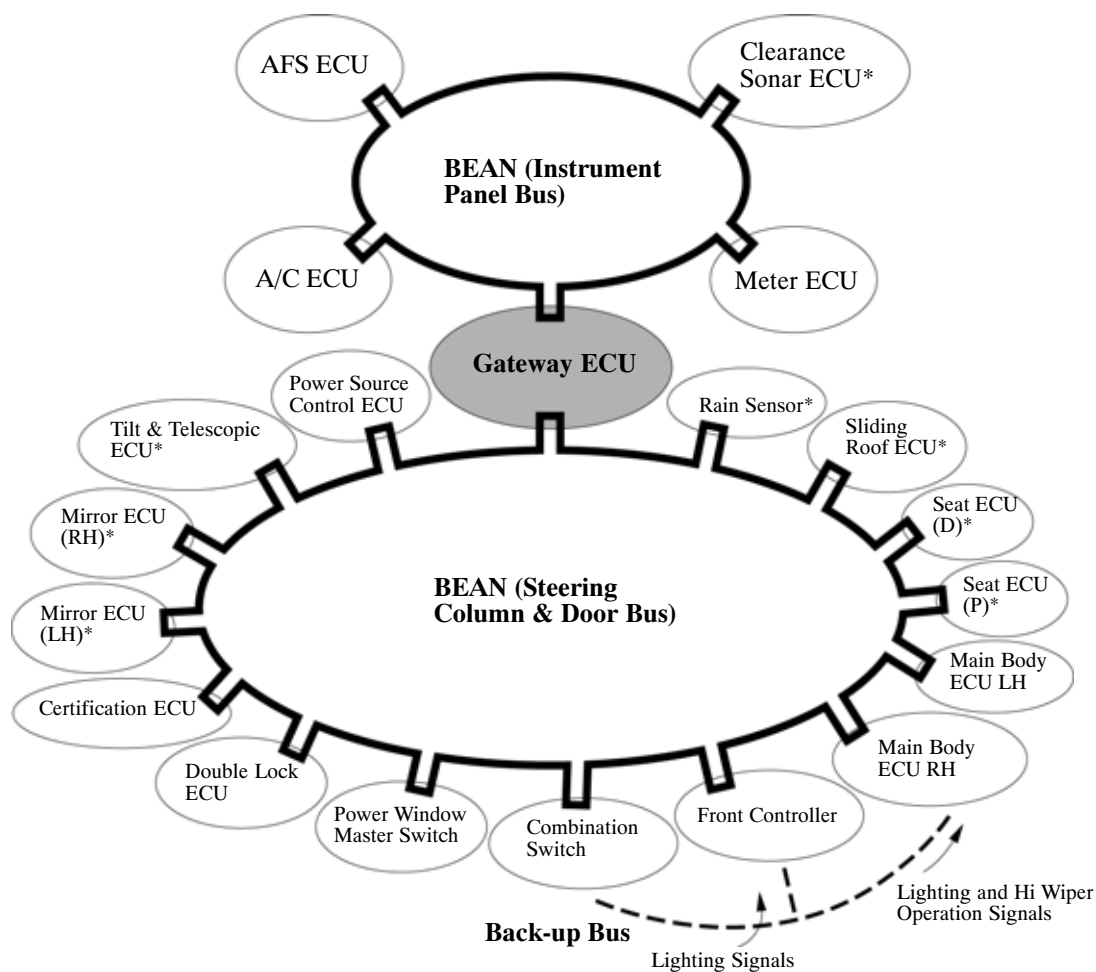


■ BEAN

1. General

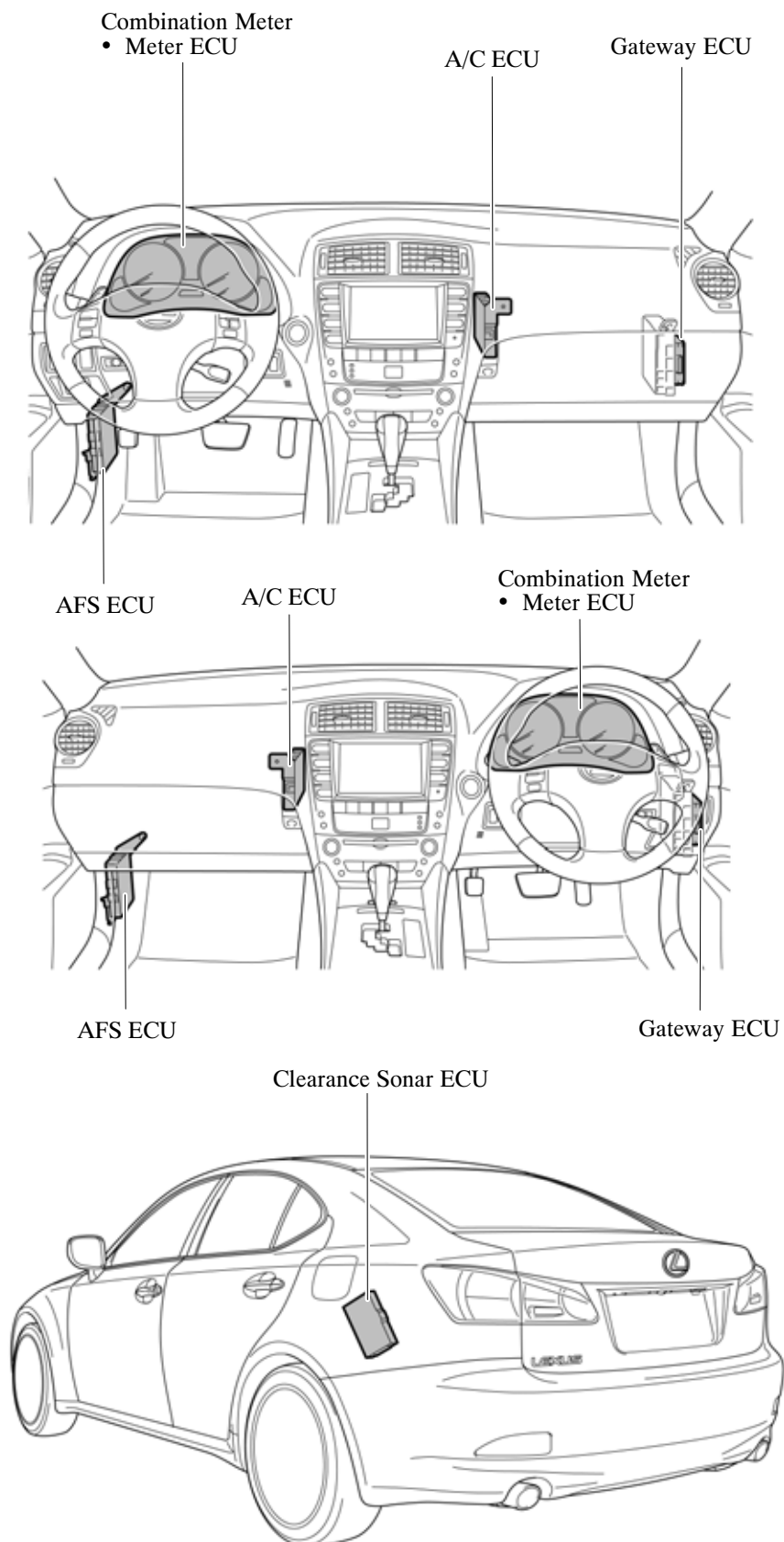
The BEAN (Body Electronics Area Network) consists of 2 buses: the instrument panel bus and the steering column & door bus.

- The communication lines of the BEAN each form a loop. This allows communication to continue, even if an open circuit occurs in one location. If an open circuit occurs in 2 or more locations, communication may not be possible. To maintain limited communication, a back up bus is provided.
- A back-up bus consists of the combination switch, Front Controller and Main Body ECU RH.
- The back-up bus can transmit lighting signals and Hi wiper operation signals.
- A customized body electronic function is used, enabling the control functions of the ECUs comprising the BEAN to be set using an intelligent tester II. For details, [see page BE-15](#).

