

DIFFERENTIAL SYSTEM

PRECAUTION

NOTICE:

When disconnecting the negative (-) battery terminal, initialize the following systems after the terminal is is reconnected.

System Name	See procedure
Lighting System (Adaptive Front-Lighting System)	LI-17
Power Window Control System	WS-12
Power Back Door System	DL-8
Sliding Roof System	RF-22

1. Before disassembly, clean the outside of the rear differential assembly and remove any sand or mud to prevent it from entering the inside of the assembly during disassembly and reassembly.
2. When removing a connected part made of light alloy such as a rear differential carrier cover, tap it off with a plastic hammer. Do not attempt to pry it off with a screwdriver.
3. Always arrange disassembled parts in order and protect them from dust.
4. Before reassembly, thoroughly clean and dry each part or then apply hypoid gear oil LSD to it. Do not use alkaline cleaner for aluminum or rubber parts and ring gear set bolts. Also, do not clean rubber parts such as O-rings or oil seals with white gasoline.
5. Coat any sliding surface and rotating part with hypoid gear oil LSD.
6. When holding a component part in a vise, be sure to place an aluminum sheet under the part. Do not put it directly on the vise.
7. Be careful not to damage the contact surfaces of the case. Such damage may cause oil leakage.
8. Before applying sealant, remove deposited oil sealant and clean the part to be sealed using white gasoline.
9. Do not apply oil immediately after installing sealed parts. Leave it for at least an hour.
10. Damage on the surface of an oil seal, O-ring or gasket may cause oil leakage.
11. When press-fitting an oil seal, be careful not to damage the oil seal lip and outside periphery.
12. When replacing a bearing, replace the inner and outer races as a set.

PROBLEM SYMPTOMS TABLE

HINT:

Use the table below to help you find the cause of the problem. The numbers indicate the priority of the likely cause of the problem. Check each part in order. If necessary, replace these parts.

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Symptom	Suspected area	See page
Noise in front differential	1. Oil (low or wrong grade)	DF-3
	2. Excessive backlash between pinion and ring gear	DF-22
	3. Ring, pinion or side gears (worn or chipped)	DF-16
	4. Pinion shaft bearing (worn)	DF-16
	5. Side bearing (worn)	DF-16
Oil leak from front differential	1. Oil (level too high or wrong grade)	DF-3
	2. Front differential rear oil seal (worn or damaged)	DF-16
	3. Side gear oil seal (worn or damaged)	DF-16
	4. Companion flange (loosen or damaged)	DF-16
	5. Side gear shaft (damaged)	DF-16
Oil leak from rear differential	1. Oil (level too high or wrong grade)	DF-3
	2. Rear differential front oil seal (worn or damaged)	DF-4
	3. Companion flange (loosen or damaged)	DF-16