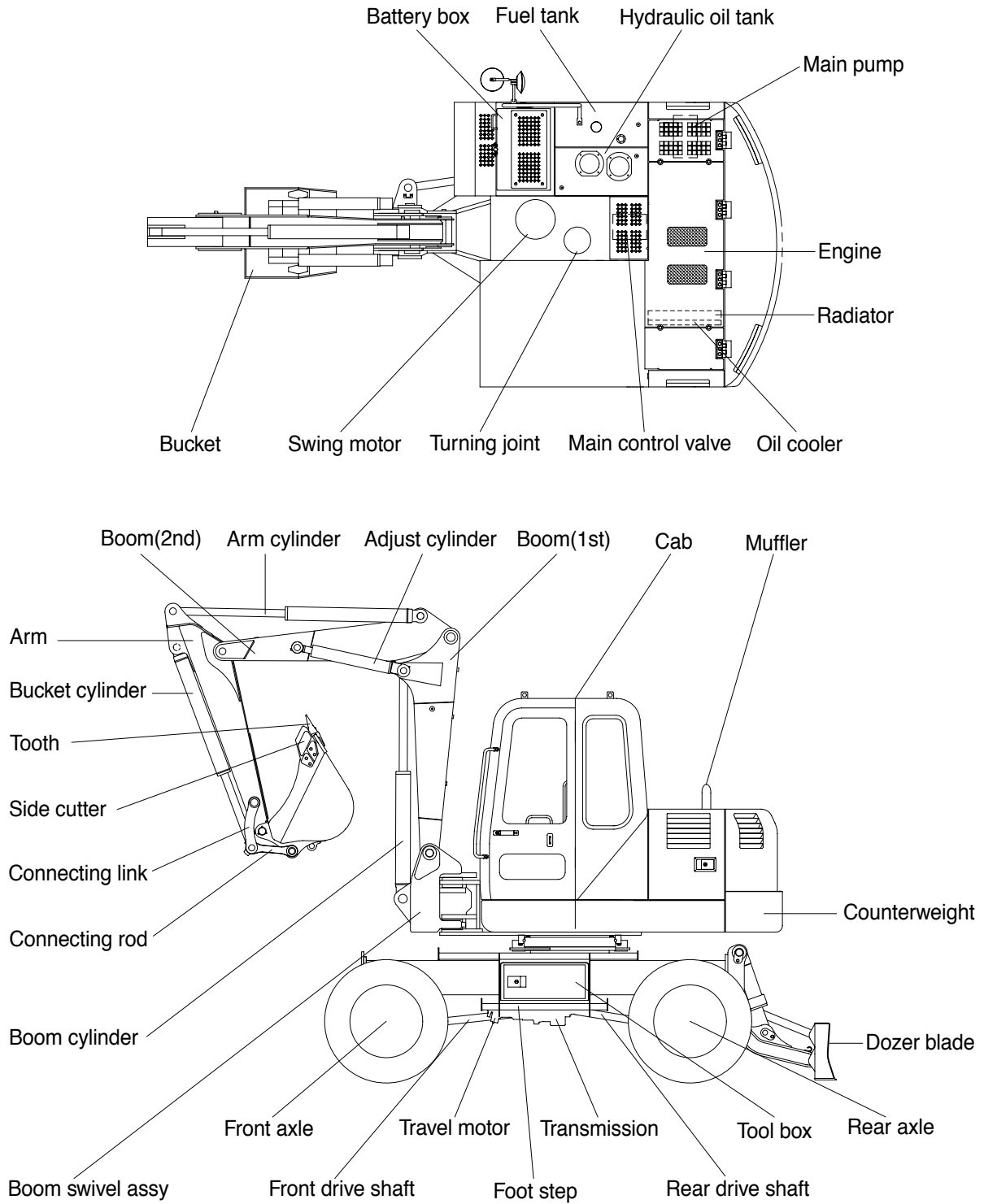


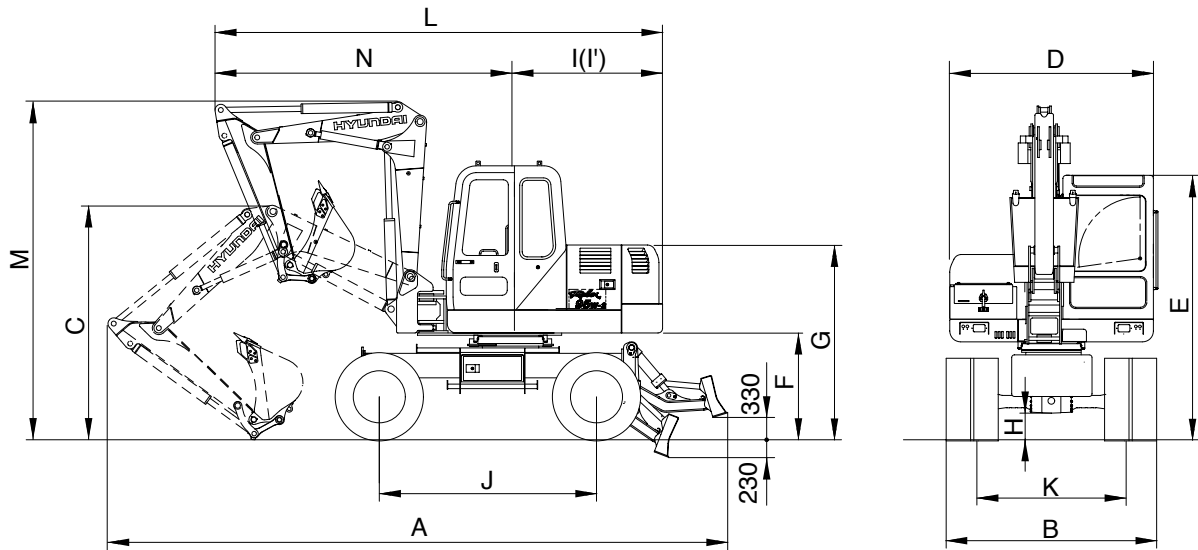
GROUP 2 SPECIFICATION

1. MAJOR COMPONENTS