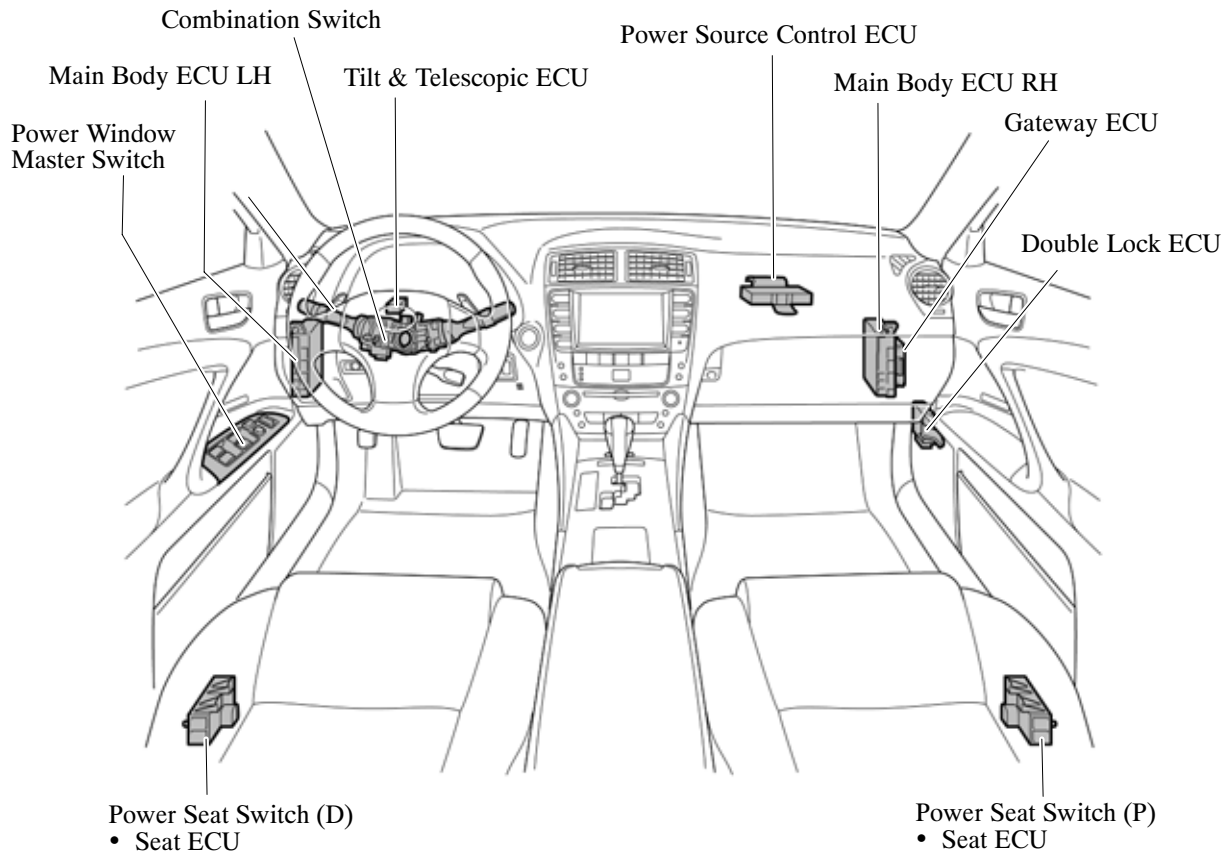


2. Layout of Main Component

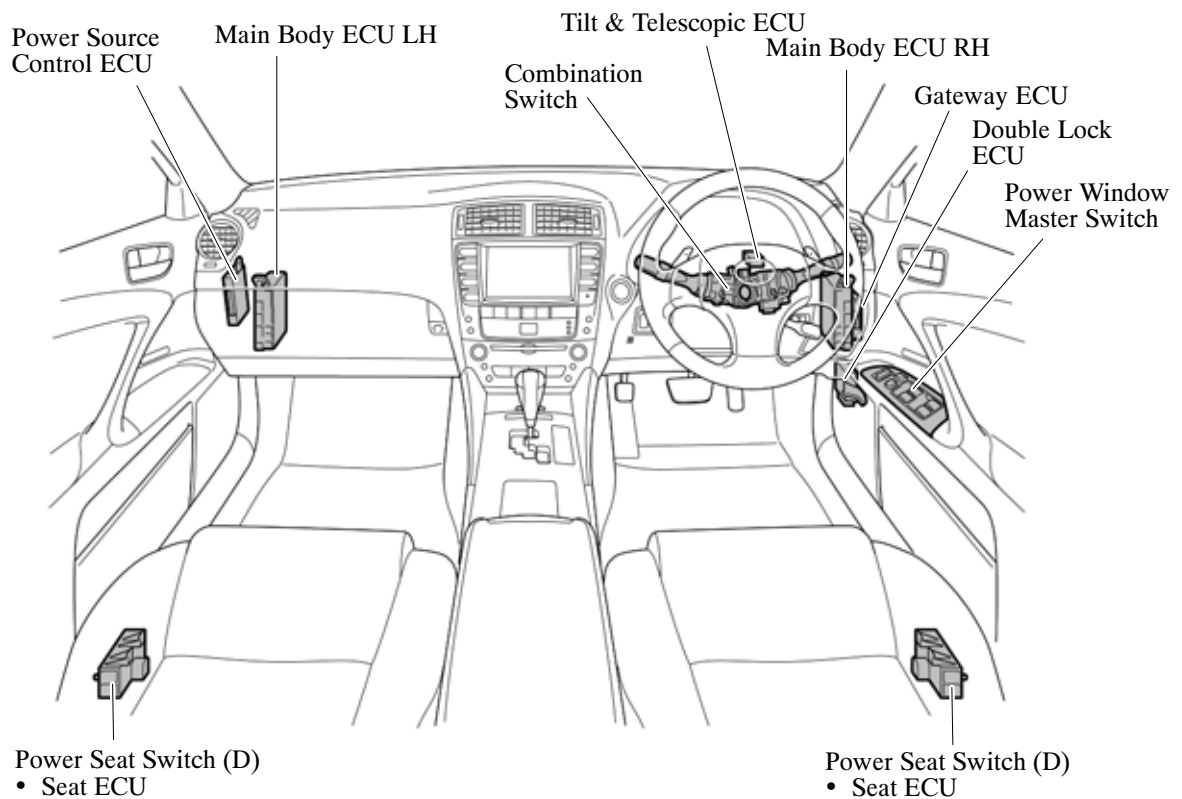
► Instrument Panel Bus ◀

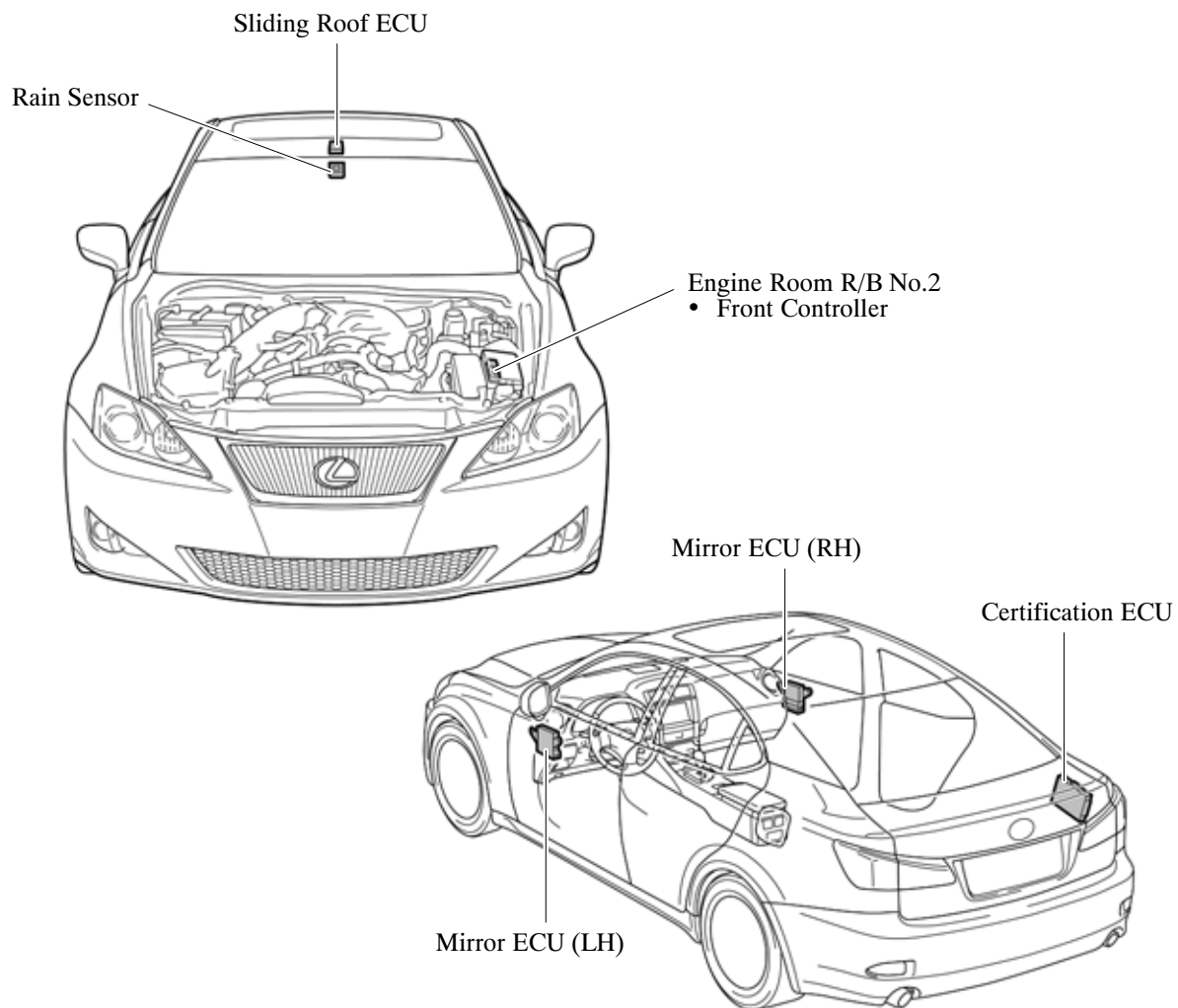


► Steering Column & Door Bus ◀



BE





3. Diagnosis

If a malfunction occurs on BEAN communication line, Main Body ECU RH stored the DTCs (Diagnostic Trouble Codes) in its memory.

- The 5-digit DTCs for BEAN communication can be read by connecting an intelligent tester II. For details, see the LEXUS IS250 Repair Manual (Pub. No. RM0150E).

4. Customized Body Electronic Function

An intelligent tester II can be changed the specification of the systems or functions.

