
POWER LIFTGATE (PLG) SYSTEM

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Outline

- When the power liftgate (PLG) front switch, power liftgate (PLG) rear switch, liftgate opener switch, or power liftgate button of the remote transmitter is operated, the liftgate opens/closes automatically.

Functions

Auto open/auto close function

- When each switch is operated, the liftgate performs auto open/auto close operation.

Auto reverse pinch protection function

- If an object is detected during the power liftgate (PLG) system operation, the liftgate reverses **50 mm {2 in} or more**.

Opening angle change function

- The opening angle of the liftgate can be changed. For the opening angle change procedure, refer to the [DOOR AND LIFTGATE PERSONALIZATION FEATURES SETTING PROCEDURE] in the workshop manual.

Fully-closed position record function

- The power liftgate records the liftgate opening angle position based on the liftgate fully-closed position.

Guidance function

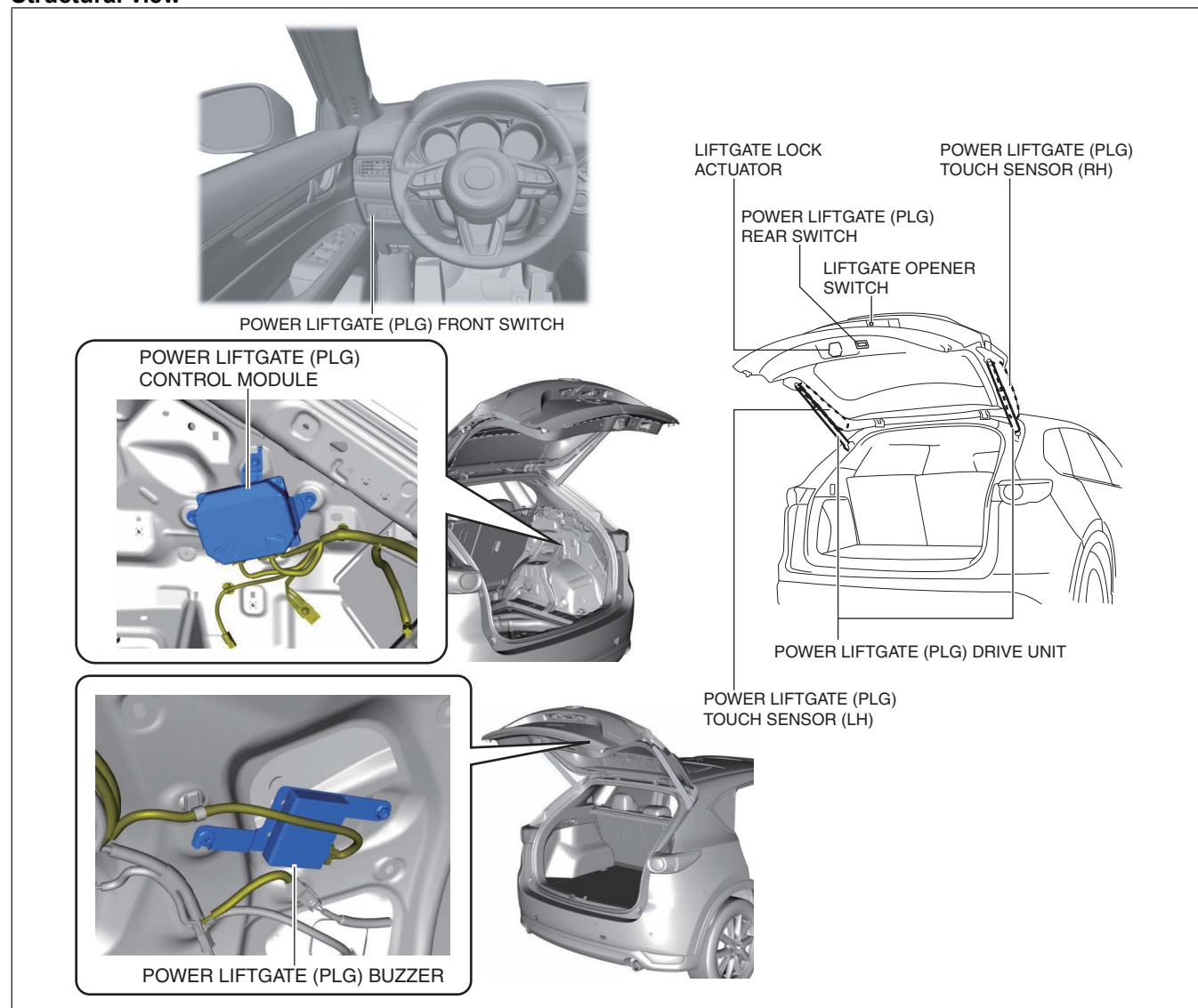
- Alerts using the power liftgate (PLG) buzzer during the auto open/auto close operation or auto open/auto close forced stop.

