

DEFINITIONS OF SEVERE CONDITIONS (Except for U.S.A. and CANADA)

1. Required maintenance under the following conditions

- For vehicles used under any of the following conditions, the maintenance items listed below should be performed in addition to the scheduled maintenance.

A: Road conditions

- Operating on rough or muddy roads, or roads with melted snow or waterlogged roads.
- Operating on dusty roads. (Roads in areas where their pavement rate is low, or a cloud of dust often arises and the air is dry.)
- Operating on road which has road salt applied.
- Operating frequently on 2,000 m (6,562 ft.) above sea. (Vehicle with high altitude compensator or EFI diesel engine.)
- Operating frequently on 700 m (2,297 ft.) above sea. (Vehicle without high altitude compensator or EFI diesel engine.)

B: Driving conditions

- Heavily loaded vehicle. (Example : Towing a trailer, using a camper, using a car top carrier, etc.)
- Repeated short trips of less than 8 km (5 miles) and outside temperatures remain below freezing. (Engine temperature will not reach to normal temperature.)
- Repeated short trips of less than 15 km (9 miles). (Engine temperature will not reach to normal temperature.)
- Extensive idling and/or low speed driving for a long distance such as police, professional/private use like taxi or door-to-door delivery use.
- Continuous high speed driving (80 % or more of maximum vehicle speed) for over 2 hours.
- Daily (30 min. or more) off-road operation of the vehicles at high engine speed and low vehicle speed, such as heavy cargo transportation, off-roads trailer towing.

Conditions										Items		
A: Road conditions				B: Driving conditions								
1.	2.	3.	4.	1.	2.	3.	4.	5.	6.			
	•			•		•	•			Engine oil	Gasoline engine	For 2TR-FBE, 1NR-FBE, 2NR-FBE, 1ZR-FBE, or 2ZR-FBE engines only
	•			•	•		•				Others	
	•		•	•	•		•				Diesel engine	
	•			•	•		•				LPG & CNG engine	
	•			•		•	•			Engine oil filter	For 2TR-FBE, 1NR-FBE, 2NR-FBE, 1ZR-FBE, or 2ZR-FBE engines only	
	•			•	•		•				Others	
	•									Air cleaner filter		
									•	HEV battery cooling intake filter		
									•	CNG tank		
•									•	Hydrogen supply system (For FC SYSTEM only)		
•									•	Hydrogen tank with valve (For FC SYSTEM only)		
•									•	Hydrogen tank band (For FC SYSTEM only)		
•	•			•					•	Brake linings and drums (Including parking brake linings and drums)		
•	•			•					•	Brake pads and discs		
•										Brake pipes and hoses (Except for EUROPE)		
•	•			•					•	Brake master cylinder, wheel cylinder cup and rubber parts		
•										Suspension ball joints and dust covers		
									•2	Clutch fluid		
•										Clutch fork grease		
•	•	•								Clutch switch		
•	•	•								Stop light switch		
•										Drive shaft boots		
•										Tighten bolts or nuts for drive shaft (flange-type)		
				•					•	Manual transmission oil		
										Automatic transmission fluid	Changed For brand-new, model changed, or minor changed non-hybrid electric vehicles and non-battery electric vehicle, that have been produced since January 2015, and also for Crown(TZSH35)	
												Others
•*1	•*1			•					•	Transfer oil		
									•	Transaxle fluid (e-Transaxle fluid)		
										Front differential oil	Integrated with transmission	M/T model
												Changed For brand-new, model changed, or minor changed non-hybrid electric vehicles and non-battery electric vehicle, that have been produced since January 2015, and also for Crown(TZSH35)
											Separated from transmission	Others
									•	Rear differential oil		
•	•	•		•						Propeller shaft grease		
•	•	•		•						Tighten bolt for propeller shaft		
•*3	•*3	•*3		•*3						Propeller shaft boots		
•										Steering wheel, linkage and steering gear box		
•				•						Wheel bearing grease		
•										Steering knuckle, drag link, kingpin, center arm and steering linkage grease (Except for AUSTRALIA and GENERAL)		
•				•						Front and rear suspension		
•										Bolts and nuts on chassis and body		
•				•						Tires and inflation pressure (For Europe only)		
•										Air conditioner filter		

*1: For FR base 4WD models.

*2: For Land Cruiser 150 and FJ Cruiser (1GR-FE engine models) only.

*3: For Land Cruiser 300, LX600, and LX500d only.