

■ ELECTRONIC CONTROL SYSTEM (FOR GS430)

1. General

The A650E automatic transmission adopted in the new GS430 has been matched to the output characteristics of the new engine. In order to further improve the shift feel, driveability, and fuel economy, the following changes have been made.

- (1) Improved shift feel
- (2) Improved driveability
- (3) Improved fuel economy

System	Function	(1)	(2)	(3)
Flex Lock-up Clutch Control	The operating range of the flex lock-up clutch has been expanded from the previous 5th and 4th gears to the 5th, 4th, and 3rd gears to improve fuel economy.			○
AI (Artificial Intelligence) – SHIFT	On the previous model, the upshift prohibition region while driving uphill was applied only to the 5th gear. On the new model, this has been expanded to the 4th and 5th gears. On the previous model, the automatic downshift during downhill driving was applied only to the 4th gear. On the new model, this has been expanded to the 3rd and 4th gears to improve driveability.		○	
Shift Timing Control	<ul style="list-style-type: none"> ● The vehicle speed at which downshifting into 1st gear during engine braking occurs has been increased to improve driveability. ● The hydraulic pressure passages, and solenoid valve construction have been optimized to achieve smooth shifting during the warm-up process following a cold startoff. 		○	
Garage Shift Control	To restrain the vertical movement of the vehicle when the shift lever is moved from the D position to N, the clutch release speed has been optimized.	○		
Shift Down Control	In order to ensure a smooth shift feel during downshifting to accelerate the vehicle, the hydraulic passages and control have been optimized.	○		