

## SC300/400

### OUTLINE NEW FEATURES

Renowned as a distinctive luxury sports coupe, the Lexus SC300/400 offers the following changes in the '97 models:

#### 1. Exterior Design

- The front bumper had been redesigned and the front spoiler has been integrated.
- The design of the fog light had been changed.
- A radiator grille had been newly adopted.
- A large side mud guard has been provided.
- The design of the rear bumper and rear combination lights have been changed.
- A wing type rear spoiler has been adopted.

#### 2. 2JZ-GE Engine

An aluminum radiator core is used for weight reduction.

#### 3. 1UZ-FE Engine

- An aluminum radiator core is used for weight reduction.
- A function for diagnosing evaporative emission control system had been added to the diagnosis system.

#### 4. Clutch

On the 2JZ-GE engine model with transmission, the diameter of the clutch release cylinder has been changed from 20.64 mm (0.81 in.) to 22.2 mm (0.87 in.) in order to reduce clutch pedal effort.

#### 5. W58 Manual Transmission

The shift lever has been relocated closer to the driver to realize excellent ease of use.

#### 6. Brakes

- On the models with ABS, the ABS actuator has been changed to a compact and lightweight actuator.
- The models with ABS & TRAC system have adopted a compact and lightweight ABS & TRAC actuator, in which the ABS actuator and TRAC actuator are integrated.

## 7. Combination Meter

- An odometer and trip meter, and clock that use LCD (Liquid Crystal Display) system have been adopted.
- A cruise information display, which displays 5 functional data such as outside temperature, average fuel consumption, etc., has been adopted.
- The warning lights have been rearranged.

## 8. Air Conditioning

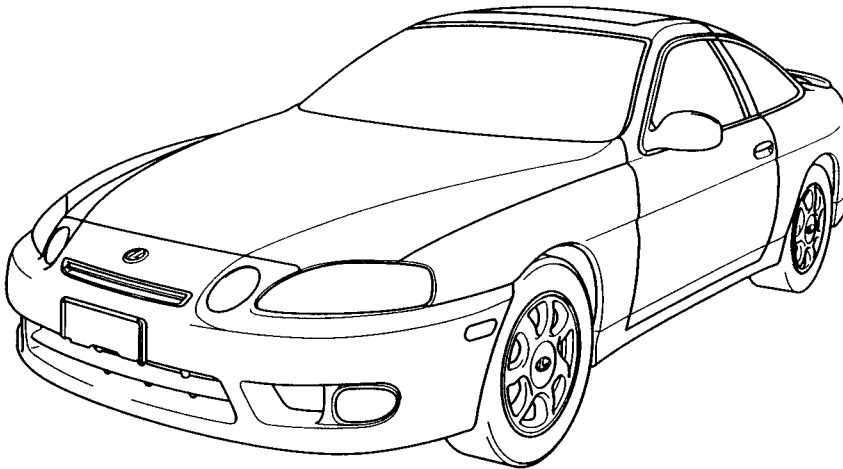
- An aluminum heater core had been adopted.
- The control logic for the air inlet mode had been changed.

## 9. SRS Airbag

The construction of the inflator for the front passenger had been changed.

## 10. Cruise Control System

- A new motor type actuator has been adopted.
- The function of the cruise control ECU has been changed.



## MODEL CODE

# JZZ31 L – A C M V F A

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①	BASIC MODEL CODE
	UZZ30 : With 1UZ-FE Engine JZZ31 : With 2JZ-GE Engine

⑤	GEARSHIFT TYPE
	M : 5-Speed Manual, Floor P : 4-Speed Automatic, Floor

②	STEERING WHEEL POSITION
	L : Left-Hand Drive

⑥	GRADE
	V : SC300 Z : SC400

③	MODEL NAME
	A : SC300/400

⑦	ENGINE SPECIFICATION
	F : Sporty DOHC and SFI K : Compact DOHC And SFI

④	BODY TYPE
	C : 2-Door Coupe

⑧	DESTINATION
	A : U.S.A. K : Canada

## MODEL LINE-UP

TRANSMISSION				5-Speed Manual	4-Speed Automatic	
DESTI-NATION	ENGINE	BODY TYPE	GRADE	W58	A340E* <sup>1</sup>	A340E* <sup>2</sup>
U.S.A.	2JZ-GE	2-Door Coupe	SC300	JZZ31L-ACMVFA	JZZ31L-ACPVFA	—
	1UZ-FE		SC400	—	—	UZZ30L-ACPZKA
Canada	1UZ-FE		SC400	—	—	UZZ30L-ACPZKK

