

INTRODUCTION

OUTLINE OF NEW FEATURES

“Truly a driver’s car of the highest dimension. Its combination of style and function gives the car a nimble and solid form and impacts a progressive and sophisticated image”. These concepts of the previous GS300 are succeeded by the new GS430/300 models, in which the GS430 grade has been newly added through the addition of the new 3UZ-FE engine. However, this 3UZ-FE engine has been adopted only on the European model. The new model has achieved a higher level of maturity through a number of changes. A description of these changes is given below.

1. Model Line-Up

- UZS161L-BEAQKW and UZS161R-BEAQKW have been added.

2. Exterior

- The design of the radiator grille has been changed.
- The headlight extension color has been changed.
- The design of the 16-inch wheel and wheel ornament have been changed.
- The design of the rear combination lights have been changed.
- The design of the baffles in the muffler has been changed.
- The front door windows have adopted water-repellent type glass.
- A tether has been provided to prevent the fuel filler cap from being lost.

3. Interior

- The design of the meter cluster has been changed.
- The color of the center register has been changed.
- A chrome-plated hole bezel has been adopted for the automatic transmission shifter.
- The front panel of the ashtray receptacle has adopted genuine wood.
- The design of the steering wheel has been changed.
- An assist grip has been newly added to the driver’s side.

4. 2JZ-GE Engine

- On Europe and Australia models, iridium-tipped spark plugs have been adopted.
- On Europe and Australia models, the construction of the exhaust manifold has been optimized to realize cleaner emissions.
- On Europe and Australia models, one additional three-way catalytic converter has been provided in the exhaust front pipe to realize cleaner exhaust emissions.
- A fuel cut control is adopted to stop the fuel pump when the airbag is deployed at the front or side collision.
- A compact and lightweight charcoal canister with an optimized internal construction has been newly adopted.

5. 3UZ-FE Engine

On new GS430, base on the 1UZ-FE engine adopted on previous LS400, 3UZ-FE engine of V8, 4.3-liter, 32-valve DOHC with the enlarged bore has been adopted.

This engine has adopted the VVT-i (Variable Valve Timing-intelligent system), ACIS (Acoustic Control Induction System) and ETCS-i (Electronic Throttle Control System-intelligent), and these control functions have been optimized in order to realize the further improvement of the engine performance, fuel economy and to reduce exhaust emissions.

However, this engine has been adopted only on the European model GS430.

6. A650E Automatic Transmission

- The same A650E 5-speed automatic transmission [Super ECT (Electronically Controlled Transmission)] used on the previous model continues to be used on the GS300, and has been newly adopted on the new GS430. The internal construction of this transmission differs slightly between the GS430 and GS300 applications in accordance with the output characteristics of the respective engines.
- The E-shift is used on the GS300. The E-shift system, which has transmission shift switches located on the steering wheel, enables the driver to manually shift the ranges without having to release the hands off the steering wheel, provided that the floor shift lever is engaged in the M position.

7. Differential

The new GS300 continues to use the same differential used on the previous GS300. The new GS430 also uses the same differential used on the previous GS300. However, on GS430, the gear ratio has been optimized to 3.266 in. accordance with the output characteristics of a new 3UZ-FE engine, and cooling fins have been newly added.

8. Suspension

- Low-pressure (N₂) gas-sealed front shock absorbers with a linear control valve have been adopted on the GS430/300.
- The shape of the front stabilizer bar has been changed and its sheet thickness has been increased. The rigidity of the bushings for both the front and rear stabilizers has been increased in order to improve driving stability and riding comfort.

9. Brake

- The same front and rear brakes of the previous GS300 are used. However, on the new GS430, the shape of the dust covers of the front brakes has been changed in conjunction with the output characteristics of the engine in order to improve the cooling performance.
- The diameter of the master cylinder has been changed from 22.22 mm (0.87 in.) to 26.99 mm (1.06 in.) to realize the excellent brake feel and control performance.
- As in the previous model, a hydraulic brake booster, in which the brake actuator and master cylinder are integrated, is used. However, the master cylinder pistons have adopted a dual construction consisting of outer and inner pistons. Ordinary, the outer and inner pistons operate in unison. If the accumulator pressure is not applied to outer piston, only the inner piston operates to ensure braking force.