Initial setting function

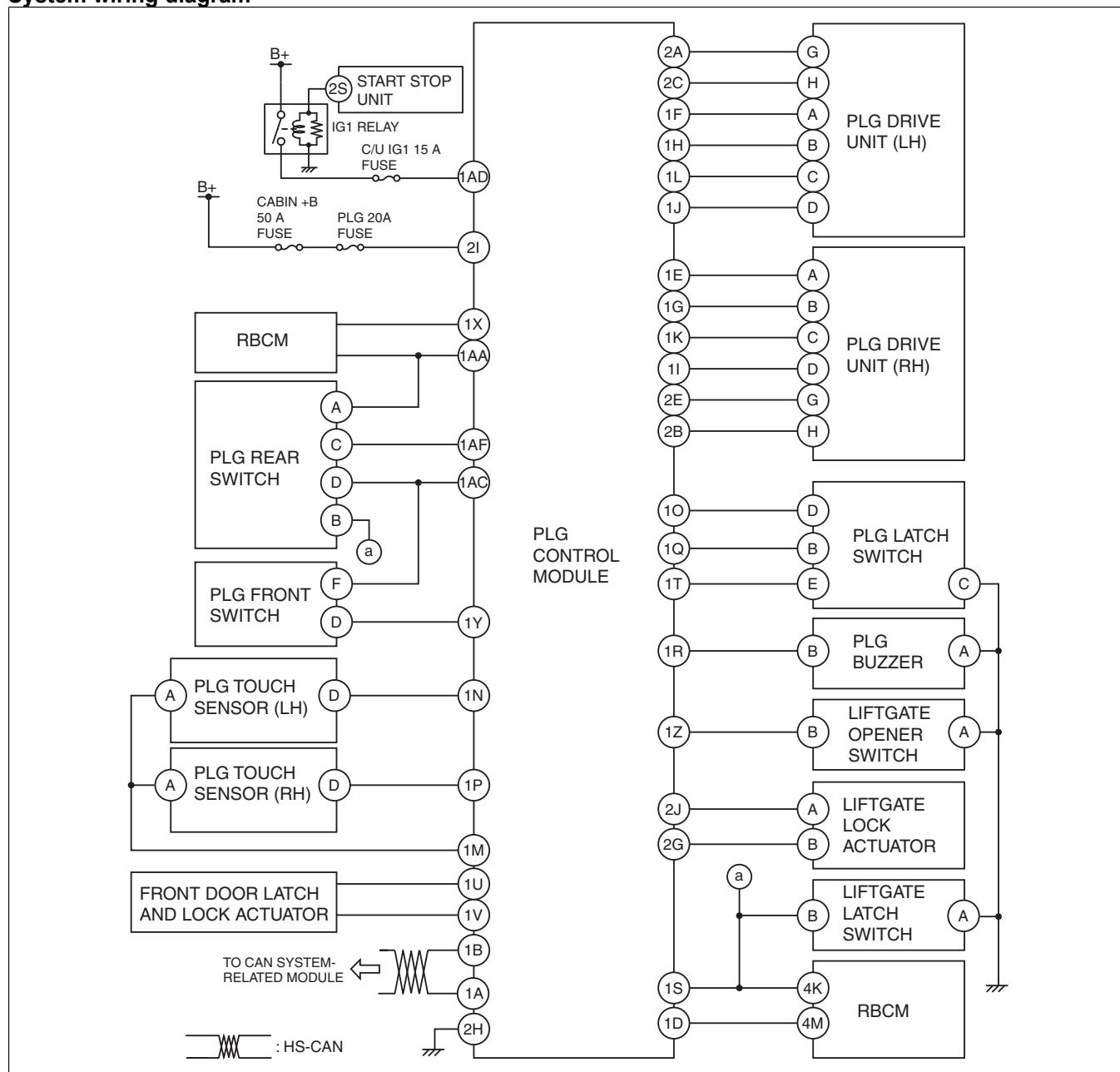
- When any of the following servicing is performed with the liftgate open, the power liftgate (PLG) system operation is disabled because the liftgate open/closed position recorded by the power liftgate (PLG) control module is canceled. To enable the power liftgate (PLG) system operation, the initial setting is required. For the initialization setting procedure, refer to the [POWER LIFTGATE (PLG) INITIALIZATION PROCEDURE] in the workshop manual.
 - Negative battery terminal is disconnected
 - Power liftgate (PLG) control module connector is disconnected
 - Power liftgate (PLG) control module power supply fuse is removed