2. SPECIFICATIONS

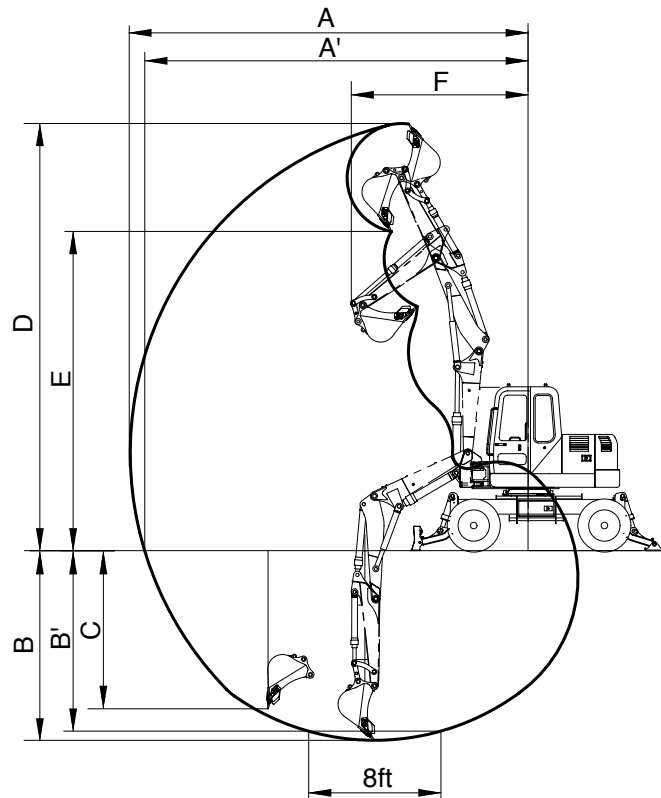
1) 3.64m(11' 11") TWO PIECE BOOM(CYL TYPE) AND REAR DOZER BLADE



