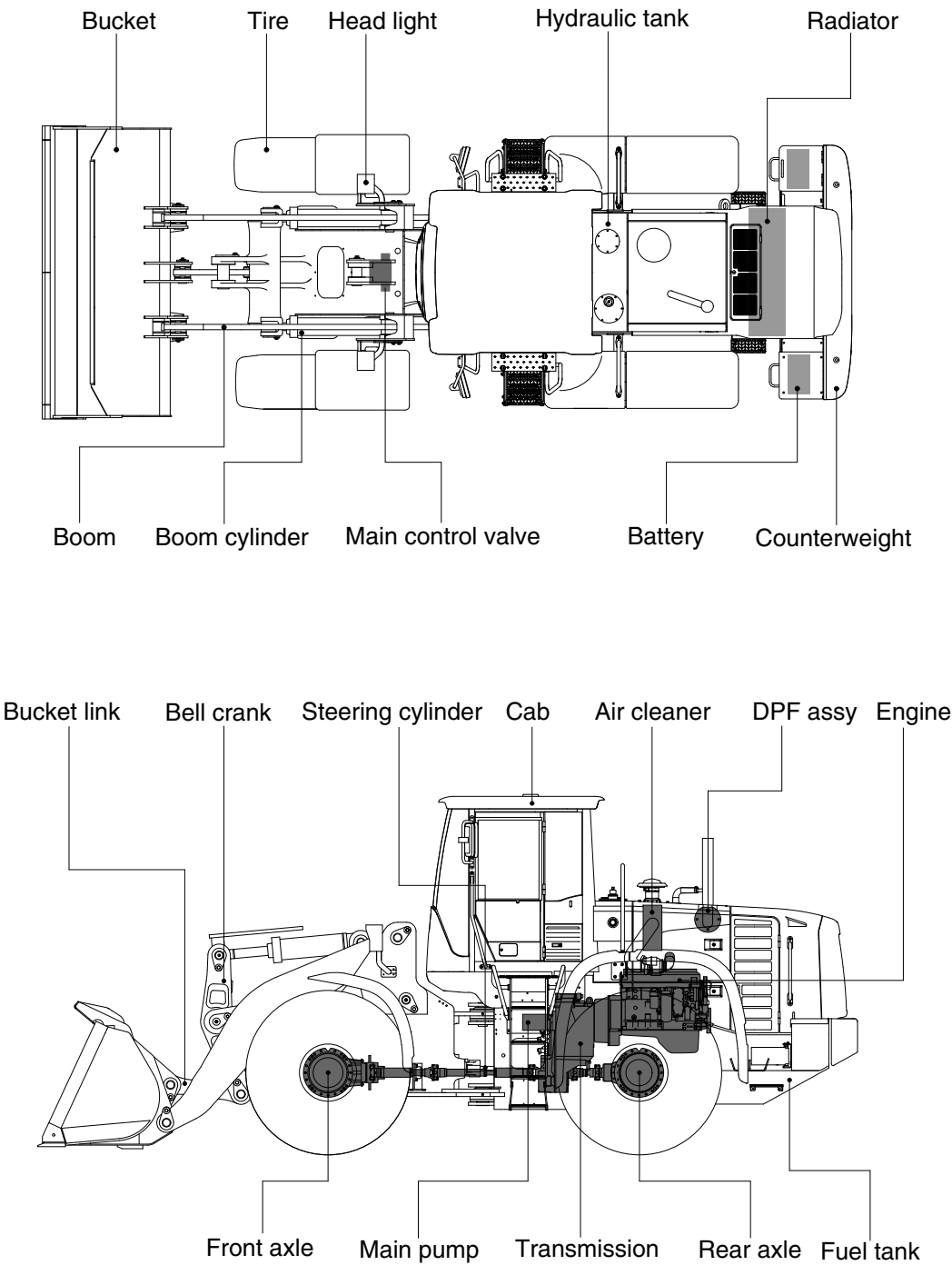


2. SPECIFICATIONS

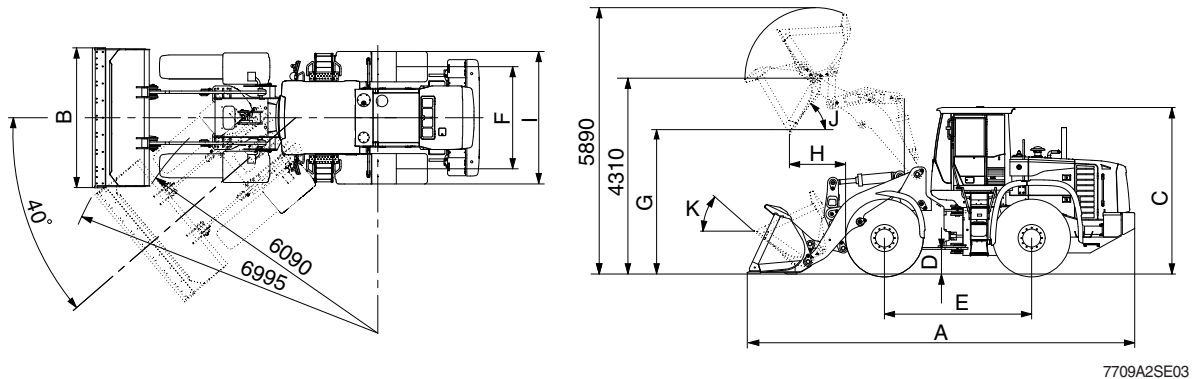
1. MAJOR COMPONENTS



7709A2SE01

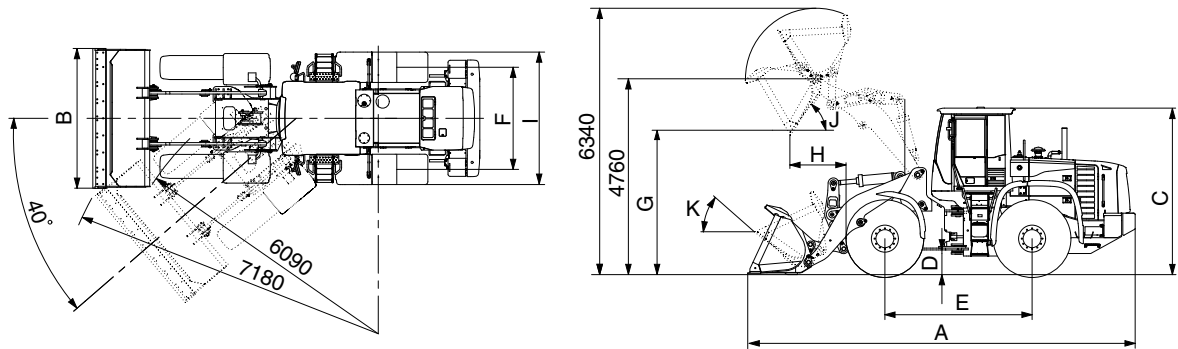
2. SPECIFICATIONS

1) WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL770-9A)



Description			Unit	Specification
Operating weight			kg (lb)	23500 (51810)
Bucket capacity	Struck		m³ (yd³)	3.6 (4.7)
	Heaped			4.2 (5.5)
Overall length	A		mm (ft-in)	8700 (28' 7")
Overall width	B			3100 (10' 2")
Overall height	C			3590 (11' 9")
Ground clearance	D			480 (1' 7")
Wheelbase	E			3500 (11' 6")
Tread	F			2300 (7' 7")
Dump clearance at 45°	G			3090 (10' 2")
Dump reach (full lift)	H			1295 (4' 3")
Width over tires	I			2975 (9' 9")
Dump angle	J		degree (°)	48
Roll back angle (carry position)	K			49
Cycle time	Lift (with load)		sec	5.4
	Dump (with load)			1.3
	Lower (empty)			2.8
Maximum travel speed			km/hr (mph)	42.0 (26.1)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				6.09 (20' 0")
Gradeability			degree (°)	30
Breakout force			kg (lb)	21740 (47930)
Travel speed	Forward	First gear	km/hr (mph)	7.0 (4.3)
		Second gear		12.5 (7.8)
		Third gear		27.6 (17.1)
		Fourth gear		42.0 (26.1)
	Reverse	First gear		7.0 (4.3)
		Second gear		12.5 (7.8)
		Third gear		27.6 (17.1)