Structure/Construction

Structural view



System wiring diagram



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Operation

Operation condition

- If all of the conditions indicated in the table below are met, each operation commences.

Ignition is switched OFF

Liftgate status	Operation switch	Selector lever position	Driver's door lock/unlock status	Vehicle speed	Operation
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Fully closed or half-latch	Press PLG front switch for 0.5 s or more	—	Unlock	—	Auto open operation
	PLG rear switch	—	—	—	Non-operation
	Press liftgate opener switch for 0.05 s or more	—	Unlock	—	
	Press power liftgate button of remote transmitter for 1 s or more	—	—	—	
Partly open (stop during close operation)	Press PLG front switch for 0.5 s or more	—	—	—	Auto open operation
	Press PLG rear switch for 0.05—3 s	—	—	—	
	Press liftgate opener switch for 0.05 s or more	—	—	—	
	Press power liftgate button of remote transmitter for 0.5 s or more	—	—	—	
Fully open	Press PLG front switch for 0.5 s or more	—	—	—	Auto close operation
	Press PLG rear switch for 0.05—3 s	—	—	—	
	Liftgate opener switch	—	—	—	Non-operation
	Press power liftgate button of remote transmitter for 1 s or more	—	—	—	
Partly open (stop during open operation)	Press PLG front switch for 0.5 s or more	—	—	—	
	Press PLG rear switch for 0.05—3 s	—	—	—	Auto close operation
	Press liftgate opener switch for 0.05 s or more	—	—	—	
	Press power liftgate button of remote transmitter for 0.5 s or more	—	—	—	
During auto close operation	Press PLG front switch for 0.05 s or more	—	—	—	OFF
	Press PLG rear switch for 0.05 s or more	—	—	—	
	Press liftgate opener switch for 0.05 s or more	—	—	—	
	Press power liftgate button of remote transmitter for 0.05 s or more	—	—	—	
During auto open operation	Press PLG front switch for 0.05 s or more	—	—	—	
	Press PLG rear switch for 0.05 s or more	—	—	—	
	Press liftgate opener switch for 0.05 s or more	—	—	—	
	Press power liftgate button of remote transmitter for 0.05 s or more	—	—	—	

Ignition is switched ON (engine off or on)

