

# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2003 NISSAN Skyline Sedan OEM Service and Repair Workshop Manual

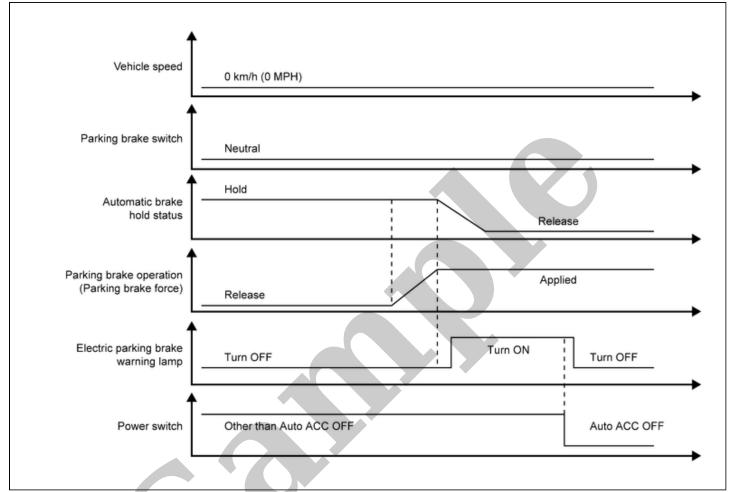
Go to manual page

• When the power switch is OFF, the electric parking brake warning lamp is turn OFF.



The braking force of electric parking brake remains to be held.

## **Changing from Automatic Brake Hold to Parking Brake**



SIEMD-7262494-02-000382916



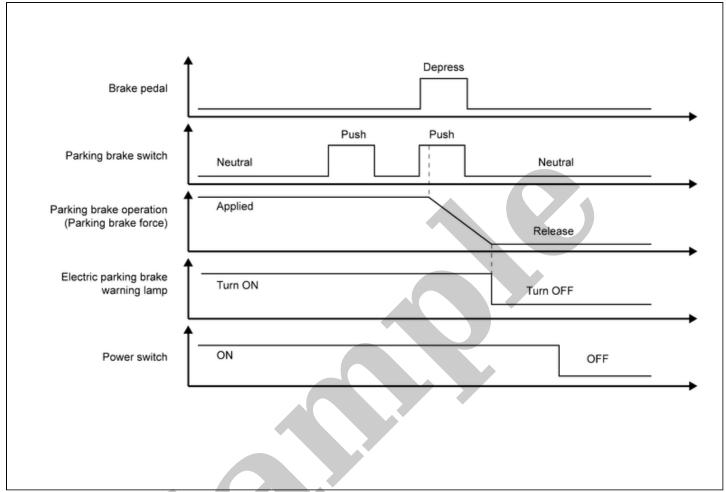
For automatic brake hold. Refer to System Description.

- If any of the following conditions are met, electric parking brake operates automatically. (The braking method for stopping the vehicle is changed from automatic brake hold to electric parking brake.)
  - Automatic brake hold operates for approximately 3 minutes
  - Driver seat belt is unfastened while automatic brake hold is being applied
  - Power switch is OFF
  - · A malfunction is detected in automatic brake hold
  - Driver door is opened
  - The electric shift selector is in the P position
- When the electric parking brake effectiveness reaches the specified value (rotating torque generated by the motor in the parking brake actuator), electric parking brake warning lamp turns ON.
- When the power switch is OFF, the electric parking brake warning lamp is turn OFF.



The braking force of electric parking brake remains to be held.

### **Normal Release (Power switch ON)**



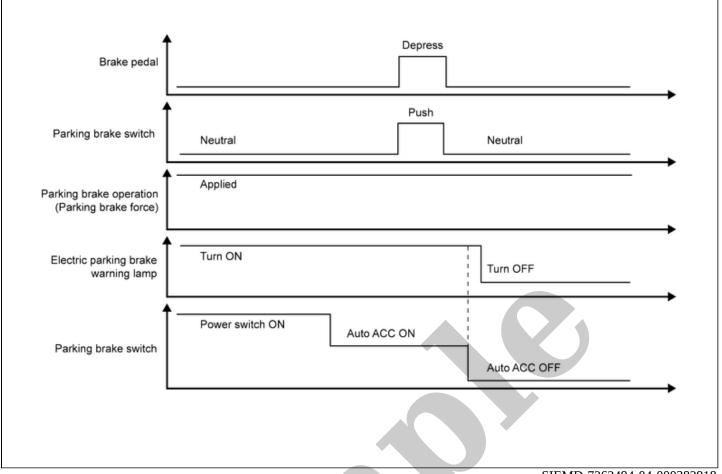
SIEMD-7262494-03-000382917

• The parking brake is released when the parking brake switch is pushed while the brake pedal is depressed, the power switch is ON, and the electric parking brake is operating.