\*<sup>1</sup> : Electronically Controlled Transmission

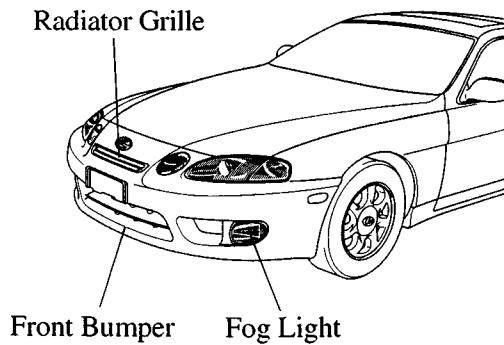
\*<sup>2</sup> : Electronically Controlled Transmission with and intelligent control system

## NEW FEATURES

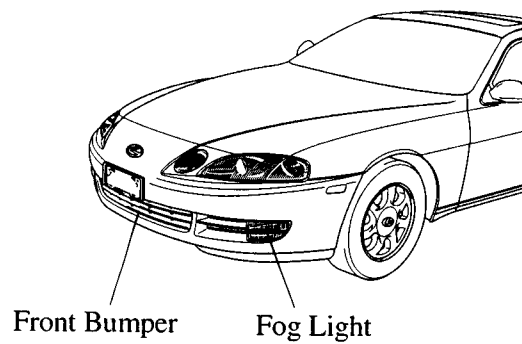
### ■ EXTERIOR DESIGN

#### 1. Front Bumper, Radiator Grille and Fog Light

- The design of the front bumper and the fog lights have been changed to realize a sportier, more powerful form with a sense of lower center of gravity. Also, a front spoiler that is integrated with the front bumper has been adopted.
- The size of the front bumper has been extended 8 mm (0.31 in.) lengthwise to realize excellent impact absorbing capability.
- A radiator grille had been newly provided in the front bumper to achieve a sense of luxury and to improve cooling performance.



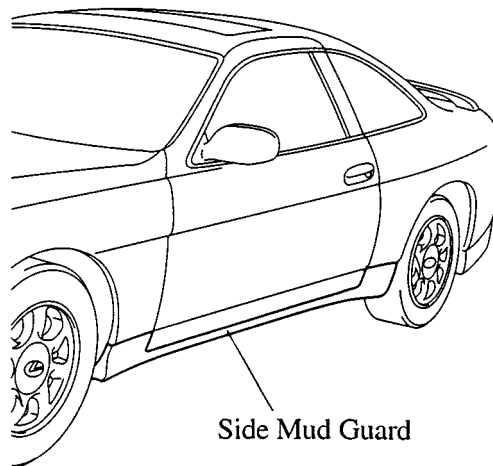
**'97 Model**



**'96 Model**

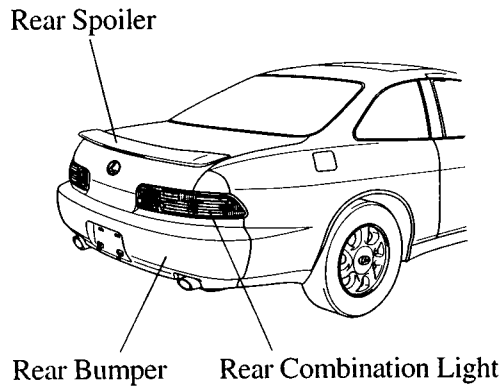
#### 2. Side Mud Guard

A large size mud guard had been provided in the rocker area to express a sense of agility and lower center of gravity.