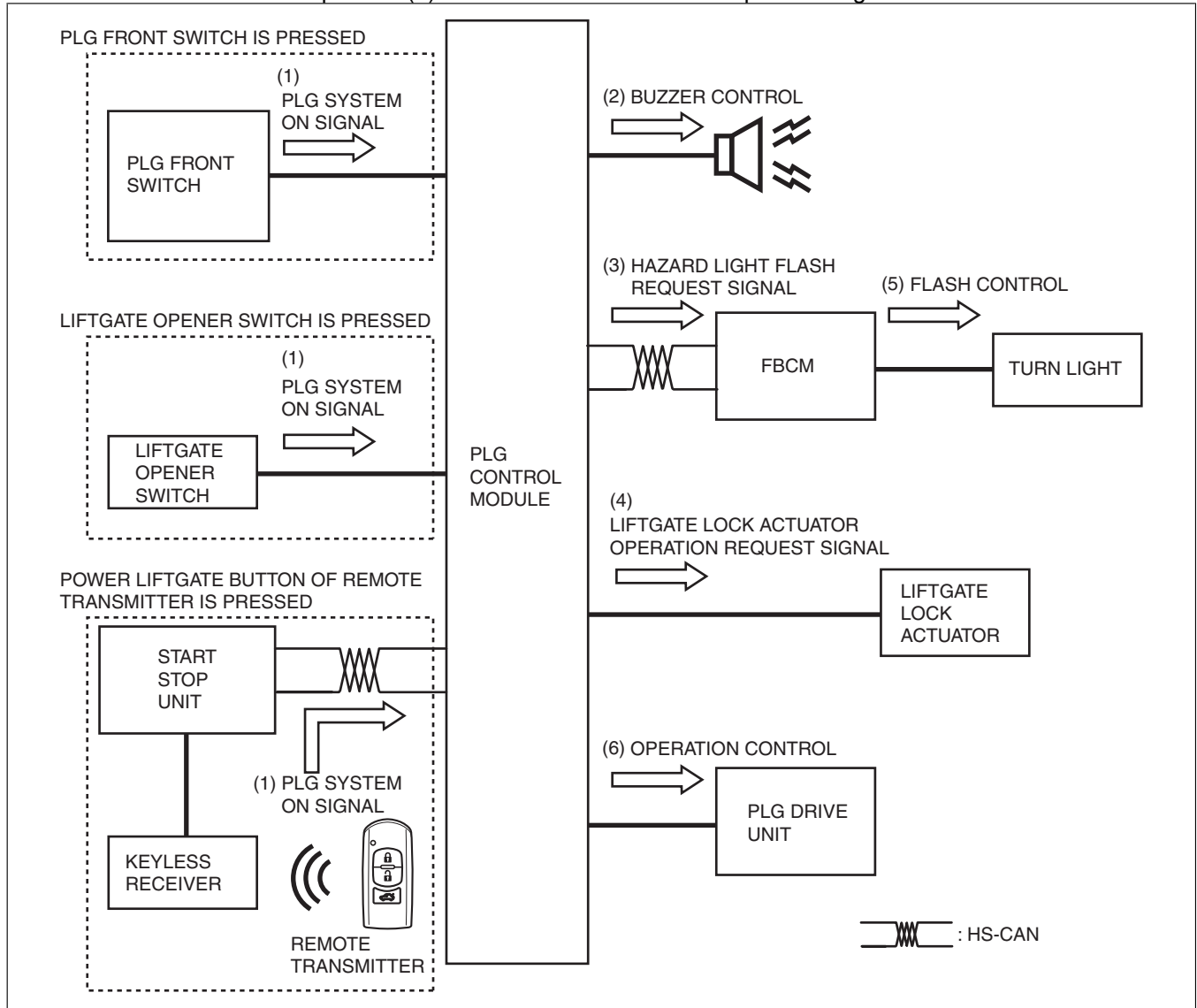
Liftgate status	Operation switch	Selector lever position	Driver's door lock/unlock status	Vehicle speed	Operation
Fully closed or half-latch	Press PLG front switch for 0.5 s or more	P position	Unlock	Less than 3 km/h {2 mph}	Auto open operation
	PLG rear switch	—	—	—	Non-operation
	Press liftgate opener switch for 0.05 s or more	P position	Unlock	Less than 3 km/h {2 mph}	Auto open operation
	Power liftgate button of remote transmitter	—	—	—	Non-operation
Partly open (stop during close operation)	Press PLG front switch for 0.5 s or more	P position	—	Less than 3 km/h {2 mph}	Auto open operation
	Press PLG rear switch for 0.05—3 s		—		
	Press liftgate opener switch for 0.05 s or more		—		
	Power liftgate button of remote transmitter	—	—	—	Non-operation
Fully open	Press PLG front switch for 0.5 s or more	P position	—	Less than 3 km/h {2 mph}	Auto close operation
	Press PLG rear switch for 0.05—3 s		—		
	Liftgate opener switch	—	—	—	Non-operation
	Power liftgate button of remote transmitter	—	—	—	
Partly open (stop during open operation)	Press PLG front switch for 0.5 s or more	P position	—	Less than 3 km/h {2 mph}	Auto close operation
	Press PLG rear switch for 0.05—3 s		—		
	Press liftgate opener switch for 0.05 s or more		—		
	Power liftgate button of remote transmitter	—	—	—	Non-operation
During auto close operation	Press PLG front switch for 0.05 s or more	P position	—	Less than 3 km/h {2 mph}	OFF*1
	Press PLG rear switch for 0.05 s or more		—		
	Press liftgate opener switch for 0.05 s or more		—		
	Press power liftgate button of remote transmitter for 0.05 s or more		—		
During auto open operation	Press PLG front switch for 0.05 s or more		—		
	Press PLG rear switch for 0.05 s or more		—		
	Press liftgate opener switch for 0.05 s or more		—		
	Press power liftgate button of remote transmitter for 0.05 s or more		—		

*1 : Performs a close operation if the selector lever is in a position other than P/vehicle speed is 3 km/h or more.

