

## NO.10 VEHICLE MOVES WHEN ACCELERATING FROM STANDSTILL ON SLOPE [SKYACTIV-G 2.0, SKYACTIV-G 2.5]

id1103a5001700

10	VEHICLE MOVES WHEN ACCELERATING FROM STANDSTILL ON SLOPE
DESCRIPTION	<ul style="list-style-type: none"> <li>Vehicle slips backwards on inclined road surface when accelerating after i-stop operates.</li> </ul>
POSSIBLE CAUSE	<p><b>Note</b></p> <ul style="list-style-type: none"> <li>MT vehicles do not have the Hill Launch Assist function from i-stop because the driver controls the brake pressure.</li> <li>i-stop (engine-stop control) continues operating when shifting the selector lever from D position to N or P position while i-stop (engine-stop control) is operating, however, if the slope of the road surface is <b>within <math>\pm 4\%</math></b>, the Hill Launch Assist (HLA) function is canceled. (ATX)</li> </ul> <p><b>Hill launch assist function system (DSC) malfunction</b></p> <ul style="list-style-type: none"> <li>False detection of inclination angle (cannot calculate correct road slope) <ul style="list-style-type: none"> <li>Low-G (XY) sensor (built-into SAS control module) malfunction (In this case, the SAS control module records DTCs C0061:29 and C0062:29.)</li> <li>Low-G (XY) sensor (built-into SAS control module) initialization malfunction</li> </ul> </li> <li>False detection of brake fluid pressure <ul style="list-style-type: none"> <li>Brake fluid pressure sensor (built-into DSC HU/CM) malfunction</li> </ul> </li> <li>Cannot maintain brake fluid pressure <ul style="list-style-type: none"> <li>DSC HU/CM malfunction</li> </ul> </li> <li>DC-DC converter system error (exceeds capacity of DC-DC converter output due to open or short circuit in wiring harness and after-market electrical part)</li> </ul> <p><b>ATX system malfunction</b></p> <ul style="list-style-type: none"> <li>Electric AT oil pump malfunction (operation malfunction, insufficient pressure)</li> <li>ATX malfunction</li> </ul>

### Diagnostic Procedure

STEP	INSPECTION	RESULTS	ACTION
1	<b>INSPECT EFFECT OF NON-GENUINE ELECTRICAL ACCESSORY FOR CAUSE OF MALFUNCTION</b> <ul style="list-style-type: none"> <li>Remove any non-genuine electrical accessory.</li> <li>Verify the malfunction symptom.</li> <li>Does vehicle slip backwards on inclined road surface when accelerating after i-stop operates?</li> </ul>	Yes	<p>The system is normal.</p> <ul style="list-style-type: none"> <li>Explain to the customer that the vehicle slips backwards on an inclined road surface when accelerating after i-stop operates due to the effect of the non-genuine electrical accessory installed.</li> </ul>
		No	Go to the next step.
2	<b>VERIFY DTC</b> <ul style="list-style-type: none"> <li>Retrieve the PCM, TCM, DSC HU/CM, SAS control module DTCs using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [FW6A-EL, FW6AX-EL].) (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) (See DTC INSPECTION.)</li> <li>Are any DTCs present?</li> </ul>	Yes	<p>Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [FW6A-EL, FW6AX-EL].) (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) (See DTC TABLE.)</p>
		No	Go to the next step.
3	<b>DETERMINE IF MALFUNCTION CAUSE IS HILL LAUNCH ASSIST FUNCTION OR ATX SYSTEM</b> <ul style="list-style-type: none"> <li>Verify the malfunction symptom on a flat road surface.</li> <li>Does the acceleration lag when accelerating?</li> </ul>	Yes	<p>Perform the symptom troubleshooting "NO.9 ACCELERATION MALFUNCTION". (See NO.9 ACCELERATION MALFUNCTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)</p>
		No	<p>Brake fluid pressure sensor (built-into DSC HU/CM) or DSC HU/CM brake pressure hold function malfunction.</p> <ul style="list-style-type: none"> <li>Replace the DSC HU/CM. (See DSC HU/CM REMOVAL/INSTALLATION.)</li> </ul>
4	<p>Verify the test results.</p> <ul style="list-style-type: none"> <li>If normal, return to the diagnostic index to service any additional symptoms. (See SYMPTOM DIAGNOSTIC INDEX [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)</li> <li>If a malfunction remains, inspect the related Service Information and perform the repair or diagnosis. <ul style="list-style-type: none"> <li>If the vehicle is repaired, troubleshooting is completed.</li> <li>If the vehicle is not repaired or additional diagnostic information is not available, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)</li> </ul> </li> </ul>		