Description		Unit	Specification	
			1.6m(5' 3") Arm	1.85m(6' 1") Arm
Operating weight		kg(lb)	9600(21160)	9620(21210)
Bucket capacity(PCSA heaped), standard		m ³ (yd ³)	0.30(0.39)	0.30(0.39)
Overall length	A	mm(ft-in)	7100(23' 4")	7210(23' 8")
Overall width	B		2345(7' 8")	2345(7' 8")
Shipping height of boom	C		2680(8' 10")	2840(9' 4")
Superstructure width	D		2250(7' 5")	2250(7' 5")
Cab height	E		3020(9' 11")	3020(9' 11")
Ground clearance of counterweight	F		1140(3' 9")	1140(3' 9")
Engine cover height	G		2330(7' 7")	2330(7' 7")
Minimum ground clearance	H		350(1' 2")	350(1' 2")
Rear-end distance	I		1800(5' 11")	1800(5' 11")
Rear-end swing radius	I'		1800(5' 11")	1800(5' 11")
Wheel base	J		2400(7' 10")	2400(7' 10")
Tread	K		1810(5' 11")	1810(5' 11")
Traveling length of boom	L		5490(18' 0")	5490(18' 0")
Traveling height of boom	M		3940(12' 11")	3940(12' 11")
Length of roading position	N		3300(10' 10")	3300(10' 10")
Travel speed	Low		km/hr(mph)	8.0(5.0)
	High	30(18.7)		30(18.7)
Swing speed		rpm	14.4	14.4
Gradeability		Degree(%)	30(58)	30(58)

3. WORKING RANGE

1) 3.64m(11' 11") TWO PIECE BOOM



Description		1.6m(5' 3") Arm	1.85m(6' 1") Arm
Max digging reach	A	7440mm (24' 5")	7670mm (25' 2")
Max digging reach on ground	A'	7190mm (23' 7")	7420mm (24' 4")
Max digging depth	B	3620mm (11' 11")	3870mm (12' 8")
Max digging depth (8ft level)	B'	3450mm (11' 4")	3700mm (12' 2")
Max vertical wall digging depth	C	2920mm (9' 7")	3170mm (10' 5")
Max digging height	D	7920mm (26' 0")	8150mm (26' 9")
Max dumping height	E	5910mm (19' 5")	6140mm (20' 2")
Min swing radius	F	2520mm (8' 3")	2720mm (8' 11")
Bucket digging force	SAE	62.7 kN	62.7 kN
		6400 kgf	6400 kgf
		14100 lbf	14100 lbf
	ISO	72.6 kN	72.6 kN
		7400 kgf	7400 kgf
		16300 lbf	16300 lbf
Arm digging force	SAE	49.0 kN	51.9 kN
		5000 kgf	5300 kgf
		11000 lbf	11700 lbf
	ISO	50.9 kN	53.9 kN
		5200 kgf	5500 kgf
		11500 lbf	12100 lbf

