■ DIFFERENTIAL

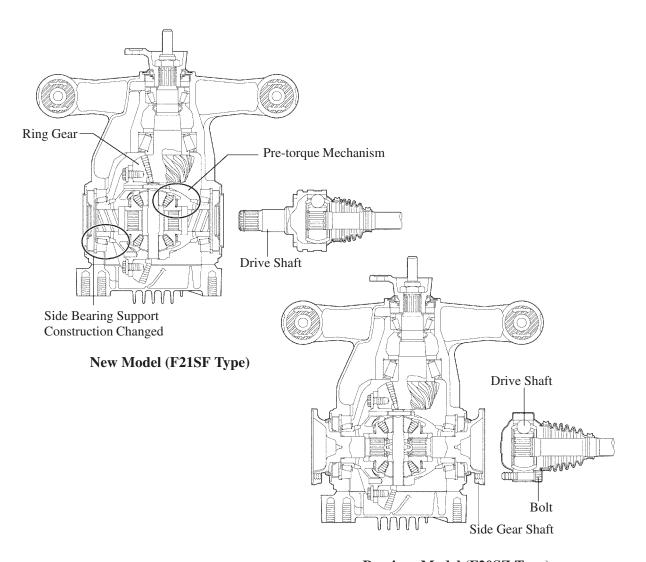
1. General

The type of differential has been changed from F20SZ to F21SF. The changes are described below.

Item		Outline	
Differential	Between Side Gear and Side Gear Washer	To improve start and acceleration performance on a slippery surface, adopt a conical spring (pre-torque mechanism) between the side gear and side gear washer. For details, see page 63.	
	Side Bearing	Along with the change in the support construction of the side bearing, support rigidity has been improved further and made the weight lighten. For details, see page 64.	
	Ring Gear	 The ring gear diameter has been made larger. The ring gear backlash adjustment procedure has been changed. 	
Differential Side Gear x Drive Shaft		The joining construction of the differential side gear and the drive shaft has been changed. For details, see page 62.	
Oil Grade		To reduce oil resistance at low oil temperatures, a low-viscosity multi-grade oil has been adopted.	

Service Tip

Along with the changes in the internal construction of the differential, the reassembly and ring gear backlash adjustment procedures have been changed. For details, see the LEXUS LS430 Repair Manual Supplement (Pub. No. RM1049E).



Previous Model (F20SZ Type)

259LSK48

▶ Specification **◄**

Model		New	Previous
Differential Type		F21SF	F20SZ
Differential Gear Ratio		3.615	3.266
No. of Teeth	Drive Pinion	13	15
No. of feeth	Ring Gear	47	49
Ring Gear Size	mm (in.)	208 (8.2)	205 (8)
No. of Differential Pinion		2	2
Oil Capacity Liters (US qts, Imp. qts)		1.35, (1.43, 1.19)	1.35, (1.43, 1.19)
Oil Viscosity		SAE75W-90	SAE90
Oil Grade		API GL-5	API GL-5
Weight* (reference) kg (lb)		34.4 (75.8)	38.3 (84.4)

^{*:} Weight shows the figure with the oil fully filled.