System	Intelligent Tester II Display Content	Contents	Default	Selection
Wireless Door Lock	Open Door Warning	Makes the buzzer sound for 10 seconds if the door is open when locking with the wireless door lock function.	ON	ON/OFF
	Wireless Control	Turns the wireless door lock function on or off.	ON	ON/OFF
	Unlock 2 Operation	Unlocks the driver's door when the unlock button of the transmitter (key) is pressed once and unlocks all the doors when it is pressed twice. In the OFF setting, pressing one time makes all the doors unlock.	OFF	ON/OFF
	'Trunk Lid Operation	Changes the button operation necessary to opening the trunk using the transmitter (key).	0.8 sec PR	1 TIME/ 2 TIMES /0.8 s PR /OFF
	Auto Lock Time	To change the time until re-locking after the vehicle is unlocked with the wireless door lock function.	30 sec.	30 sec. /60 sec.
	Hazard Answer Back	Lights up the all turn signal lights once when the transmitter lock button is pressed, and twice when the unlock button is pressed.	ON	ON/OFF
	Wireless Buzzer Resp	Turns the wireless buzzer response function on or off.	ON	ON/OFF
Door Lock	Unlock Key Twice	Unlocks only the driver's door by operating the key once and unlocks all the doors when the key is operated twice. In the OFF setting, operating the key "UNLOCK" once makes all the doors unlock.	ON	ON/OFF

(Continued)

