing the brake pedal
- Turning on the hazard warning flasher switch
- The system may also be canceled under conditions not listed above.

Is the width of the road is too narrow or too wide?

1. Do not install any accessories on the front side such as on the hood or the grille.

2. It may affect the camera view and the system may not operate correctly.
 3. Make sure that the cargo loaded on the roof does not interfere in the stereo camera's field of view. Obstructing the stereo camera's view may impair the system operation. For details, contact a SUBARU dealer.
 4. Keep the windshield (outside and inside) clean at all times. When the windshield has become fogged, or it has a dirt or an oil film on it, the stereo camera may not detect objects accurately and the EyeSight system may not operate correctly.
 5. Never mount any device to the center air vent, because any airflow change may impact performance of the EyeSight system.
- Do not place any stickers or accessories on the windshield (outside or inside). If you have to do so (for example, legally required or electronic toll tag), avoid the area directly in front of the camera. Otherwise, it may adversely affect the field of view of the stereo camera and can cause improper operation of the system. For details, contact a SUBARU dealer.
 - Do not use any glass coating agents or similar substances on the windshield. Doing so may interfere with the proper operation of the system.
 - Do not install any film or an additional layer of glass on the windshield. The system may not operate correctly.
 - If there are scratches or cracks on the windshield, contact a SUBARU dealer.
 - To have the windshield replaced or repaired, contact a SUBARU dealer.

RES/SET switch

1. This switch can be used to set cruise control*.
2. This switch can be used to reduce the set vehicle speed (when cruise control* is currently set).
3. Adaptive Cruise Control and Conventional Cruise Control
4. This switch can be used to set cruise control*.
5. After cruise control* is canceled, this switch can be used to resume the cruise control function at the vehicle speed that was previously set.
6. This switch can be used to increase set vehicle speed (when cruise control* is currently set). Refer to pages 44 and 54 (for Adaptive Cruise Control).
7. Refer to pages 82 and 87 (for Conventional Cruise Control).
8. Adaptive Cruise Control and Conventional Cruise Control

About EyeSight

1. These switches are used in the following situations.
2. When switching the screen displayed on the combination meter display.
3. When changing the Warning Volume settings, etc. Refer to page 92.

4. Pre-Collision Braking System OFF) switch
5. Press and hold this switch for approximately 2 seconds or longer to turn off the Pre-Collision Braking System and Pre-Collision Throttle Management.
6. When these functions are off, the Pre-Collision Braking System OFF indicator light on the instrument panel illuminates.
7. Press and hold the switch again to turn on the Pre-Collision Braking System and Pre-Collision Throttle Management. This turns off the Pre-Collision Braking System OFF indicator light.

Pre-Collision Braking System

1. Detection of pedestrians
2. The EyeSight system can also detect pedestrians. The EyeSight system detects pedestrians from their size, shape and movement. The system detects a pedestrian when the contour of the head and shoulders are clear.

NOTE

- Some unusual noises may be audible during automatic braking. This is caused by the braking control and is normal.

WARNING

1. The EyeSight system's Pre-Collision Braking function also identifies pedestrians as obstacles. However, depending on the conditions, there may be cases when the system cannot detect a pedestrian. In the following conditions, the possibility that the system may not be able to detect a pedestrian as an object is particularly high.
2. When pedestrians are walking in a group
3. When a pedestrian is next to a wall or other obstacle
4. When a pedestrian is using an umbrella
5. When a pedestrian is wearing clothes that are a similar color to the surrounding environment
6. When a pedestrian is carrying bulky luggage
7. When a pedestrian is bent over, crouching down or lying down
8. When a pedestrian is in a dark location

Pre-Collision Braking System

- When there is an obstacle in front of you during driving, the system activates in the following sequence in order to warn the driver, activate braking control, and activate the brake lights.

- **Following Distance Warning:** When the system determines that there is a risk of collision, a buzzer sounds repeated short beeps and the indicators on the combination meter display illuminate to warn the driver.
- The Following Distance Warning operates when Adaptive Cruise Control is not set.
- When the driver depresses the brake pedal to decelerate and achieves a suitable following distance, the warning is canceled.
- **First Braking and Warning:** When the system determines that there is a high risk of collision with an obstacle in front, a buzzer sounds repeated short beeps and the indicators on the combination meter display illuminate to warn the driver.
- Braking control will be activated and in some situations, the engine output will also be controlled. If the system determines that the amount of evasive action (braking, steering, etc.) taken by the driver has reduced the risk of collision, braking activation is canceled.
- **Secondary Braking and Warning:** If the system then determines that the risk of collision is extremely high, the buzzer changes to a continuous beeping sound and stronger braking control is activated.
- Despite any evasive action taken by the driver, if the system subsequently determines that a collision is unavoidable, braking and engine output are controlled by the system.
- Even after the vehicle has stopped, depress the brake pedal.
- Until the brake pedal is depressed, a message appears and stays in the warning screen area of the combination meter display for approximately 2 minutes. A single continuous beep sounds while the message is displayed.

NOTE

1. To release the brake control after the vehicle has come to a stop through Pre-Collision Braking System, perform the following.
2. Depress the brake pedal.
3. Depress the accelerator pedal (except when the select lever is in the position).
4. Shift the select lever into the position

Turning off the Pre-Collision Braking System

1. When the Pre-Collision Braking System is turned off, the Pre-Collision Throttle Management Control function is also turned off.
2. Even when the Pre-Collision Braking System is turned off, if the ignition switch is turned off and the engine is then restarted, the Pre-Collision Braking System will be turned on. The system default setting when the vehicle is restarted is "ON".