- Electric parking brake is not released if only parking brake switch is pushed.
- The electric parking brake can be released by ON the power switch and pushing the parking brake switch while depressing the brake pedal.
- When release of the electric parking brake is completed (it means no rotating torque generated by the motor in the parking brake actuator), the electric parking brake warning lamp turns OFF.

# Normal Release (Other Power switch ON)



SIEMD-7262494-04-000382918

• The electric parking brake cannot be released if only parking brake switch is pushed while the power switch is OFF, the electric parking brake is applied, and the brake pedal is depressed.

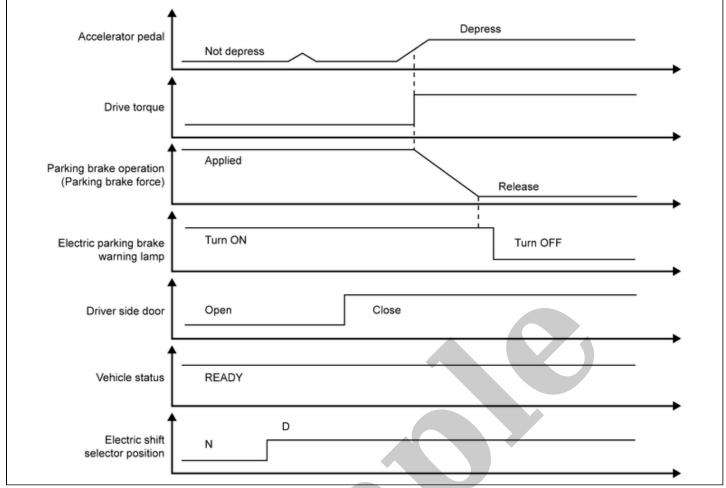


- Electric parking brake is not released if only parking brake switch is pushed.
- The electric parking brake can be released by ON the power switch and pushing the parking brake switch while depressing the brake pedal.
- The electric parking brake warning lamp turns OFF.



The electric parking force of parking brake remains to be held.

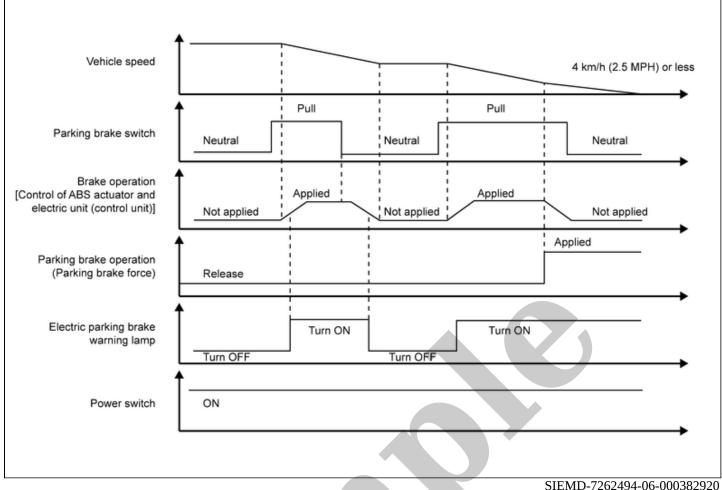
#### **Automatic Release**



SIEMD-7262494-01-000382919

- The parking brake automatically releases under the following conditions.
  - Vehicle to READY
  - The electric shift selector is in the D or R position
  - Driver door is closed
  - The accelerator pedal is depressed
  - When traction motor torque necessary for travelling is generated
- When release of the electric parking brake is completed (it means no rotating torque generated by the motor in the parking brake actuator), the electric parking brake warning lamp turns OFF.

