

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSB6.7
Type	4-cycle turbocharged diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	6 cylinders, in-line
Firing order	1-5-3-6-2-4
Combustion chamber type	Direct injection type
Cylinder bore × stroke	104 × 132(4.09" × 5.20")
Piston displacement	6700cc(409cu in)
Compression ratio	17.2 : 1
Rated gross horse power(SAE J1995)	227Hp at 1900rpm(169kW at 1900rpm)
Maximum torque	96.8kgf · m(700lbf · ft) at 1500rpm
Engine oil quantity	24 l (6.3U.S. gal)
Dry weight	556kg(1226lb)
High idling speed	2050 + 50rpm
Low idling speed	950 ± 100rpm
Rated fuel consumption	167g/Hp · hr at 1900rpm
Starting motor	Delco Remy 24V-4.5kW
Alternator	Delco Remy 24V-50A
Battery	2 × 12V × 160Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Maximum pressure	330kgf/cm ² (4690psi)[360kgf/cm ² (5120psi)]
Rated oil flow	2 × 252 l /min (66.6U.S. gpm/ 55.4U.K. gpm)

[]: Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	35kgf/cm ² (500psi)
Rated oil flow	27 l /min(7.1U.S. gpm/5.9U.K. gpm)

4) MAIN CONTROL VALVE

Item		Specification	
		R290LC-7A	R290LC-7A Long reach
Type		10 spools	
Operating method		Hydraulic pilot system	
Main relief valve pressure		330kgf/cm ² (4695psi) [360kgf/cm ² (5120psi)]	
Overload relief valve pressure	Boom	390kgf/cm ² (5550psi)	390kgf/cm ² (5550psi)
	Arm	390kgf/cm ² (5550psi)	In : 230kgf/cm ² (3270psi) Out : 260kgf/cm ² (3700psi)
	Bucket	390kgf/cm ² (5550psi)	270kgf/cm ² (3840psi)

[]: Power boost

5) SWING MOTOR

Item	Specification
Type	Axial piston motor
Capacity	169.4cc/rev
Relief pressure	265kgf/cm ² (3770psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	70kgf · m(506lbf · ft)
Brake release pressure	26kgf/cm ² (370psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	330kgf/cm ² (4693psi)
Capacity(max / min)	154.8/88.5cc/rev
Reduction gear type	3-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	9kgf/cm ² (128psi)
Braking torque	40kgf · m(290lbf · ft)

7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	6.5kgf/cm ² (92psi)
	Maximum	26kgf/cm ² (370psi)
Single operation stroke	Lever	61mm(2.4in)
	Pedal	123mm(4.84in)

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø 140 × ø 100 × 1465mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	ø 150 × ø 110 × 1765mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 140 × ø 95 × 1185mm
	Cushion	Extend only
Bucket cylinder (LONG REACH)	Bore dia × Rod dia × Stoke	ø 100 × ø 70 × 870mm
	Cushion	Extend only

※ Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.

※ Discoloration does not cause any harmful effect on the cylinder performance.

9) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R290LC-7A	Standard	600mm(24")	0.56kgf/cm ² (7.97psi)	48	3200mm(10' 6")
	Option	700mm(28")	0.49kgf/cm ² (6.97psi)	48	3300mm(10' 10")
		800mm(32")	0.44kgf/cm ² (6.26psi)	48	3400mm(11' 1")
		900mm(36")	0.38kgf/cm ² (5.40psi)	48	3500mm(11' 5")
R290NLC-7A	Standard	600mm(24")	0.55kgf/cm ² (7.82psi)	48	2990mm(9' 10")
R290LC-7A LONG REACH	Standard	800mm(32")	0.44kgf/cm ² (6.26psi)	48	3400mm(11' 2")
R290LC-7A HIGH WALKER	Standard	600mm(24")	0.62kgf/cm ² (8.82psi)	48	3470mm(11' 5")
	Option	700mm(28")	0.54kgf/cm ² (7.68psi)	48	3570mm(11' 9")
		800mm(32")	0.48kgf/cm ² (6.83psi)	48	3670mm(12' 0")
		★710mm(28")	0.54kgf/cm ² (7.68psi)	48	3580mm(11' 9")

★ : Double grouser.

10) BUCKET

Item		Capacity		Tooth quantity	Width	
		SAE heaped	CECE heaped		Without side cutter	With side cutter
R290LC-7A R290NLC-7A H/WALKER	Standard	1.27m ³ (1.66yd ³)	1.10m ³ (1.44yd ³)	5	1290mm(50.8")	1410mm(55.5")
	Option	0.79m ³ (1.03yd ³)	0.70m ³ (0.92yd ³)	3	890mm(35.0")	1010mm(39.8")
		1.03m ³ (1.35yd ³)	0.90m ³ (1.18yd ³)	4	1090mm(42.9")	1210mm(47.6")
		◆1.07m ³ (1.40yd ³)	0.95m ³ (1.24yd ³)	5	1150mm(45.3")	-
		◆1.27m ³ (1.66yd ³)	1.10m ³ (1.44yd ³)	5	1210mm(47.6")	-
		◆1.46m ³ (1.91yd ³)	1.28m ³ (1.67yd ³)	5	1460mm(57.5")	-
		⊙1.16m ³ (1.52yd ³)	1.00m ³ (1.05yd ³)	5	1340mm(52.8")	-
		⊙1.49m ³ (1.95yd ³)	1.28m ³ (1.67yd ³)	5	1620mm(63.8")	-
		1.50m ³ (1.96yd ³)	1.30m ³ (1.70yd ³)	6	1490mm(58.7")	1610mm(63.4")
		1.73m ³ (2.26yd ³)	1.50m ³ (1.96yd ³)	6	1700mm(66.9")	1820mm(71.7")
		1.85m ³ (2.42yd ³)	1.60m ³ (2.09yd ³)	5	1800mm(70.9")	1920mm(75.6")
LONG REACH	Standard	0.52m ³ (0.68yd ³)	0.46m ³ (0.60yd ³)	5	935mm(36.8")	1035mm(40.8")

◆ : Heavy duty bucket

⊙ : Rock bucket