10. Body

- Anti-corrosion sheet steel is used in the roof panel of all the models. On the models for Europe, the areas in which the wax, sealer, and undercoat are applied have been expanded to improve the rust resistance performance.
- The construction of the asphalt sheet has been optimized and its application areas have been expanded to reduce engine and road noise.

11. Multiplex Communication System

- An airbag sensor assembly and a steering pad switch (only for the GS430) have been newly added to the BEAN (Body Electronics Area Network). Furthermore, on the models with the GPS (Global Positioning System) voice navigation system, a gateway ECU that provides the function to convert the transmission signals between the BEAN and the AVC-LAN (Audio Visual Communication - Local Area Network) has been added. Along with the addition of these items, new DTCs (Diagnosis Trouble Codes) have been added to the multiplex communication system.
- The multimedia ECU has been discontinued.

12. Air Conditioner

A deodorizing function that eliminates the exhaust gas smell that enters the cabin from the outside has been added to the conventional clean air filter. This clean air filter uses spreading type activated charcoal in the deodorizing layer to eliminate the exhaust gas smell.

13. Multi Display

- A Multi display has been provided on the center cluster panel of the European model as an option. The display, which consists of a 7.0-inch wide LCD (Liquid Crystal Display) screen with a IR (Infrared) – sensitive touch panel, offers improved ease of use.
- Through the use of the GPS (Global Positioning System) and map data in a DVD (Digital Versatile Disc), this navigation system analyzes the position of the vehicle and indicates that position on the map that is displayed on the screen.
Additionally, it provides voice instructions to guide the driver through the route to reach the destination that has been selected.

14. Power Window System

In the power window system, the starting time of the transmitter-linked up-and-down function has been changed from approximately 1.5 seconds to approximately 2.5 seconds.

15. Door Lock Control System

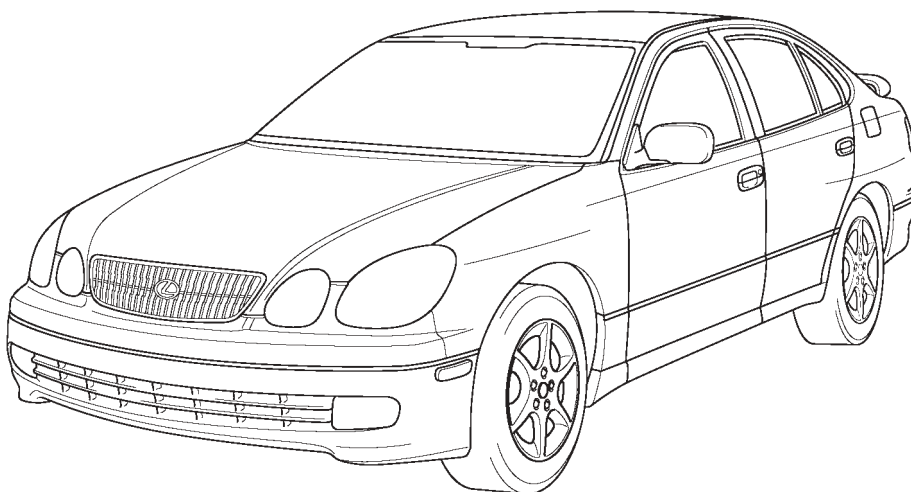
“Collision door lock release” functions have been added to the door lock control system of the new GS430/300 models for Europe. Furthermore, for improved theft deterrence, a double locking system is standard equipment on the RHD model for Europe and optional equipment on the LHD model for Europe.

16. SRS AIRBAG SYSTEM

- A curtain shield airbag has been adopted as the SRS (Supplementary Restraint System) of the new GS430/300. This curtain shield airbag operates under the same condition as the side airbag.
- The GS430/300 have adopted a fuel cut control that stops the fuel pump if the airbag has been deployed.
- A function that detects whether or not the front passenger seat is occupied and prohibits the deployment of the front passenger airbags (front, side, and curtain shield) if the seat is unoccupied, has been adopted in the SRS airbag system.
- The airbag sensor assembly has been added to the BEAN (Body Electronics Area Network).

17. Audio

A steering pad switch that operates the audio unit has been provided on the steering wheel of the new GS430.



188IN01