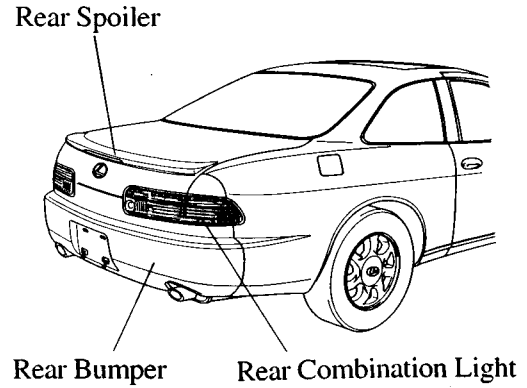


### 3. Rear Bumper, Rear Spoiler, and Rear Combination Light

- The design of the rear bumper has been changed. In addition, the size of the rear bumper has been extended 28 mm (1.1 in.) lengthwise to realize excellent impact absorbing capability.
- A wing type rear spoiler had been adopted to give a wide and swift look.
- The lights in the rear combination lights have been rearranged and redesigned for sportier look.



**'97 Model**



**'96 Model**

## ■ 1UZ-FE ENGINE

### 1. Description

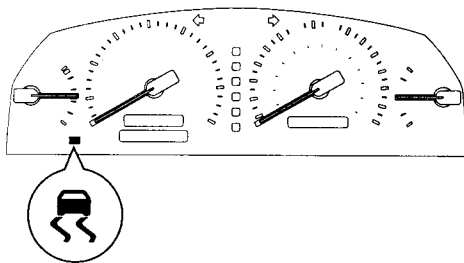
The following changes have been made to the 1UZ-FE engine.

Item	Outline
Cooling System	An aluminum radiator core is used for weight reduction.
Engine Control System	A diagnosis function for the evaporative emission control system has been added to the diagnosis system.
Emissions Control System	The capacity of charcoal cannister has been enlarged (2 l) to increase the absorption rate of the evaporative HC and to improve the efficiency of this system.

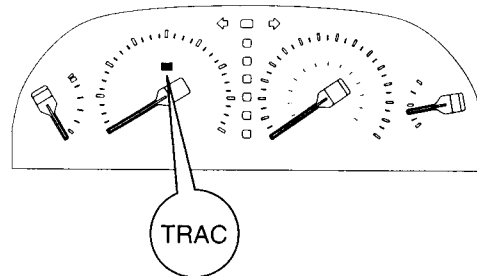
## ■ BRAKES

### 1. Description

- On the models with ABS, the actuator has been changed to a compact and lightweight ABS actuator that adopts a 2-position solenoid valve. The models with ABS & TRAC Systems have adopted an ABS & TRAC actuator in which ABS and TRAC actuator functions are integrated. The basic construction and operation of these actuators are the same as those of the '97 LS400. For details, see pages 21.
- The diagnostic codes of the ABS and ABS & TRAC systems have been changed. For details on the diagnostic codes check method, diagnostic code, and diagnostic code clearance, see the 1997 SC300/400 Repair Manual (Pub. No. RM513U).
- The indicator light, which informs the driver that the TRAC system is in operation, has been changed.



'97 Model

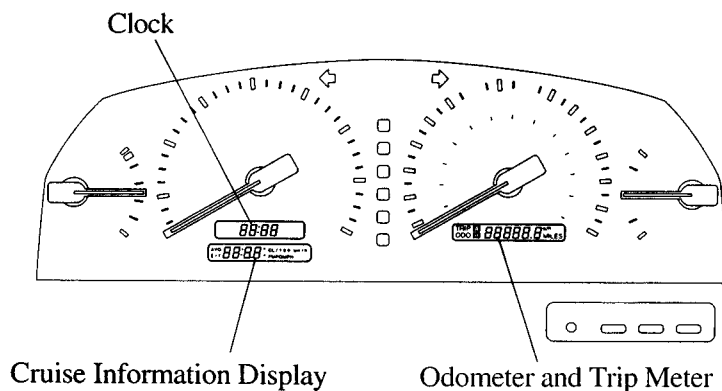


'96 Model

## ■ COMBINATION METER

### 1. General

- The displays of the odometer and trip meter and clock have been changed from the VFD (Vacuum Fluorescent Display) to the LCD (Liquid Crystal Display).
- A cruise information display that displays the 5 types of data shown below has been provided the clock.
  - ① Outside Temperature                      ② Running Time                      ③ Average Speed
  - ④ Average Fuel Consumption              ⑤ Instant Fuel Consumption
- Along with the adoption of the cruise information display, the warning lights have been rearranged.



