LX470

OUTLINE OF NEW FEATURES

The LX470 has been highly acclaimed for its dignity and characteristic style.
The following features have been changed on the LX470.

1. Model Line-Up

- An A750F automatic transmission has been added, and the model code has been changed accordingly as follows:
  - UZJ100L-GNPGKV → UZJ100L-GNAGKV
  - UZJ100R-GNPGKQ → UZJ100R-GNAGKQ
- The Russia models have been newly added.
  - UZJ100L-GNAGKW

2. Exterior

- The design of the front bumper and radiator grille have been changed.
- The headlight, turn-signal light, clearance light and fog light reflector color have been changed.
- The design of the rear combination light has been changed.
- The design of the outside back door moulding has been changed.
- The design of the rear license plate garnish has been changed, and the backup light has been integrated.
- A 275/65R17 tire size has been newly adopted.
- A newly designed, 17 x 8JJ-65 size disc wheels have been adopted as standard equipment.
- The following exterior colors have been added:

New Color No.	New Color Name
070	White Pearl Crystal Shine
4R2	Beige Pearl Crystal Shine
6T2	Light Green Mica Metallic

3. Interior

- The design of the center cluster has been changed.
- The designs of the all pillar portions and roof side portion have been changed.
- The designs of the assist grip and coat hook have been changed.

4. 2UZ-FE Engine

- The ETCS-i (Electronic Throttle Control System – intelligent) system continues to be used from the previous model. However, on the new model, the accelerator cable has been discontinued and an accelerator position sensor has been mounted on the accelerator pedal. A no-contact sensor has been adopted in the throttle position sensor.
- The volume and the material of the TWC (Three-Way Catalytic Converter) have been changed on models for G.C.C. Countries (Saudi Arabia) and Russia.
- The TWC has been newly adopted on models for Australia.
- The capacity of the charcoal canister has been increased on models for G.C.C. Countries (Saudi Arabia) and Australia.
- The fuel pump control has been changed into a 2-speed control that uses a fuel pump resistor. Furthermore, fuel cutoff control has been adopted in order to stop the fuel pump in the event an airbag is deployed.
- A cranking hold function has been adopted. Once the ignition switch is turned to the START position, this control continues to operate the starter until the engine starts.

- The 32-bit CPU of the engine ECU has been changed from the 16-bit CPU.
- All the DTCs (Diagnostic Trouble Codes) have been made to correspond to the SAE controlled codes. Some of the DTCs have been further divided into smaller detection areas than in the past, and new DTCs have been assigned to them. For details, see the General Features Section.

5. A750F Automatic Transmission

- The A750F 5-speed automatic transmission [Super ECT (Electronically Controlled Transmission)] has been newly adopted.
- A gate type shift lever is used.

6. Propeller Shaft and Differential

- Along with the adoption of the A750F automatic transmission, the construction of the front and rear propeller shafts have been changed.
- Along with the adoption of the A750F automatic transmission, the gear ratio of the front and rear differentials have been changed.

7. Brake

- The deceleration sensor that is provided for the brake control system (ABS with EBD, Brake Assist, A-TRC, and VSC system) has been integrated in the yaw rate sensor.
- Information on the steering angle, vehicle speed, and the actual turning angle of the wheels can now be exchanged between the skid control ECU and the VGRS ECU, which has been newly added for the VGRS (Variable Gear Ratio Steering).
- By changing the resistance value of the coil of the solenoid valves in the hydraulic brake booster established in A-TRC as shown in the following table, the heat resistance has been improved. As a result, the consecutive operation time of this system has increased.

Model		New	Previous
Solenoid Valve	SA3, SFRH, SFLH, SRRH, SRLH	Approx. 7.2 Ω	Approx. 5.0 Ω
	STR, SA1, SA2	Approx. 4.3 Ω	Approx. 3.7 Ω

8. Steering

- A VGRS (Variable Gear Ratio Steering) system, which variably controls the steering angle in accordance with the vehicle speed, has been adopted.
- The construction and specifications of the steering gear box and power steering pump have been changed.
- The DTC output of the tilt and telescopic ECU has been changed so that the DTC can be accessed with a hand-held tester even when the ignition switch is turned OFF.

