## **Hill-Start Assist Control (HAC) Operation**

USA

Vehicle Interior

Applicability

Meter/Gauge/Display

2011 Sienna

#### **APPLICABLE VEHICLES**

2011 Sienna

#### **CONDITION**

Some customers may inadvertently activate the Hill-Start Assist Control (HAC). Most typical complaints may include one or more of the following symptoms with no DTC(s) stored in the Skid Control ECU:

- Slip indicator light flashes
- Skid control buzzer sounds one to three times
- Vehicle temporarily does not move forward or backwards

#### **RECOMMENDATIONS**

- Review Hill-Start Assist Control (HAC) Description and Operation
- Verify vehicle is equipped with Hill-Start Assist Control (HAC)
- Verify customer's concern
- Refer to Owner's Manual, New Car Features, or the Repair Manual for additional information

#### **Description:**

Hill-start assist control helps to prevent the vehicle from rolling backwards when starting on an incline or slippery slope.

#### Operation:

To engage Hill-Start Assist Control, further depress the brake pedal when the vehicle is stopped completely.

A buzzer will sound once to indicate the system is activated. The slip indicator will also start flashing.

While Hill-Start Assist Control is operating, the brakes remain automatically applied after the driver releases the brake pedal. The stop lights and the high mounted stoplight turn on.

Hill-start assist control operates for about 2 seconds after the brake pedal is released.

Tech Tip 08/31/2010

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### **RECOMMENDATIONS**

The Hill-Start Assist Control system operates in the following situations:

- The shift lever is in a position other than "P"
- The parking brake is not applied
- The accelerator pedal is not depressed

#### **LINK REFERENCES**

- 2011 Sienna: Using Other Driving Systems
- BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: BRAKE CONTROL SYSTEM: DETAILS (2011 Sienna)
- BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: VEHICLE STABILITY CONTROL SYSTEM: SYSTEM DESCRIPTION (2011 Sienna)