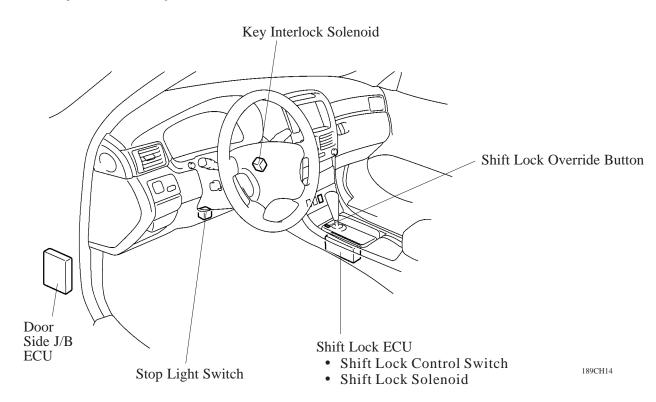
### **■ SHIFT LOCK SYSTEM**

### 1. General

A shift lock system that help prevent the unintended operation of the shift lever has been provided. The shift lock system consists of a key interlock device and shift lock mechanism.

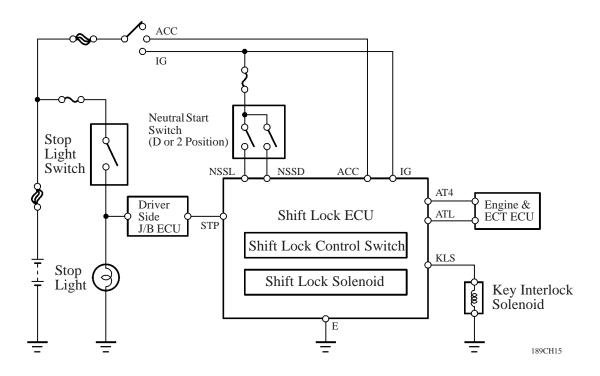
# 2. Layout of Components



# 3. Function of Components

Components		Function	
Key Interlock Solenoid		Regulates ignition key movement according to signal from the shift lock ECU.	
Stop Light Switch		Sends the brake signal to the shift lock ECU.	
Shift Lock Override Button		Manually cancels shift lock mechanism when the battery is discharged or in any other emergency condition.	
Shift Lock ECU		<ul> <li>Receives inputs of various types of signals and regulates the operation the two solenoids.</li> <li>Outputs the signal of shift lever position 4 or L to engine &amp; ECT ECU.</li> </ul>	
	Shift Lock Control Switch	Detects the shift lever position (P, 4, or L position).	
	Shift Lock Solenoid	Regulates the operation of the shift lever at P position according to signal from the shift lock ECU.	

# 4. System Diagram



# 5. System Operation

The following describes the operation conditions of the shift lock mechanism and the key interlock device.

### ► Shift Lock Mechanism ◀

Brake Pedal	Ignition Switch Position	Shift Lever (In "P" position)	
Stop light switch ON	ON	Shift lever is free (Shift lock solenoid is ON)	
(when brake pedal is depressed)	LOCK or ACC	Shift lever is locked (Shift lock solenoid is OFF)	
Stop light switch OFF	ON	<u>†</u>	
(when brake pedal is not depressed)	LOCK or ACC	†	

### **▶** Key Interlock Device **◄**

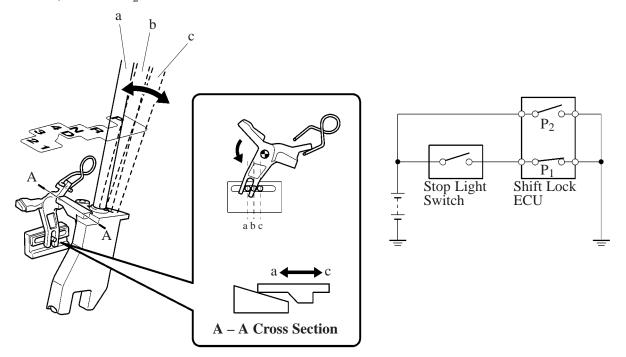
Shift Lever Position	Ignition Key (In a position other than LOCK)	
Shift lever in a "P" position	Will turn to LOCK position (Key lock solenoid is OFF)	
Shift lever in a position other than "P" position (or shift lever in "P" position and another position is being selected)	Will not turn to LOCK position (Key lock solenoid is ON)	

### 6. Construction and Operation

#### **Shift Lock Control Switch**

The shift lock control switch is integrated into the shift lock ECU to detect the shift lever position (whether or not it is in "P" position, and in which of the select position).

- When the shift lever is in the select position "a", "b", or "c", terminal "P1" turn ON.
- When the shift lever is in the select position "b" or "c", or shift lever is in a position other than "P" position, terminal "P<sub>2</sub>" turn ON.



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## **▶** Shift Lock Control Switch Operation **◄**

Shift Lever Position		a ("P" Position)	b (Shift Lock Position)	c (Shift Free Position)	Other than "P" position
-	ON				
$P_1$	OFF				
_	ON				
P <sub>2</sub>	OFF				

#### **Shift Lock Mechanism**

When the shift lock solenoid is OFF, the shift lock plate stopper is located at the select position of "P" position to regulate the shift lever movement. When the shift lock solenoid is turned ON, the shift lock plate stopper, as illustrated below, moves away from the select position of "P" position to free the shift lever.