## 2. Cruise Information Display

The cruise information display displays the 5 types of data shown below.

Data	Details
Outside Temperature	Displays the current outside temperature. The display range is from $-30^{\circ}\text{C}$ to $50^{\circ}\text{C}$ ( $-22^{\circ}\text{F}$ to $122^{\circ}\text{F}$ ).
Running Time	Totals the number of hours of engine operation and displays it in the form of running time. Even after the engine is turned off, the running time is stored in memory as cumulative data, until the data is cleared.
Average Speed	During engine operation, the vehicle speed data that is calculated by the CPU is totaled and displayed in the form of average vehicle speed. Even after the engine is turned off, the speed data is stored in memory as cumulative data, until the data is cleared.
Average Fuel Consumption	Totals the fuel consumption data that was calculated by the CPU during engine operation and displays it in the form of average fuel consumption. Even after the engine is turned off, the fuel consumption data is stored in memory as cumulative data, until the data is clear.
Instant Fuel Consumption	During engine operation, the fuel consumption data that is calculated by the CPU every 3 seconds is displayed in the form of instant fuel consumption.

## ■ AIR CONDITIONING

### 1. General

- An aluminum heater core has been adopted. Along with this change, the specifications of the heater core have also been changed.

#### ► Specifications ◀

Model		'97 Model	'96 Model
Item			
Heater Core	Size W x H x L mm (in.)	155.7 x 200 x 27 (6.1 x 7.9 x 1.1)	159.5 x 200 x 49 (6.3 x 7.9 x 1.9)
	Fin Pitch mm (in.)	2.5 (0.10)	2.7 (0.11)

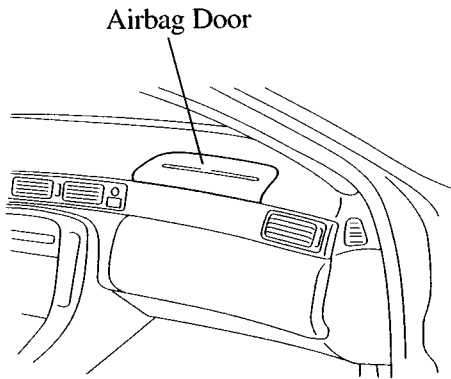
- The air inlet and outlet control logic had been changed so that the air inlet mode after the restarting of the engine will resume the mode that was used prior to stopping the engine.

## ■ SRS AIRBAG

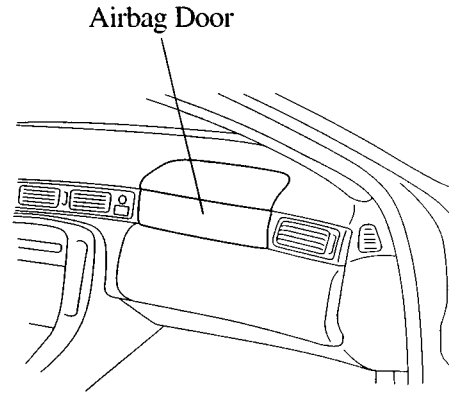
### 1. SRS Airbag for Front Passenger

#### General

The construction of the SRS airbag for the front passenger had been changed. As a result, the airbag door has been made more compact, thus improving the appearance of the instrument panel.



