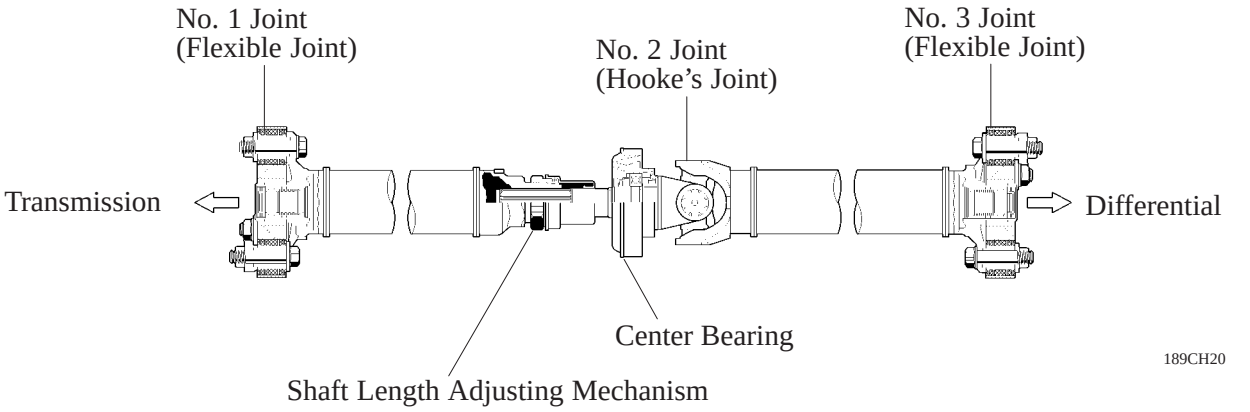
PROPELLER SHAFT

■DESCRIPTION

The 2-part type propeller shaft is used in the new LS430, as well as in the previous model. Each part of the propeller shaft consists a strong tube having a high centering and dimensional precision and a small diameter. The propeller shaft is connected to the transmission and the differential via 3 joints. No. 1 and No. 3 joints are made of flexible rubber couplings. No. 2 joint is a Hooke's universal joint. All 3 joints are carefully arranged in such a way that their shaft angles rest on a straight line. This design ensures a precise drive line linearity from the engine through the differential to minimize noise and vibration.
A shaft length adjustment mechanism is incorporated in order to make propeller shaft removal and reinstallation easier.



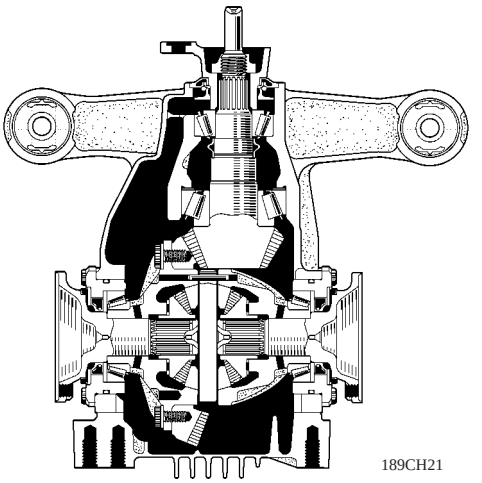
Service Tip

When the removing and reinstalling the propeller shaft, make sure to inspect the shaft angle at each of the 3 joints and confirm that they are in the specified range. For details, refer to the LEXUS LS430 Repair Manual (Pub. No. RM792E).

DIFFERENTIAL

■DESCRIPTION

- As in the previous model, the differential has 205 mm (8.07 in.) ring gear to ensure accurate operation at high power output and high speed.
- The differential is supported by a rear suspension member via rubber mounts which deter vibration and noise from being transmitted to the body.



▶ Specifications ◀

Item		New LS430	Previous LS400
Differential Gear Ratio		3.266	←
No. of Teeth	Drive Pinion	15	←
	Ring Gear	49	←
Ring Gear Size mm (in.)		205 (8.07)	←
No. of Differential Pinion		2	←
Oil Capacity Liters (US qts, Imp. qts)		1.35 (1.43, 1.19)	←
Oil Viscosity		SAE90	←
Oil Grade		API GL-5	←