

5. Gateway ECU

General

The gateway ECU of the new LS430 has the following functions.

Function	Outline
Gateway	The data for the respective protocols (CAN, BEAN, and AVC-LAN) are arranged differently. Therefore, it is not possible to exchange data between different protocols. For this reason, the data arrangement must be converted before transferring data to a communication bus (CAN, BEAN, or AVC-LAN). This conversion is called a gateway function, which is performed by the gateway ECU.
Diagnosis (only for BEAN)	By connecting a hand-held tester or intelligent tester II to the DLC3 and operating the tester, a technician can access the ECUs via the gateway ECU and the BEAN communication bus. In this manner, the DTCs can be output of the BEAN, DATA LIST (for checking ECU data) and ACTIVE TEST (to actuate a desired actuator) can be performed. For details, see the LEXUS LS430 Repair Manual Supplement (Pub No. RM1049E).
Customize (only for BEAN)	The customized body electronics system enables the control function settings of the ECUs to be changed through the use of a hand-held tester. However, this system can change the settings of only the ECUs that belong to the bus in which communication is centered on the gateway ECU.

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Diagnosis of BEAN

The DTCs of the engine ECU and skid control ECU, which have been converted from BEAN to CAN, have been discontinued. An AFS ECU has been added to BEAN.

DTC	DTC No.	Detection Item
Discontinued	B1261	Engine ECU communication stop
	B1282	Skid Control ECU communication stop
Added	B1205	AFS ECU communication stop