

3. SPECIFICATION OF FUEL, COOLANT AND LUBRICANTS

1) NEW MACHINE

New machine used and filled with following lubricants.

Description	Specification
Engine oil	SAE 15W-40(API CH-4)
Hydraulic oil	Hyundai genuine long life hydraulic oil (ISO VG46, VG68 only) Conventional hydraulic oil (ISO VG32)
Transmission oil	SAE 15W-40
Axle oil	SAE 80W-90 LS (API GL-5) for wet type brake & limited slip differential
Grease	Lithium base grease NLGI No. 2
Fuel	ASTM D975-No. 2
Coolant	Mixture of 50% ethylene glycol base antifreeze and 50% water

- SAE : Society of Automotive Engineers
- API : American Petroleum Institute
- ISO : International Organization for Standardization
- NLGI : National Lubricating Grease Institute
- ASTM : American Society of Testing and Material

2) RECOMMENDED LUBRICANTS

Use only oils listed below or equivalent.

Do not mix different brand oil.

Service point	Kind of fluid	Capacity l (U.S. gal)	Ambient temperature °C (°F)					
			-20 (-4)	-10 (14)	0 (32)	10 (50)	20 (68)	30 (86)
Engine oil pan	Engine oil	11 (2.9)	SAE 30					
			SAE 10W					
			SAE 10W-30					
						SAE 15W-40		
Transmission	Engine oil	20 (5.3)	SAE 10W-30					
						SAE 15W-40		
Axle	Gear oil	Front : 17.7 (4.7) Rear : 17.7 (4.7)	SAE80W-90LS/API GL-5					
Hydraulic tank	Hydraulic oil	Tank: 121 (32) System: 154 (40.7)	ISO VG 32					
						ISO VG 46		
						ISO VG 68		
Fuel tank	Diesel fuel	218 (57.6)	ASTM D975 NO.1					
						ASTM D975 NO.2		
Fitting (grease nipple)	Grease	As required	NLGI NO.1					
						NLGI NO.2		
Radiator	Mixture of antifreeze and water 50 : 50	30 (7.9)	Ethylene glycol base permanent type					

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