Auto open operation

- When the PLG front switch/liftgate opener switch/power liftgate button of the remote transmitter is pressed, a PLG system on signal is input (1) to the PLG control module.
- When the PLG control module detects that the PLG system is on with the PLG system auto open operation conditions met, it activates (2) a PLG buzzer and sends the following signals at the same time.
 - Hazard warning light flash request signal (3) to front body control module (FBCM)

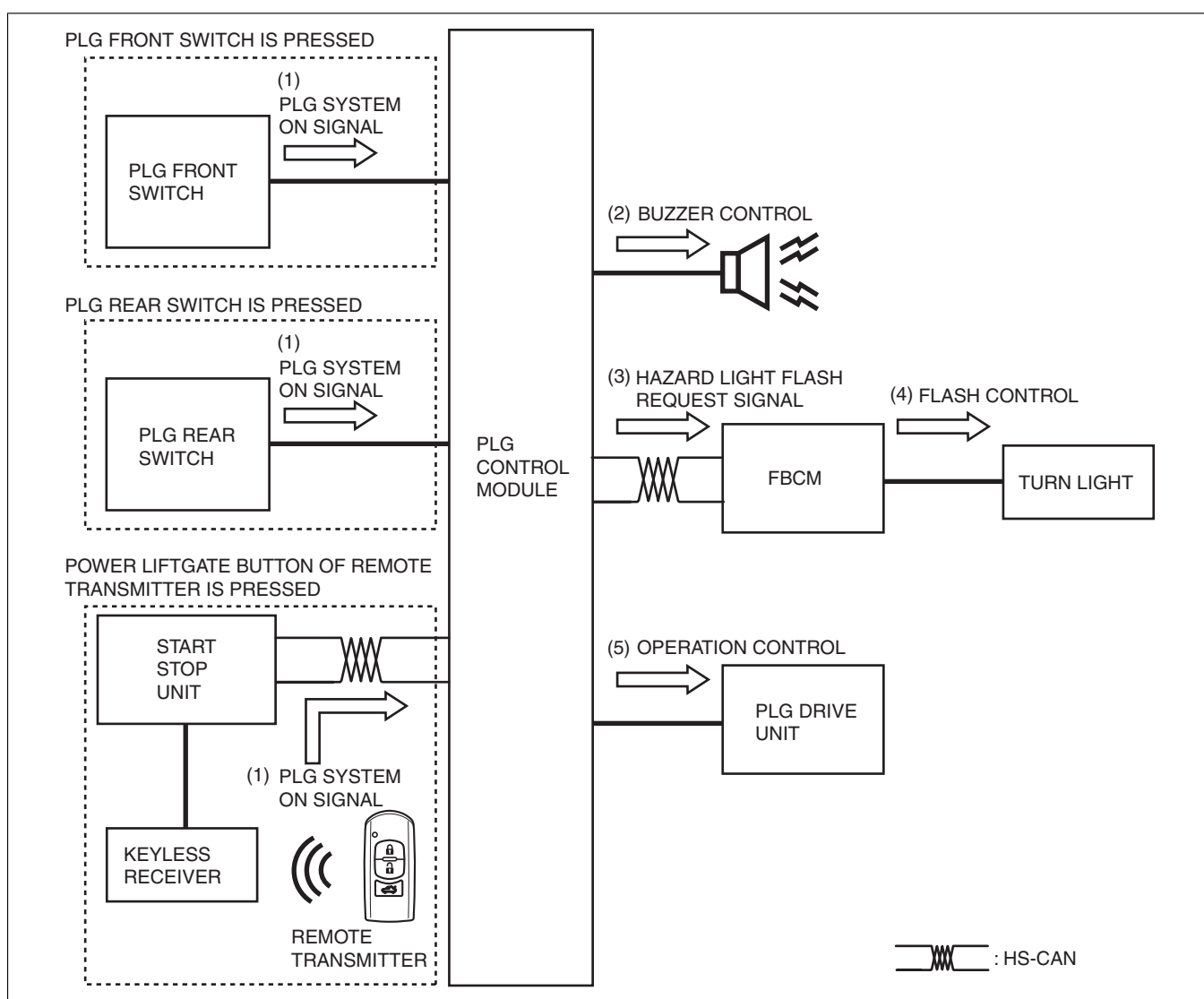
- Liftgate lock actuator operation request signal (4)
- When the front body control module (FBCM) receives a hazard warning light flash request signal, it flashes (5) the hazard warning lights two times.
 - When the liftgate lock actuator receives a liftgate lock actuator operation request signal from the PLG control module, it operates the liftgate lock actuator to release the latch lever.
 - The PLG control module operates (6) the PLG drive unit motor to open the liftgate.