# **Driving**



- When parking brake switch is pulled while the vehicle is stopping [Vehicle speed is 4 km/h (2.5 MPH) or less.], the electric parking brake starts the operation (the motor in the parking brake actuator starts the rotation). And then the electric parking brake warning lamp is turned ON.
- When the parking brake switch is pulled while travelling, a command is transmitted to the ABS actuator and electric unit (control unit), and it applies brake on four wheels to reduce vehicle speed.



- · If ABS actuator and electric unit (control unit) cannot operate, the electric parking brake system brakes rear wheels by the parking brake actuator. And then vehicle speed is decelerated.
- When the parking brake switch is released, the ABS actuator and electric unit (control unit) releases the brakes.
- During the brake operation (deceleration) by the ABS actuator and electric unit (control unit), the status becomes as follows:
  - Electric parking brake warning lamp and master warning lamp are turned ON.
  - Buzzer beeps.
  - "Release parking brake" is shown on the information display of the combination meter.
  - Stop lamp is turn ON.
  - If the electric parking brake switch is still pulled after the vehicle speed decelerates 4 km/h (2.5 MPH), the braking operation is switched from control by the ABS actuator and electric unit (control unit) to control by electric parking brake control unit.

# CONDITION FOR TURN ON THE WARNING LAMP AND INFORMATION DISPLAY

- Electric parking brake warning lamp: Refer to <u>Electric Parking Brake Warning Lamp</u>.
- Brake system warning lamp: Refer to <u>Brake System Warning Lamp</u>.

Condition (status)	Electric parking brake warning lamp	Master warning lamp	Brake system warning lamp	Parking brake switch indicator	Warning buzzer	Information display
	(P)	$\triangle$	(I)) <b>Y</b>			
Electric parking brake system is operating	ON	OFF	OFF	ON	OFF	_
Electric parking brake system is released	OFF	OFF	OFF	OFF	OFF	_
The parking brake switch is pushed without depressing the brake pedal.	ON	OFF	OFF	ON	OFF	Press brake pedal
The accelerator pedal is depressed with the vehicle is READY state and the driver door is open.	ON	OFF	OFF	ON	OFF	Release parking brake
The electric parking brake is operated with the parking brake switch kept pulled during driving.	ON	ON	OFF	ON	ON	Release parking brake
When measuring the braking force	ON	OFF	OFF	ON	OFF	_
Electric parking brake system is malfunctioning	ON/OFF (Depends on the status of the electric parking brake system.)	OFF	ON	ON/OFF (Depends on the status of the electric parking brake system.)	OFF	_
The electric parking brake braking force is insufficient (vehicle is moving backward).	Blinking	ON	ON	Blinking	ON	Press brake pedal
The combination meter cannot receive signals from the ABS actuator and electric unit (control unit) via CAN communication.	Blinking	OFF	ON	ON/OFF (Depends on the status of the electric parking brake system.)	OFF	_
A malfunction of the parking brake switch is detected.	ON/OFF (Depends on the status of the electric parking brake system.)	OFF	ON	ON/OFF (Depends on the status of the electric parking brake system.)	OFF	_
The parking brake switch is operated while a malfunction of the parking brake switch is detected.	Blinking	OFF	ON	Blinking	OFF	_
Release of the electric parking brake is inhibited detecting malfunctions of other control units.	ON/OFF (Depends on the status of the electric parking brake system.)	OFF	ON	ON/OFF (Depends on the status of the electric parking brake system.)	OFF	_
Electric parking brake system does not operate (malfunction check not possible).	Blinking	OFF	ON	Blinking	OFF	_

Refer to Circuit Diagram.



Refer to Fail-safe.



#### FOR USA

Name	Design	Layout/Function
Electric parking brake warning lamp	PARK	For layout: Refer to <u>Design</u> .
		For function: Refer to Electric Parking Brake Warning Lamp.

#### FOR USA

Proko system warning lamp		For layout: Refer to <u>Design</u> .
Brake system warning lamp	For function: Refer to <u>Brake System Warning Lamp</u> .	

#### **EXCEPT FOR USA**

Name	Design	Layout/Function
Electric parking brake warning lamp	((P))	For layout: Refer to <u>Design</u> .
		For function: Refer to Electric Parking Brake Warning Lamp.

#### **EXCEPT FOR USA**

Brake system warning lamp	((!)) <b>Y</b>	For layout: Refer to <u>Design</u> .
		For function: Refer to Brake System Warning Lamp.

