## 4. Shift Control Mechanism

General

- A gate type shift lever is used in conjunction with the installation of the 5-speed automatic transmission. With the gate type, the shift lever button and the overdrive switch of the straight type shift lever have been discontinued. Similar functions are achieved through a single-shift operation (fore-aft and side-to-side).
- This shift lever mainly consists of the shift lock ECU, shift lever plate, and shift lever sub-assembly.
- Shift lock ECU has a built-in transmission control switch, P detection switch, and shift lock solenoid.
- A shift lock system consists of the key interlock device and shift lock mechanism.
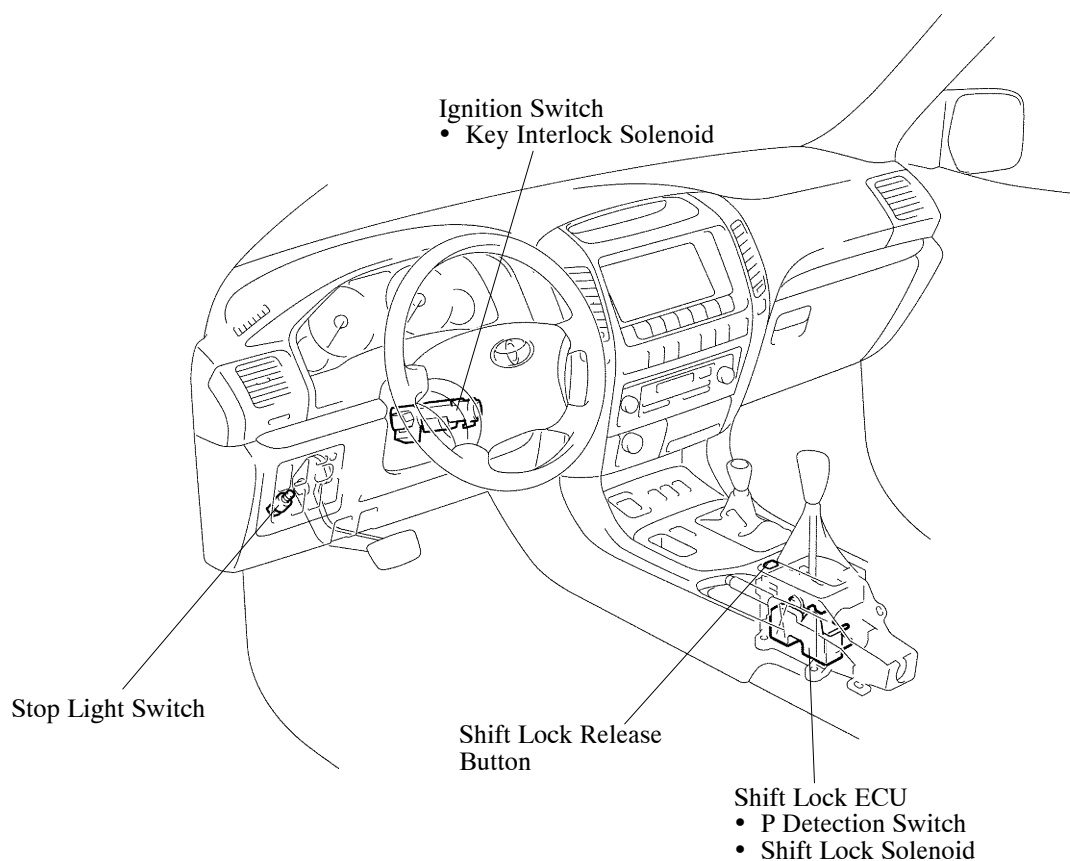

Shift Pattern

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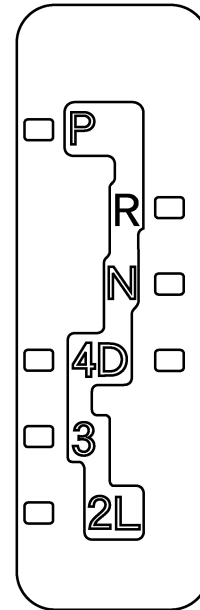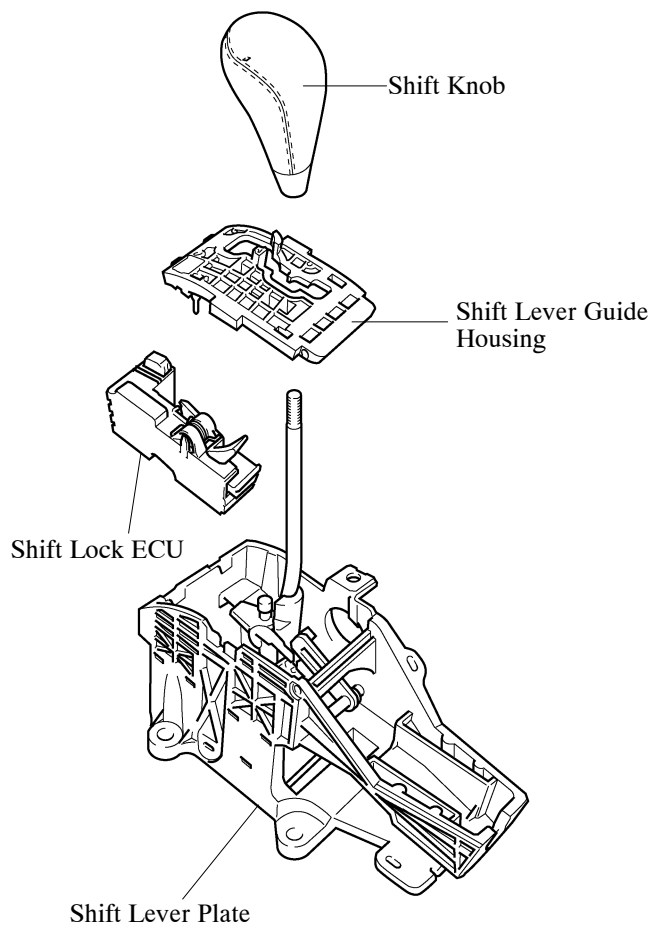
Shift Lock System