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Auto close operation

- When the PLG front switch/PLG rear switch/power liftgate button of the remote transmitter is pressed, a PLG system ON signal is input (1) to the PLG control module.
- When the PLG control module detects that the PLG system is on with the PLG system auto close operation conditions met, it activates (2) a PLG buzzer and sends a hazard warning light flash request signal to the front body control module (FBCM) at the same time.
- When the front body control module (FBCM) receives a hazard warning light flash request signal, it flashes (4) the hazard warning lights two times.
- The PLG control module operates (5) the PLG drive unit motor to close the liftgate.



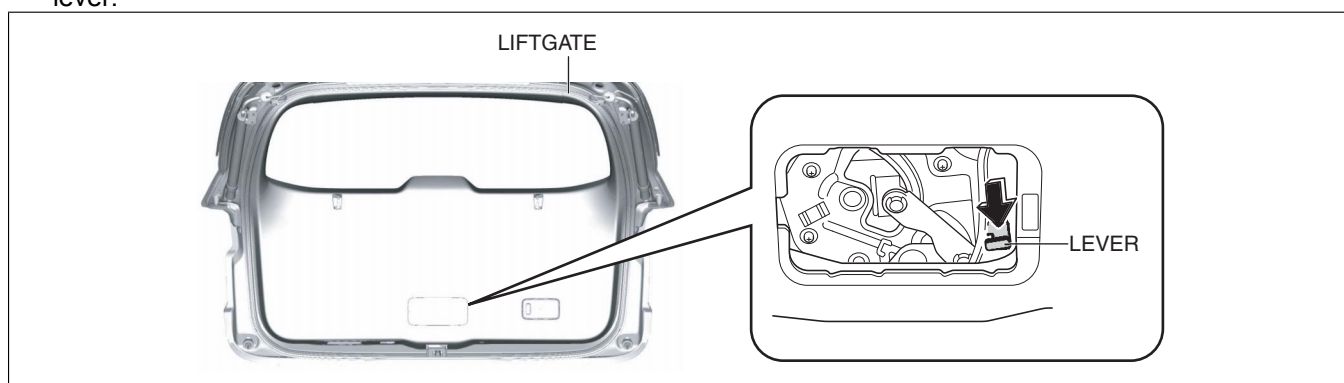
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Operation of auto reverse pinch protection function

- When the PLG control module detects any of the following signals, it reverses the PLG motor and opens/closes the liftgate **50 mm {2 in} or more**.
 - Change in pulse signal from PLG drive unit is detected
 - On signal from PLG touch sensor is detected

Liftgate latch manual release procedure

- If the power liftgate latch cannot be unlocked and the liftgate cannot be opened due to a discharged battery or malfunction in the electrical system, the power liftgate latch can be released by operating the power liftgate latch lever.



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Fully-closed position record function

- The power liftgate records the liftgate opening angle position based on the liftgate fully-closed position.

Note

- Performing the following procedures will reset the initial setting and disable the power liftgate operation. Re-perform the initial setting. For the initial setting procedure, refer to the Workshop Manual, "POWER LIFTGATE INITIAL SETTING".
 - The negative battery terminal is disconnected with the liftgate fully or half opened.

Guidance function

- The power liftgate (PLG) control module sends a buzzer request signal to the power liftgate (PLG) buzzer under the following conditions.

Condition	Power liftgate (PLG) buzzer sound pattern *2
Auto open/close operation is performed	Pattern A
<ul style="list-style-type: none">• Auto reverse pinch protection function is operated• Auto open/close operation is forcibly stopped• Each switch is operated with operation conditions not met	Pattern B
Auto open/close operation is stopped by each switch during auto open/close operation	Pattern C
Vehicle speed of 3 km/h {2 mph} or more is detected with liftgate open	Pattern D
Opening angle of liftgate is stored by opening angle change function	Pattern E
Opening angle change function is reset	Pattern F

*2 : For the power liftgate (PLG) buzzer sound pattern, refer to the [POWER LIFTGATE (PLG) BUZZER]. (See POWER LIFTGATE (PLG) BUZZER.)