4. WEIGHT









Item	R95W-3	
	kg	lb
Upperstructure assembly	3600	7940
Main frame weld assembly	873	1925
Engine assembly	250	551
Main pump assembly	60	132
Main control valve assembly	62	137
Swing motor assembly	68	150
Hydraulic oil tank assembly	60	132
Fuel tank assembly	43	95
Counterweight	1320	2910
Cab assembly	190	420
Lower frame weld assembly	803	1770
Swing bearing	140	308
Travel motor assembly	43	93
Turning joint	76	170
Transmission assembly	110	243
Front axle assembly	375	827
Rear axle assembly	285	628
Dozer blade assembly	435	959
Front attachment assembly(3.64m boom, 1.6m arm, 0.30m ³ PCSA heaped bucket)	3000	6610
3.0m mono boom assembly	430	948
3.64m two piece boom assembly	680	1500
1.6m arm assembly	360	790
1.85m arm assembly	380	840
0.30m ³ PCSA heaped bucket assembly	225	500
Boom cylinder assembly	116	256
Arm cylinder assembly	83	183
Bucket cylinder assembly	65	143
Dozer bolae cylinder assembly	39.5	87
Adjust cylinder assembly	48	106
Oscillating cylinder assembly	24	53
Boom swivel cylinder	64.5	142
Bucket control linkage assembly	71	157
Front outrigger assembly	265	584
Rear outrigger assembly	145	320

5. LIFTING CAPACITIES









1) ROBEX 95W-3

(1) 5.2m(17' 1") boom, 2.0m(6' 7") arm equipped with 0.87m³(PCSA heaped) bucket and 4 outrigger down.

-  : Rating over-front
-  : Rating over-side or 360 degree

Load point height		Load radius						At max reach		
		3.0m(10ft)		4.5m(15ft)		6.0m(20ft)		Capacity		Reach
										m(ft)
6.0m (20ft)	kg lb							*1810 *3990	1480 3260	5.34 (17.5)
4.5m (15ft)	kg lb			*2010 *4430	1970 4340			*1590 *3510	1020 2250	6.50 (21.3)
3.0m (10ft)	kg lb			*2360 *5200	1840 4060	*1780 *3920	1130 2490	*1490 *3280	870 1920	7.00 (23.0)
1.5m (5ft)	kg lb			*2730 *6020	1690 3730	*1830 *4030	1080 2380	*1380 *3040	840 1850	7.04 (23.1)
Ground Line	kg lb			*2660 *5860	1620 3570	*1650 *3640	1060 2340	*1190 *2620	940 2070	6.63 (21.8)
-1.5m (-5ft)	kg lb	*2990 *6590	*2990 *6590	*1950 *4300	1640 3620			*710 *1570	*710 *1570	5.61 (18.4)

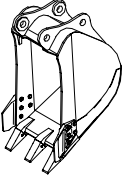
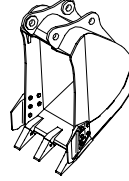
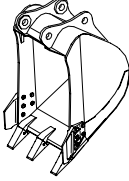
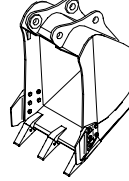
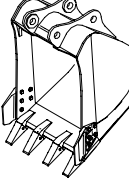
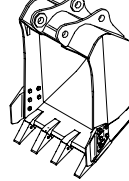
(2) 3.0m(9' 10") mono boom, 1.6m(5' 3") arm equipped with 0.30m³(PCSA heaped) bucket and rear dozer blade down.

Load point height		Load radius						At max reach		
		1.5m(5.0ft)		3.0m(10ft)		4.5m(15ft)		Capacity		Reach
										m(ft)
4.5m (15ft)	kg lb					*1650 *3640	*1650 *3640	*1570 *3460	1340 2950	5.59 (18.3)
3.0m (10ft)	kg lb					*1940 *4280	1850 4080	*1710 *3770	1100 2430	6.20 (20.3)
1.5m (5ft)	kg lb			*4850 *10690	3240 7140	*2580 *5690	1750 3860	*1870 *4120	1050 2310	6.24 (20.5)
Ground Line	kg lb	*3570 *7870	*3570 *7870	*5520 *12170	3120 6880	*2950 *6500	1670 3680	*2020 *4450	1190 2620	5.74 (18.8)
-1.5m (-5ft)	kg lb	*6770 *14930	*6770 *14930	*4660 *10270	3150 6940					

- Note
1. Lifting capacity are based on SAE J1097 and ISO 10567.
 2. Lifting capacity of the ROBEX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
 3. The load point is a hook located on the back of the bucket.
 4. *indicates load limited by hydraulic capacity.