1) General

- The key interlock device prevents the key from being pulled out after the ignition switch is turned OFF, unless the shift lever is moved to the P position. Thus, the driver is urged to park the vehicle in the P position.
- The shift lock mechanism prevents the shift lever from being shifted to a position other than the P position, unless the ignition switch is ON and the brake pedal is pressed. This prevents the vehicle from starting off suddenly against the wish of the driver.

2) Layout of Component

Ignition Switch
- Key Interlock Solenoid

Stop Light Switch

Shift Lock Release Button

Shift Lock ECU
- P Detection Switch
- Shift Lock Solenoid

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3) Key Interlock Solenoid

The activation of the key interlock solenoid that is mounted on the upper column bracket moves the lock pin to restrict the movement of the key cylinder.

Therefore, if the shift lever is shifted to any position other than "P", the ignition key cannot be moved from the "ACC" to the "LOCK" position.
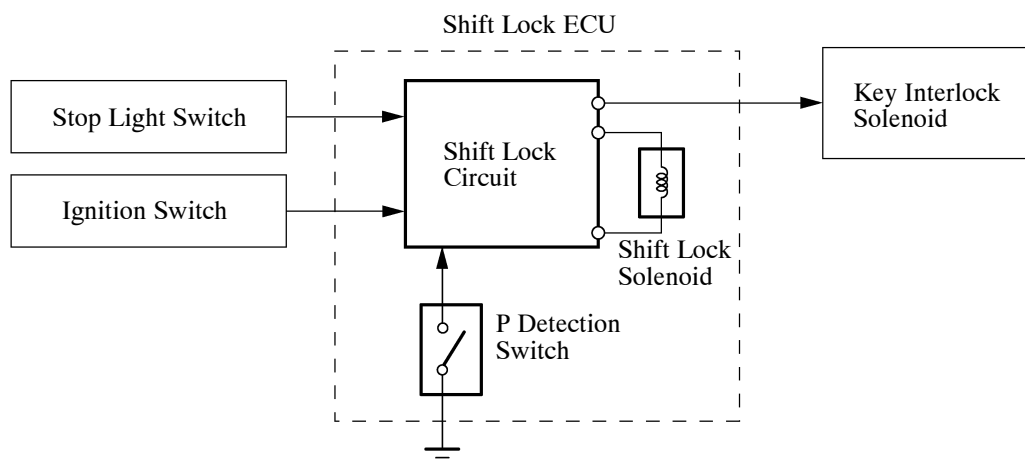
Key Interlock Solenoid

Lock Pin
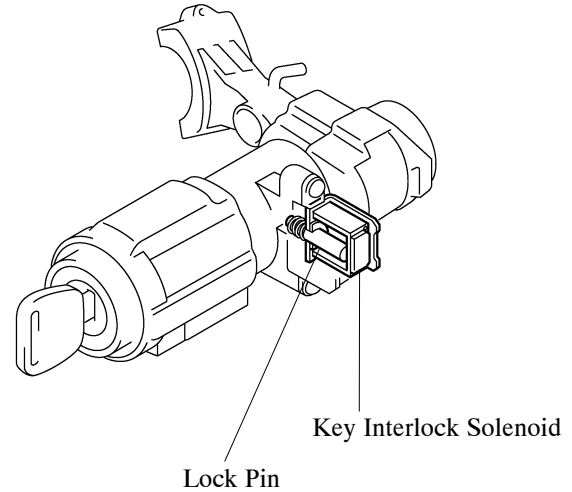
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4) System Operation

- The shift lock ECU uses the P detection switch to detect the shift lever position, and receives the inputs of the stop light switch and ignition switch signals. Upon receiving these signals, the shift lock ECU turns ON the key interlock solenoid and the shift lock solenoid in order to release the key interlock and shift lock.
- A shift lock override button, which manually overrides the shift lock mechanism, is provided.

▶ **System Diagram** ◀

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Shift Lock ECU

| Stop Light Switch | → | Shift Lock Circuit | | Key Interlock Solenoid |
| Ignition Switch | → | | Shift Lock Solenoid | |

P Detection Switch

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