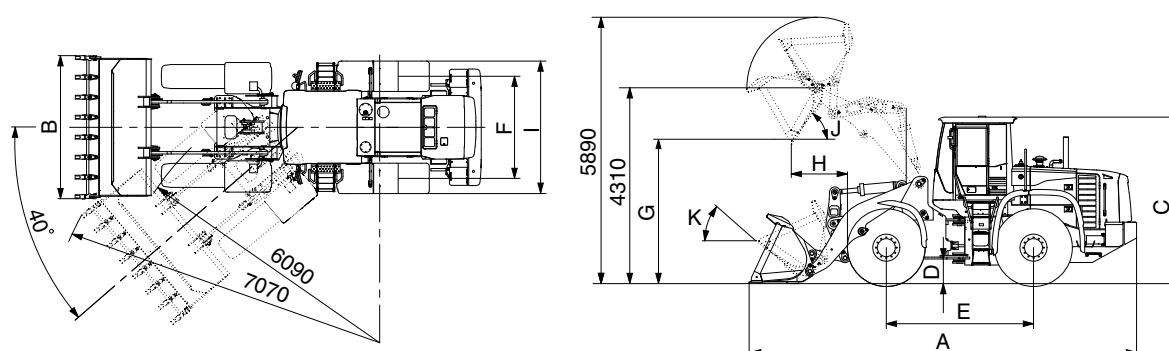
WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL770XTD-9A)



7709A2SE03-1

Description			Unit	Specification
Operating weight			kg (lb)	24250 (53460)
Bucket capacity	Struck		m³ (yd³)	3.6 (4.7)
	Heaped			4.2 (5.5)
Overall length	A		mm (ft-in)	9175 (30' 1")
Overall width	B			3100 (10' 2")
Overall height	C			3590 (11' 9")
Ground clearance	D			480 (1' 7")
Wheelbase	E			3500 (11' 6")
Tread	F			2300 (7' 7")
Dump clearance at 45°	G			3540 (11' 7")
Dump reach (full lift)	H			1295 (4' 3")
Width over tires	I			2975 (9' 9")
Dump angle	J		degree (°)	48
Roll back angle (carry position)	K			50
Cycle time	Lift (with load)		sec	5.4
	Dump (with load)			1.3
	Lower (empty)			2.8
Maximum travel speed			km/hr (mph)	42.0 (26.1)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				6.09 (20' 0")
Gradeability			degree (°)	30
Breakout force			kg (lb)	21390 (47160)
Travel speed	Forward	First gear	km/hr (mph)	7.0 (4.3)
		Second gear		12.5 (7.8)
		Third gear		27.6 (17.1)
		Fourth gear		42.0 (26.1)
	Reverse	First gear		7.0 (4.3)
		Second gear		12.5 (7.8)
		Third gear		27.6 (17.1)

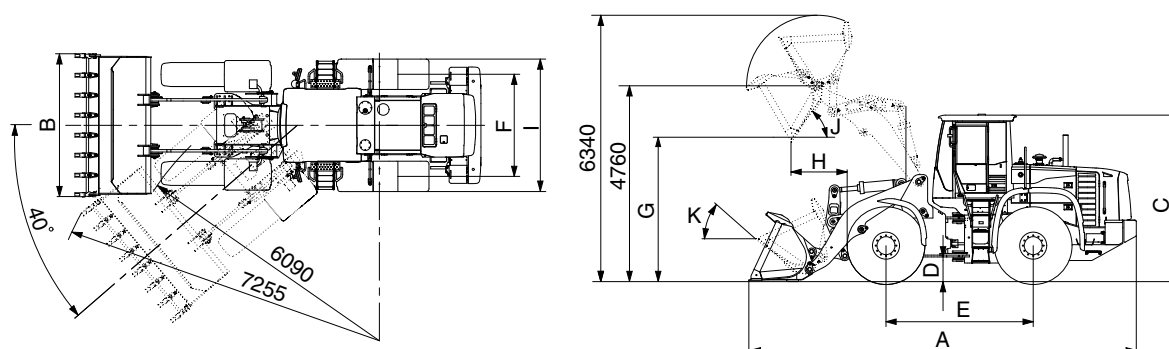
2) WITH TOOTH TYPE BUCKET (HL770-9A)