System	Intelligent Tester II Display Content	Contents	Default	Selection
Power Window	Up/Door Key	Makes all the door windows go up manually when the driver's side door key is held to the lock side for 1.5 seconds when the power source is OFF.	ON	ON/OFF
	Down/Door Key	Makes all the door windows go down manually when the driver's side door key is held to the unlock side for 1.5 seconds when the power source is OFF.	ON	ON/OFF
	Up/Wireless	Make all the door windows up manually by pressing on the transmitter lock button for 2.5 seconds when power source is OFF.	ON	ON/OFF
	Down/Wireless	Makes all the door windows go down manually when pressing on the transmitter unlock button for 2.5 seconds when power source is OFF.	ON	ON/OFF
	Up/Smart	Makes all the door windows up manually by pressing on the lock button for 2.5 seconds when power source is OFF.	ON	ON/OFF
Wiper	Speed Mode	Changes the intermittent wiper operation to available when the vehicle comes to a stop (0 vehicle speed) from running condition when the wiper switch is in the LO position.	ON	ON/OFF
	Auto Wiper	Operates the wipers automatically when it is raining.	AVAIL	NOT AVL/AVAIL
	Re-wiper Control	Changes delay until rewipe time to prevent drips after having used the washer.	SPD MOD	OFF/ 3 sec/ SPD MOD

(Continued)

System	Intelligent Tester II Display Content	Contents	Default	Selection
Illuminated Entry	Seat Light Control	Lights up the seat illumination when unlocking the vehicle using the door key cylinder.	AVAIL	NOT AVL/ AVAIL
	Shift Light Control	Lights up the shift illumination when unlocking the vehicle using the key cylinder.	AVAIL	NOT AVL/ AVAIL
	Lighting Time	Changes the lighting time after closing the door. (It will quickly fade out in the event the power source is turned ON.)	15 sec	7.5 sec/ 15 sec/ 30 sec
	Illumination System	Lights up the scuff plate illumination when one of the following occurs; power source is turned ON, a door is unlocked or a door opens.	ON	ON/OFF
	Light Control	Lights up the scuff plate illumination when the power source is ON and the shift lever is not in the P position.	ON	ON/OFF
	I/L ON W/Unlock	Lights up the interior lights, etc. when the door is unlocked with a transmitter, key cylinder or door lock control switch.	ON	ON/OFF
	I/L when ACC OFF	Lights up the interior lights when the power source is operated from “ACC” to “OFF”.	ON	ON/OFF
	Exterior Foot Light Control	Changes the availability of the foot lights.	AVAIL	NOT AVL/ AVAIL
Warning	Key Low Battery Warning	Enables a warning function for the first time when a key battery becomes weak.	ON	ON/OFF
	Key Remind Volume	Changes the volume of the key reminder buzzer.	LARGE	LARGE/ MEDIUM/ SMALL
	Key Remind Sound	Changes the frequency of the key reminder buzzer.	NORMAL	NORMAL/ FAST/ SLOW
	Keep Sense Status Buzzer	Makes the buzzer sound when distance between vehicle and obstacle does not change for more than 3 seconds.	ON	ON/OFF
	Fr & Rr Buzzer Volume	Changes the volume of the clearance sonar buzzer.	M2	L/M1/M2/ M3/H

(Continued)

System	Intelligent Tester II Display Content	Contents	Default	Selection
Light Control	Sensitivity	To adjust the sensitivity of the lighting illumination.	NORMAL	LIGHT 2/ LIGHT 1/ NORMAL/ DARK 1/ DARK 2
	Response Time	To change the delay timing of lighting the taillight when going into the tunnel in case that the light control switch is at AUTO position.	0.15 sec	1.0 sec/ 0.15 sec
	Disp Ex ON Sen	Used to changes the brightness required to dim the lights such as the indicator light of the combination meter, A/C indicator lights, clock.	NORMAL	LIGHT 2/ LIGHT 1/ NORMAL/ DARK 1/ DARK 2
	Disp Ex OFF Sen	Used to change the brightness required to cancel the dimming of the lights such as the indicator light of the combination meter, A/C indicator lights, clock.	NORMAL	LIGHT 2/ LIGHT 1/ NORMAL/ DARK 1/ DARK 2
Tilt & Telescopic	Autoaway/Return function	Turns the Auto away/return function on or off.	ON	ON/OFF
Slide Roof	Door Key Related Open	Opens the sliding roof manually by linking with the power window if the key cylinder is held for 1.5 seconds or more to the unlock side when the power source is OFF.	ON	ON/OFF
	Door Key Related Close	Closes the sliding roof by manually linking with the power window if the key cylinder is held for 1.5 seconds or more to the lock side when the power source is OFF.	ON	ON/OFF
	Wireless Key Related Open	Opens the sliding roof manually by linking with the power window if the transmitter unlock button is pressed for 1.5 seconds or more when the power source is OFF.	ON	ON/OFF
	Wireless Key Related Close	Closes the sliding roof manually linking with the power window if pressing on the transmitter lock button for 1.5 seconds or more when the power source is OFF.	ON	ON/OFF
	Door Key Related Operation	Function to select the opening type of the sliding roof linked to the power window if the driver side door key is held for 1.5 seconds or more to the unlock side when the power source is OFF.	SLIDE	TILT/ SLIDE
	Wireless Key Related Operation	Selects the opening type of the sliding roof linked to the power window if pressing on the transmitter unlock button for 1.5 seconds or more when the power source is OFF.	SLIDE	TILT/ SLIDE