9. Body

- The material of the front bumper reinforcement has been changed to aluminum in order to reduce its weight.
- A sealing material has been added around the door panel in order to reduce noise and vibration.

10. Body Electrical System Control

- The configuration of the BEAN (Body Electronics Area Network) has been changed in accordance with the addition of equipment.
- The body ECU is based on the previous model. On the new model, the body ECU provides additional control functions in order to comprehensively control the body electrical system. Furthermore, a sub-body ECU has been adopted.
- A customized body electronic system is used in order to set the control functions of the ECUs through the use of a hand-held tester.

11. Lighting

- The construction of the light control sensor, which is provided in the automatic light control system, has been changed.
- The following illuminations have been newly added to the illuminated entry system: the inside door knob illumination, center spot illumination, and foot light.

12. Combination Meter

The design and construction of the combination meter has been changed.

13. Wiper System

A wiper system containing a raindrop sensing function, which is exactly the same as the system that is used on the current LS430, has been adopted.

14. Air Conditioner

- The air conditioner system has newly adopted automatic recirculation control on models for Russia. When the air inlet is in the FRESH mode, the smog ventilation sensor detects the entry of the exhaust gas into the cabin and the air conditioner ECU automatically switches the air inlet into the RECIRC mode.
- A seal has been provided around the radiator support to prevent hot air from making a detour, in order to improve the cooling performance on models for except G.C.C. Countries. Accordingly, the electric fan for cooling the condenser has been discontinued.

15. Multi Display

The multi display has been adopted on model for Australia.

16. Multi Information Display

The function to display trip information has been added to the multi-information display, which is provided above the audio head unit on models for G.C.C. Countries and Russia.

17. Power Window System

- A “all-door one-touch auto up and down” function has been added to the power window system on models for Australia.
- A “key-linked up-and-down” function and a “transmitter-linked down” function have been added to the power window system.
- A correction function has been added to the jam protection function to prevent it from activating unintentionally when the vehicle is driven on rough roads.

18. Wireless Door Lock Remote Control System

A power window open operation function and a moon roof transmitter-linked open function have been adopted in the wireless door lock remote control system.

19. Engine Immobiliser System

On previous model, the engine ECU used to control the system. However, a change is made on new model that a transponder key ECU is newly adopted to control the system.

20. SRS Airbag System

- The side and curtain shield airbags have been adopted.
- Roll sensing of curtain shield airbags control has been adopted in order to deploy the curtain shield airbags and the seat belt pretensioners for the driver and front passenger, in the event that the vehicle rolls over. A roll sensing of curtain shield airbags cutoff switch is provided on the driver side of the instrument panel to enable the driver to disable this system.
- A dual-stage SRS airbag system has been added to the driver and front passenger airbags.
- In accordance with the adoption of the dual-stage SRS airbag system, a seat position sensor has been established for the driver seat.
- On the new model, the previous mechanical type front airbag sensor assembly (consisting of movable and stationary contact points) has been changed to an electrical (deceleration sensor) type front airbag sensor assembly.
- Front passenger airbag door is made invisible. This means that without the airbag door, the airbag will be inflated by breaking to open the cleavage line stored in the instrument panel inflating.
- This system has adopted a fuel cut control that stops the fuel pump when the airbag is deployed.

21. Power Seat System

Infrared communication has been adopted between the seat ECU for the driver seat and the power seat operation switch of the power seat system.

22. Audio System

- The steering wheel with steering pad switch has been adopted.
- An RSAS (Rear Seat Audio System) has been adopted on model for Russia. In this system, a rear audio control panel is provided behind the center console. By using headphones on this panel, the rear seat occupants can listen to an audio mode different from the one that is currently selected in the front head unit.