7709A2SE04

Description			Unit	Specification
Operating weight			kg (lb)	23500 (51810)
Bucket capacity	Struck		m³ (yd³)	3.4 (4.4)
	Heaped			4.0 (5.2)
Overall length	A		mm (ft-in)	8820 (28' 11")
Overall width	B			3150 (10' 4")
Overall height	C			3590 (11' 9")
Ground clearance	D			480 (1' 7")
Wheelbase	E			3500 (11' 6")
Tread	F			2300 (7' 7")
Dump clearance at 45°	G			2965 (9' 9")
Dump reach (full lift)	H			1380 (4' 6")
Width over tires	I			2975 (9' 9")
Dump angle	J			degree (°)
Roll back angle (carry position)	K		49	
Cycle time	Lift (with load)		sec	5.4
	Dump (with load)			1.3
	Lower (empty)			2.8
Maximum travel speed			km/hr (mph)	42.0 (26.1)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				6.09 (20' 0")
Gradeability			degree (°)	30
Breakout force			kg (lb)	23040 (50790)
Travel speed	Forward	First gear	km/hr (mph)	7.0 (4.3)
		Second gear		12.5 (7.8)
		Third gear		27.6 (17.1)
		Fourth gear		42.0 (26.1)
	Reverse	First gear		7.0 (4.3)
		Second gear		12.5 (7.8)
		Third gear		27.6 (17.1)

WITH TOOTH TYPE BUCKET (HL770XTD-9A)



7709A2SE04-1

Description			Unit	Specification
Operating weight			kg (lb)	24250 (53460)
Bucket capacity	Struck		m³ (yd³)	3.4 (4.4)
	Heaped			4.0 (5.2)
Overall length	A		mm (ft-in)	9320 (30' 7")
Overall width	B			3150 (10' 4")
Overall height	C			3590 (11' 9")
Ground clearance	D			480 (1' 7")
Wheelbase	E			3500 (11' 6")
Tread	F			2300 (7' 7")
Dump clearance at 45°	G			3415 (11' 2")
Dump reach (full lift)	H			1380 (4' 6")
Width over tires	I			2975 (9' 9")
Dump angle	J			degree (°)
Roll back angle (carry position)	K		50	
Cycle time	Lift (with load)		sec	5.4
	Dump (with load)			1.3
	Lower (empty)			2.8
Maximum travel speed			km/hr (mph)	42.0 (26.1)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				6.09 (20' 0")
Gradeability			degree (°)	30
Breakout force			kg (lb)	22680 (50000)
Travel speed	Forward	First gear	km/hr (mph)	7.0 (4.3)
		Second gear		12.5 (7.8)
		Third gear		27.6 (17.1)
		Fourth gear		42.0 (26.1)
	Reverse	First gear		7.0 (4.3)
		Second gear		12.5 (7.8)
		Third gear		27.6 (17.1)

3. WEIGHT

Item		kg	lb
Front frame assembly		2154	4750
Rear frame assembly		2417	5330
Front fender (LH & RH)		48	106
Counterweight		1200	2650
Additional counterweight (HL770XTD-9A)		520	1150
Cab assembly		1050	2320
Engine assembly		800	1760
Transmission assembly		760	1680
Drive shaft (front)		37	82
Drive shaft (center)		37	82
Drive shaft (rear)		21	46
Front axle (include differential)		1200	2650
Rear axle (include differential)		1090	2400
Tire (26.5-25 20PR, L3)		394	870
Hydraulic tank assembly		285	624
Fuel tank assembly		390	860
Main pump assembly		80	176
Fan & brake pump assembly		11.5	25.3
Main control valve (3 spool)		75	165
Flow amplifier		29	64
Boom assembly	HL770-9A	1610	3550
	HL770XTD-9A	1820	4010
Bell crank assembly		460	1010
Bucket link		73	160
4.2 m ³ bucket, with bolt on cutting edge		2160	4760
4.0 m ³ bucket, with tooth		2070	4560
Boom cylinder assembly		225	496
Bucket cylinder assembly		235	518
Steering cylinder assembly		44	97
Seat		40	88
Battery		55	121

