

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	ISO VG46
Transmission oil	SAE 15W-40
Axle oil	UTTO, SAE 10W-30
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
- UTTO : Universal tractor transmission oil

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)	40 (104)		
Engine oil pan	Engine oil	16(4.2)					SAE 30				
			SAE 10W								
			SAE 10W-30								
			SAE 15W-40								
Transmission	Oil	43(11.4)	SAE 10W-30								
			SAE 15W-40								
Axle	UTTO	Front : 29(7.7) Rear : 24(6.3)	SAE 10W-30								
Hydraulic tank	Hydraulic oil	Tank: 125(33) System: 175(46)	ISO VG 32								
			ISO VG 46								
			ISO VG 68								
Fuel tank	Diesel fuel	295(78)	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	35(9.2)	Ethylene glycol base permanent type								