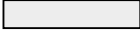


6. BUCKET SELECTION GUIDE

1) GENERAL BUCKET

					
0.13m ³ PCSA heaped bucket	0.16m ³ PCSA heaped bucket	0.22m ³ PCSA heaped bucket	0.26m ³ PCSA heaped bucket	0.30m ³ PCSA heaped bucket	0.35m ³ PCSA heaped bucket

Capacity		Width		Weight	Recommendation			
PCSA heaped	CECE heaped	Without side cutter	With side cutter		3.64m(11' 11") two piece boom		3.0m(9' 10") mono boom	
					1.6m arm (5' 3")	1.85m arm (6' 1")	1.6m arm (5' 3")	1.85m arm (6' 1")
0.13m ³ (0.17yd ³)	0.12m ³ (0.16yd ³)	450mm (17.7")	550mm (21.7")	170kg (370lb)				
0.16m ³ (0.21yd ³)	0.15m ³ (0.20yd ³)	500mm (19.7")	600mm (23.6")	180kg (400lb)				
0.22m ³ (0.29yd ³)	0.20m ³ (0.26yd ³)	600mm (23.6")	700mm (27.6")	200kg (440lb)				
0.26m ³ (0.34yd ³)	0.24m ³ (0.31yd ³)	680mm (26.8")	780mm (30.7")	215kg (470lb)				
0.30m ³ (0.39yd ³)	0.27m ³ (0.35yd ³)	750mm (29.5")	850mm (33.5")	225kg (500lb)				
0.35m ³ (0.46yd ³)	0.32m ³ (0.42yd ³)	840mm (33.1")	940mm (37.0")	240kg (530lb)				

: Standard bucket

-  Applicable for materials with density of 2000kg/m³ (3370lb/yd³) or less
-  Applicable for materials with density of 1600kg/m³ (2700lb/yd³) or less
-  Applicable for materials with density of 1100kg/m³ (1850lb/yd³) or less

7. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Mitsubishi S4S-DT
Type	4-cycle turbocharged diesel engine, low emission
Cooling method	Water cooling
Number of cylinders and arrangement	4 cylinders, in-line
Firing order	1-3-4-2
Combustion chamber type	Direct injection
Cylinder bore × stroke	94 × 120mm(3.70" × 4.72")
Piston displacement	3331cc(203cu in)
Compression ratio	17 : 1
Rated gross horse power(SAE J1349)	77Hp at 2200rpm(57kW at 2200rpm)
Maximum torque at 1500rpm	25.6kgf · m(185lbf · ft)
Engine oil quantity	10 (2.6U.S. gal)
Dry weight	250kg(551lb)
High idling speed	2400 ± 30rpm
Low idling speed	850 ± 20rpm
Rated fuel consumption	165g/Hp · hr
Starting motor	Delco Remy 28MT(24V)
Alternator	Delco Remy(24V-50Amp)
Battery	2 × 12V × 100Ah

2) MAIN PUMP

Item	Specification
Type	Tow variable displacement piston pump
Capacity	2 × 41cc/rev
Pressure rated	280kgf/cm ² (3980psi)
Rated oil flow	2 × 90.2 /min(23.8U.S. gpm/ 19.8U.K. gpm)
Rated speed	2200rpm(Clockwise viewed from shaft end)

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	16.2+10.7cc/rev
Maximum pressure	150/40kgf/cm ² (2130/570psi)
Rated oil flow	35.6/23.5 /min(9.4/6.2U.S. gpm, 7.8/5.2U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spool
Operating method	Hydraulic pilot system
Main relief valve pressure	280kgf/cm ² (3980psi)
Overload relief valve pressure	320kgf/cm ² (4550psi)