Pre-Collision Braking System OFF indicator light

1. This indicator light illuminates when the ignition switch is turned to the ON position, and remains illuminated for approximately 7 seconds after the engine starts. It turns on when the Pre-Collision Braking System is turned off.
2. It also illuminates under the following conditions.
3. When the EyeSight system has malfunction Refer to page 89.
4. When the EyeSight system has stopped temporarily Refer to page 90.

NOTE

- When the Pre-Collision Braking System OFF indicator light is turned on, the Pre-Collision Braking System (including the Pre-Collision Braking Assist function) does not operate.

Adaptive Cruise Control

1. Adaptive Cruise Control is a driving support system intended to allow more comfortable driving on expressways, freeways and interstate highways.
2. The stereo camera detects vehicles in front that are driving in the same traffic lane, and your vehicle follows the vehicle in front (up to the maximum speed of the set vehicle speed).
3. While following, your vehicle will automatically maintain a following distance that corresponds to the speed of the vehicle in front. When the vehicle in front comes to a complete stop, your vehicle will be also stopped and the electronic parking brake will be automatically applied.
4. The vehicle is capable of being controlled at a speed between approximately 0 and 90 MPH (145 km/h). Please remember that you should not exceed posted speed limits.

Sharp corners or winding roads

1. Frozen roads, snow-covered roads or other slippery road surfaces The tires may spin, causing loss of control of the vehicle.
2. Traffic conditions when frequent acceleration and deceleration make it difficult to maintain the following distance It may not be possible for the system to perform as the traffic conditions require.
3. Steep downhill grades The set vehicle speed may be exceeded.
4. On a steep continuous downhill grade The brakes may overheat.
5. Roads and overpasses with repeated steep uphill and downhill grades Detection of the vehicle in front may be lost, or the road surface may be detected instead of the vehicle in front, making correct control impossible.
6. When entering a sharp corner/turn into an interchange or junction, or a service area, parking area, toll booth or other facilities Detection of the vehicle in front may not be possible.

7. When there are changes in brightness. such as at a tunnel entrance or exit
8. When visibility is poor due to sand. smoke or water vapor blowing in the wind. or when the front vision is obscured due to water splashes. snow. dirt. water spray from road sprinklers or snow clearing sprinklers on the road. or dust stir up generated by the vehicle in front or oncoming traffic.
9. Detection of the vehicle in front may be lost. or water or other substances may be incorrectly detected instead. making correct control impossible.

Adaptive Cruise Control

- After Adaptive Cruise Control has started. it maintains control continuously according to the movement of the vehicle in front. When your vehicle comes to a stop if the vehicle in front has stopped. the stay-stopped function is engaged. However. if the EyeSight stereo camera has lost detection of the vehicle in front. the system may not stop your vehicle.
- Operate the brake pedal and maintain the correct following distance as necessary. Be aware that the EyeSight system has difficulty detecting objects or vehicles that have a relative speed in comparison to your vehicle. Therefore. if the EyeSight system loses detection just as you are approaching a line of stopped cars. for example - you will have to brake manually.
- There is no possibility that the vehicle will automatically begin moving from a stay-stopped condition without operation from the driver.
- If the conditions for automatically canceling cruise control (Refer to page 51) are met while the vehicle is stay-stopped. Adaptive Cruise Control is canceled. For safety reasons. the electronic parking brake is automatically applied.
- Braking may not be sufficient depending on the following conditions.
- Depress the brake pedal and decelerate as necessary.
- Vehicle conditions (amount of load. number of occupants. etc.)
- Road conditions (grade. slipperiness. shape. bumps. etc.)
- Vehicle maintenance condition (brake systems. tire wear. air pressure. temporary spare tire is being used. etc.)
- When the brakes are cold. (For example. just after the engine is started or when the outside temperature is low.)
- For a short period of time when driving after the engine is started until the engine has warmed-up
- When the brakes are overheated on downhill grades (braking performance may be reduced)
- When driving in rain or after washing the vehicle (the brakes may become wet and braking performance may be reduced)

- When towing a trailer or another vehicle. etc.

Setting Adaptive Cruise Control

- Setting Adaptive Cruise Control to standby status Press the (CRUISE) switch. At this time. “ ” (Adaptive Cruise Control). your vehicle indicator and the following distance setting indicator are displayed on the EyeSight display area in the combination meter display.
- The set vehicle speed display will read “ - - - MPH (km/h)”.
- If the switch is pressed once more. the EyeSight display will turn off. It will also automatically turn off when the engine is stopped.
- To set ready status: Adaptive Cruise Control can be set when all of the following conditions are met and is displayed on the EyeSight display area.
- All doors (except the rear gate/trunk) are closed.
- The driver's seatbelt is fastened.
- The electronic parking brake is not engaged (The brake system warning light is turned off.).
- The select lever is in the position and the paddle shift is not operated.
- The brake pedal is not depressed while driving or the brake pedal is strongly depressed while stopping.
- EyeSight operation is not temporarily stopped. Refer to page 90.
- The road is not a steep slope.
- The steering wheel has not been turned significantly in either direction.
- X-MODE is not turned on.

Are you driving on or near a curve?

1. When driving on a curve. braking control may be activated in response to guard rails. the angle of the steering wheel. or roadside structures.
2. The Lead Vehicle Start Alert activates. even though there is no vehicle in front.
3. Depending on surrounding objects. traffic environment and weather. the Lead Vehicle Start Alert may issue a warning in response to objects other than a vehicle that appear in front of your vehicle.

Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.