**'97 Model**



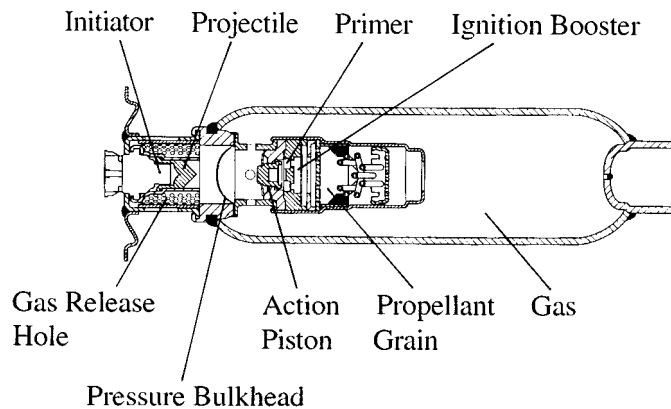
**'96 Model**

#### Construction

##### 1) Inflator

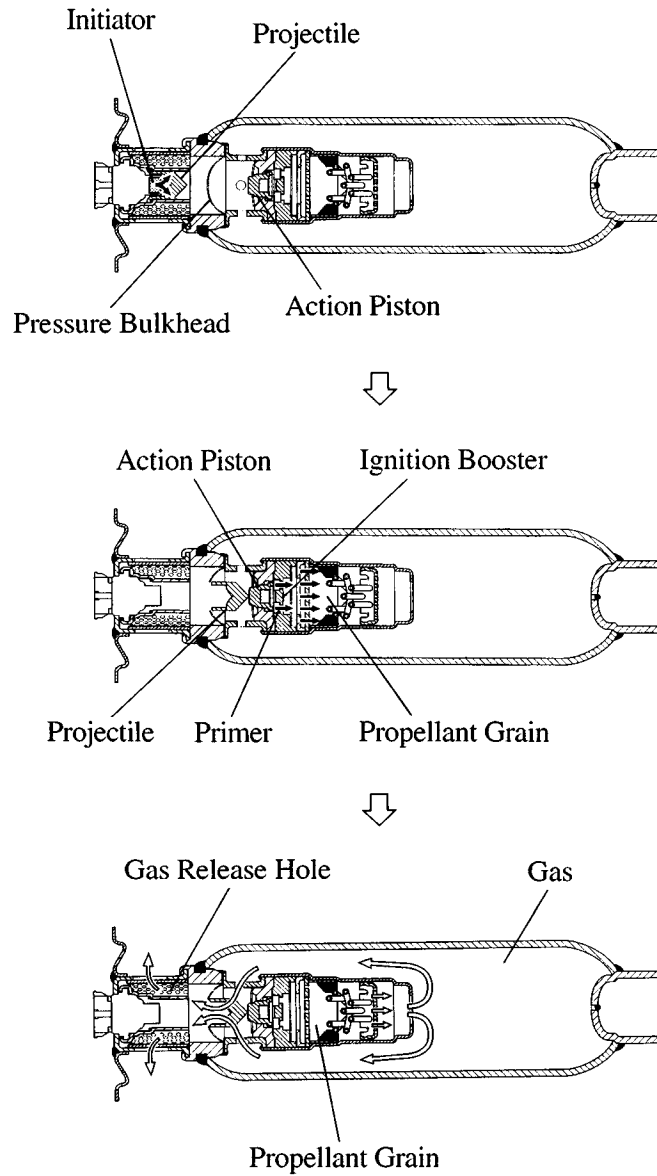
The inflator is comprised of a initiator, projectile, pressure bulkhead, propellant grain and gas. The bag is made of strong nylon cloth, and becomes inflated by the argon gas.

The inflator and bag are integrated inside the case, and located in the passenger side instrument panel.



## Operation

The airbag sensor is activated by deceleration due to frontal collision. The electric current ignites the initiator located in the inflator. The projectile which fired by the ignition of the initiator pierces through the pressure bulkhead and collides with the action piston, which causes the primer to ignite. The flame of the primer spreads instantaneously to the ignition booster and then the propellant grain. The gas which expanded by the heat of the ignition of the propellant grain flows into the airbag via the gas release hole, thus inflating the airbag. The airbag pushes the airbag door open to expand further and to help to restrain the impact applied to the head and chest of the front passenger.