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	45.5cc/rev
Relief pressure	190kgf/cm ² (2700psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	12kgf · m(87lb · ft)
Brake release pressure	20~50kgf/cm ² (285~710psi)
Reduction gear type	2 - stage planetary
Swing speed	14.4rpm

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement bent-axis axial piston motor
Capacity(Max/min)	80/30cc/rev
Relief pressure	280kgf/cm ² (3980psi)
Counter balance valve	Applied

7) POWER TRAIN

Item	Description	Specification	
Transmission	Type	2 speed power shift transmission	
	Gear ratio	1st	5.0
		2nd	1.29
Parking brake	Type	Multi disc brake integrated in transmission	
	Maximum braking power	117kgf · m(8461lbf · ft)	
Axle	Type	4 wheel drive with differential	
	Gear ratio	13.714	
	Brake	Multi disc brake	

8) REMOTE CONTROL VALVE

Item	Specification	
Type	Pressure reducing type	
Operating pressure	Minimum	5.5kgf/cm ² (78psi)
	Maximum	19.5kgf/cm ² (277psi)
Single operation stroke	Lever	82.7mm(3.3in)

9) CYLINDER

Item	Specification	
Boom cylinder	Bore dia × Rod dia × Stroke	Ø125 × Ø85 × 725mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	Ø100 × Ø65 × 845mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø90 × Ø60 × 700mm
	Cushion	Extend only
Dozer cylinder	Bore dia × Rod dia × Stroke	Ø100 × Ø65 × 180mm
	Cushion	Extend only
Outrigger cylinder	Bore dia × Rod dia × Stroke	Ø100 × Ø65 × 180mm
	Cushion	-
Boom swivel cylinder	Bore dia × Rod dia × Stroke	Ø100 × Ø65 × 640mm
	Cushion	-
Boom adjust cylinder	Bore dia × Rod dia × Stroke	Ø90 × Ø60 × 565mm
	Cushion	-

10) BUCKET

Item	Capacity		Tooth quantity	Width	
	PCSA heaped	CECE heaped		Without side cutter	With side cutter
Standard	0.30m ³ (0.39yd ³)	0.27m ³ (0.35yd ³)	4	750mm (30")	850mm (33")
Option	0.13m ³ (0.17yd ³)	0.12m ³ (0.16yd ³)	3	450mm (18")	550mm (22")
	0.16m ³ (0.21yd ³)	0.15m ³ (0.20yd ³)	3	500mm (20")	600mm (24")
	0.22m ³ (0.29yd ³)	0.20m ³ (0.26yd ³)	3	600mm (24")	700mm (28")
	0.26m ³ (0.34yd ³)	0.24m ³ (0.31yd ³)	3	680mm (27")	780mm (31")
	0.35m ³ (0.46yd ³)	0.32m ³ (0.42yd ³)	4	840mm (33")	940mm (37")

8. RECOMMENDED OILS

Use only oils listed below or equivalent.

Do not mix different brand oil.

Service point	Kind of fluid	Capacity (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	10(2.6)					SAE 30				
					SAE 10W						
Transmission case		2.3(0.6)	SAE 10W-30								
							SAE 15W-40				
Swing drive	Gear oil	1.5(0.4)					SAE 85W-140				
Front axle	Gear oil	Case	6(1.6)								
		Hub	0.8 × 2(0.2 × 2)								
Rear axle		Case	8(2.1)					SAE 85W-90			
		Hub	0.8 × 2(0.2 × 2)								
Hydraulic tank	Hydraulic oil	Tank: 90(23.8)	ISO VG 32								
		System: 130(34.4)	ISO VG 46								
			ISO VG 68								
Fuel tank	Diesel fuel	140(37)	ASTM D975 NO.1								
			ASTM D975 NO.2								
Fitting (Grease nipple)	Grease	As required	NLGI NO.1								
			NLGI NO.2								
Radiator (Reservoir tank)	Mixture of antifreeze and water 50 : 50	12.1(3.2)	Ethylene glycol base permanent type								

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