4. SPECIFICATION FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSL9
Type	4-cycle turbocharged, charge air cooled diesel engine
Control type	Electronic control
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	114 × 145 mm (4.49" × 5.71")
Piston displacement	8900 cc (543 cu in)
Compression ratio	17.8 : 1
Rated gross horse power	304 ps at 2000 rpm
Maximum gross torque (1400 rpm)	148 kgf · m (1070 lbf · ft)
Engine oil quantity	23 ℓ (6.1 U.S. gal)
Wet weight	800 kg (1764 lb)
High idling speed	2030 ± 50 rpm
Low idling speed	800 ± 25 rpm
Rated fuel consumption	167 g/ps · hr
Starting motor	Nippondenso (24 V - 7.8kW)
Alternator	Delco Remy 22SI (24 V - 70Amp)
Battery	2 × 12V × 200Ah

2) MAIN PUMP

Item	Specification	
	Steering	Loader
Type	Variable tandem piston pump	
Capacity	110 cc/rev	61 cc/rev
Maximum operating pressure	210 kgf/cm ² (2990 psi)	280 kgf/cm ² (3980 psi)
Rated oil quantity	220 l /min (58.1 U.S.gpm)	122 l /min (32.2 U.S.gpm)
Rated speed	2000 rpm	

3) FAN + BRAKE PUMP

Item	Specification
Type	Variable piston pump
Capacity	28 cc/rev
Maximum operating pressure	250 kgf/cm ² (3560 psi)
Rated oil quantity	56 l /min (14.8 U.S.gpm)
Rated speed	2000 rpm

4) MAIN CONTROL VALVE

Item	Specification
Type	2 spool
Operating method	Hydraulic pilot assist
Main relief valve pressure	280 kgf/cm ² (3980 psi)
Overload relief valve pressure	340 kgf/cm ² (4840 psi)
Overload relief valve pressure (dump)	310 kgf/cm ² (4410 psi)

5) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	5 kgf/cm ² (71 psi)
	Maximum	30 kgf/cm ² (427 psi)
Single operation angle	degree	17

6) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø 160 × ø 95 × 765 mm
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 180 × ø 95 × 570 mm
Steering cylinder	Bore dia × Rod dia × Stroke	ø 95 × ø 50 × 480 mm

7) DYNAMIC POWER TRANSMISSION DEVICES

Item			Specification
4-speed transmission (std)	Model		ZF 4WG 260
	Type	Converter	Single-stage, single-phase
		Transmission	Full-automatic power shift
	Converter stall ratio		2.09 : 1
	Gear shift		Forward fourth gear, reverse third gear
	Control		Electrical single lever type, kick-down system Automatic kick down from 2nd to 1st gear FNR switch on joystick lever (option)
	Pump rated flow		135 ℓ /min (35.7 U.S.gpm) at 2000 rpm
	Travel speed		See the page 2-2.
5-speed transmission (opt)	Model		ZF 5WG 260
	Type	Converter	Single-stage, double-phase (with lock up clutch)
		Transmission	Full-automatic power shift
	Converter stall ratio		2.09 : 1
	Gear shift		Forward fifth gear, reverse third gear
	Control		Electrical single lever type, kick-down system Automatic kick down from 2nd to 1st gear FNR switch on joystick lever (option)
	Pump rated flow		135 ℓ /min (35.7 U.S.gpm) at 2000 rpm
	Travel speed	Forward 1/2/3/4/5	6.9/12.6/20.1/28.7/46.0 km/hr
		Reverse 1/2/3	6.9/12.6/28.7 km/hr
Axle	Drive devices		4-wheel drive
	Front		Front fixed location
	Rear		Oscillation ± 11° of center pin-loaded
Wheels	Tires		26.5-25, 20PR (L3)
Brakes	Travel		Four-wheel, wet-disc type, full hydraulic
	Parking		Spring applied, hydraulic released brake on T/M
Steering	Type		Full hydraulic, articulated
	Steering angle		40° to both right and left angle, respectively