(Continued)

System	Intelligent Tester II Display Content	Contents	Default	Selection
A/C	Set Temperature Shift	Shifts the climate control output air temperature compared to the displayed temperature.	NORMAL	+2°C/ +1°C/ NORMAL/ -1°C/ -2°C
	Air Inlet Mode	When the A/C is turned ON and it is desired to make the compartment cool down quickly, this is the function to set the mode automatically to RECIRCULATE mode.	AUTO	MANUAL/ AUTO
	Compressor Mode	Turns the A/C ON automatically by pressing the AUTO button when the blower is ON and the A/C is OFF.	AUTO	MANUAL/ AUTO
	Compressor/Air Inlet DEF operation	Turns the A/C ON automatically linking with the FRONT DEF button when the A/C is OFF.	LINK	NORMAL/ LINK
	Evaporator Control	Sets the evaporator control to the AUTOMATIC position (AUTO) to save power or to the coldest position (MANUAL) to dehumidify the air and to prevent the windows fogging up.	AUTO	MANUAL/ AUTO
	Emission Gas Sensor Shift	Changes the sensitivity of the exhaust gas sensor.	NORMAL	MU MORE/ MORE/ LI MORE/ NORMAL/ LI LESS/ LESS/ MU LESS
	Button Press Buzzer	Function to sound a buzzer when a button is pressed.	ON	OFF/ON
	Foot/DEF Auto Mode	Sounds a buzzer when a button is pressed.	ON	OFF/ON
	Foot/DEF Automatic Blower Increase Function	Turns the air flow to FOOT/DEF ON automatically when AUTO MODE is ON.	ON	OFF/ON
	Ambient Temperature Shift	To control with the shifted ambient temperature against the display ambient temperature.	NORMAL	+3°C/ +2°C/ +1°C/ NORMAL/ -1°C/ -2°C/ -3°C
	Foot Air Leak	Function to cut off the airstream felt underfoot while the vehicle is moving.	ON	OFF/ON

(Continued)

System	Intelligent Tester II Display Content	Contents	Default	Selection
LEXUS Parking Assist-sensor	Non P/R Range Sensor	Function to set available sensors when shift position is not P or R.	F	F, R CRN2/ F
	Keep Sense Status Buzzer	Function to make buzzer sound when distance between vehicle and obstacle does not change for more than 3 seconds.	ON	ON/OFF
Smart Entry & Start System	Select IG ON actuation area	Chooses the actuation area for the key to start E/G and cancel the Steering Lock.	ALL	FRONT/ ALL
	Park Wait Time	Sets a wait time to permit opening a door after it has been locked.	3.0 sec	1.0 sec/ 2.0 sec/ 3.0 sec/ 5.5 sec
	Trunk Open Mode	Permits opening a trunk with the key.	ON	ON/OFF
Rear Sunshade	Rear Sunshade Reverse Control	NOT AVL/AVAIL of the rear sunshade reverse function.	AVAIL	NOT AVL/ AVAIL
	Reverse Output Response Time	Changes the time until operating the function linked shift R position.	0.7 sec	0 sec/ 0.7 sec/ 0.9 sec/ 1.2 sec
Multi-information Display	Units By Region	To change the unit of the display.	RHD: ML/G LHD: KM/L	ML/G, KM/L