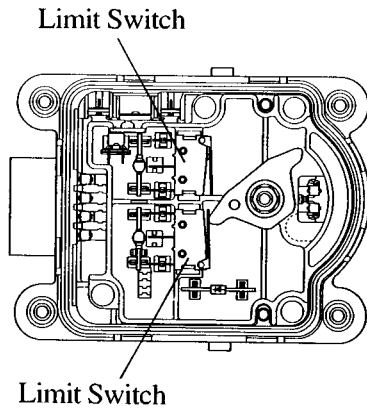
➡ : Propagation of Fire  
 ⇨ : Flow of Argon Gas

## ■ CRUISE CONTROL SYSTEM

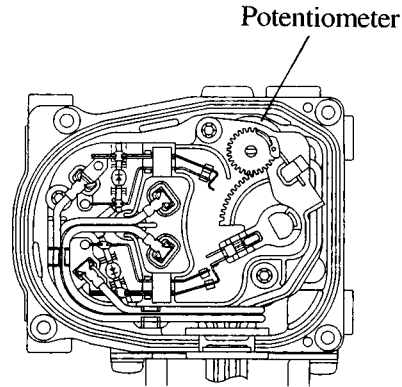
### 1. Actuator

The '97 model has adopted a new motor type actuator. The new motor type consists of a motor, control link and limit switch, etc. as shown below.

The potentiometer that measured the opening angle of the control link and transmitted the signals to the cruise control ECU has been discontinued in the new actuator. The new actuator is equipped it with a compact motor. As a result, the new actuator is controlled by the ECU based on the calculation obtained from 2 values; the current vehicle speed which is detected by the speed sensor; and the desired vehicle speed which is stored in memory.



**'97 Model**



**'96 Model**

### 2. Cruise Control ECU

#### Manual Cancel Function

The manual cancel function, which cancels the cruise control when the parking brake is operated, has been discontinued.

#### Auto Cancel Function

When the vehicle is being driven under cruise control, if any of the conditions listed on the next page is present, the vehicle speed stored in memory is deleted, the control is lifted, the current to the actuator is disrupted, and the power indicator light is made to flash. The methods to reactivate the cruise control at that time in accordance with that particular condition (malfunction category A or B) are classified in the chart on next page. Other auto cancel functions are basically the same as those of the previous model.

Condition	Malfunction Category	How to reactivate
<ul style="list-style-type: none"> <li>Continuous current applied to the motor's acceleration output.</li> <li>The motor did not move. (The motor is locked.)</li> </ul>	A	Turn off the ignition switch, and turn it back on. Then turn on the main switch.
<ul style="list-style-type: none"> <li>Excessive current flowed to the motor or magnetic clutch drive transistor</li> <li>Open circuit in magnetic clutch (Including a blown stop light fuse)</li> <li>The vehicle speed signal is not sent for a predetermined period of time (approx. 140 msec.).</li> <li>The vehicle speed is equal to the set speed minus approximately 16 km/h (10mph) or below.</li> <li>Short circuit in the control switch.</li> <li>The deceleration control circuit has an open circuit (Including an open circuit in the motor).</li> <li>A malfunction in the vehicle speed signal</li> </ul>	B	Turn the main switch back on.



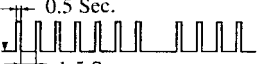



## Diagnosis Function

### 1) Warning Indication

The cruise control ECU immediately blinks the power indicator light in the combination meter on and off repeatedly to alert the driver of a system malfunction.

When the power indicator light is flashing, and the cruise control is released by pressing on the main switch, the power indicator light will be turned off. When the main switch is turned back on, and cruise control driving is resumed, the power indicator light output pattern as shown below differs according to the malfunction categories A or B. When a category A malfunction is occurring, the power indicator light will flash again, but if it is a category B malfunction, the indicator light will remain on indicating that the system is operating.

#### ► Power Indicator Light Blinking Pattern◀

Condition			Actuator current is off.	Actuator current is on.
Operation Method				
Main Switch		ON		
		OFF		
Power Indicator Light	A*	ON		
		OFF		
	B*	ON		
		OFF		

\* : "A" and "B" indicate malfunction categories.

### 2) Diagnostic Trouble Code Indication

The diagnostic trouble codes have been modified in the '97 model. For details of inspection, diagnostic trouble codes and repair procedures, see 1997 SC300/400 Repair Manual (Pub. No. RM513U).