

### 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	*Refer to below list
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
- \* Recommended oil list
    - BP TERRAC SUPER TRANSMISSION 10W-30
    - CASTROL AGRI TRANS PLUS 10W-30
    - MOBILFLUID 426
    - SHELL DONAX TD 10W-30
    - TOTAL DYNATRANS MPV

## 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	Engine oil	43(11.4)	SAE 10W-30						
			SAE 15W-40						
Axle	UTTO	Front : 29(7.7) Rear : 24(6.3)	*Refer to below list						
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						

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• UTTO : Universal Tractor Transmission Oil

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