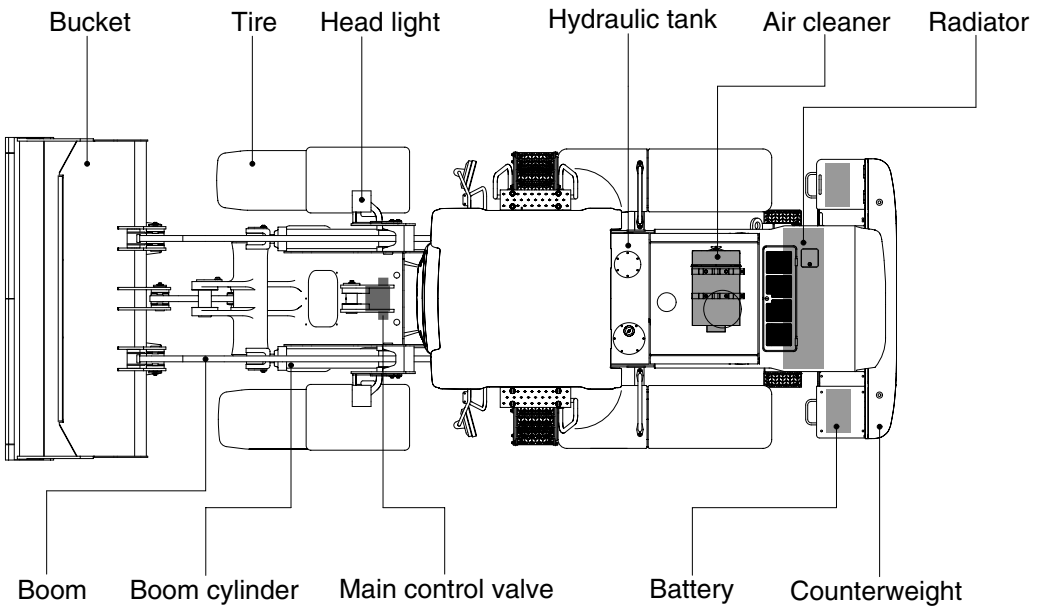
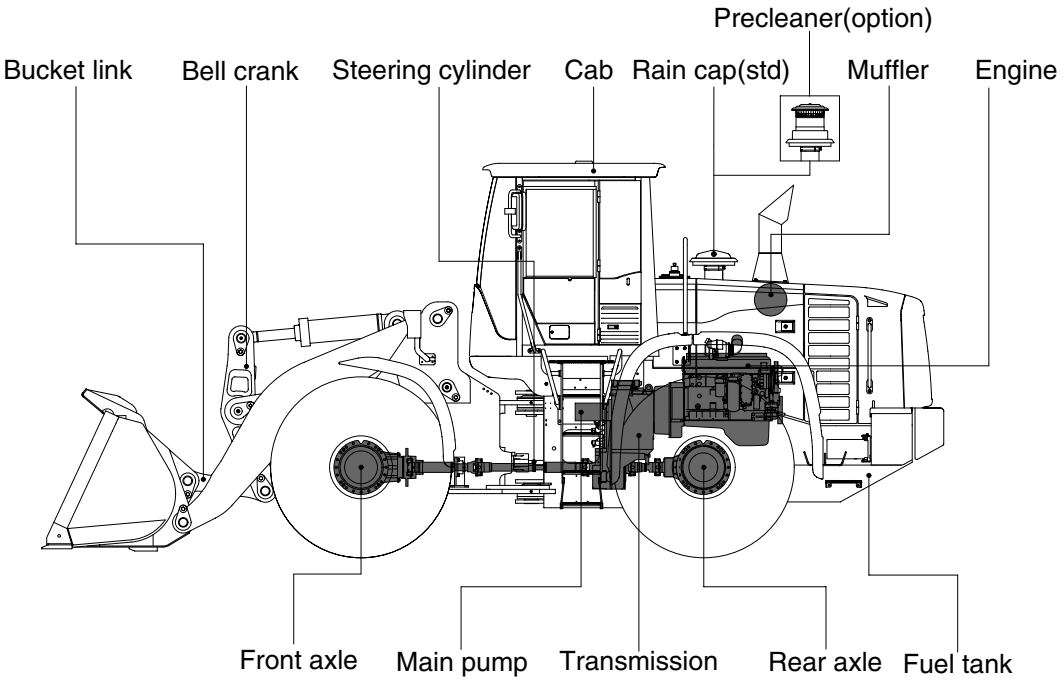
1. MAJOR COMPONENTS

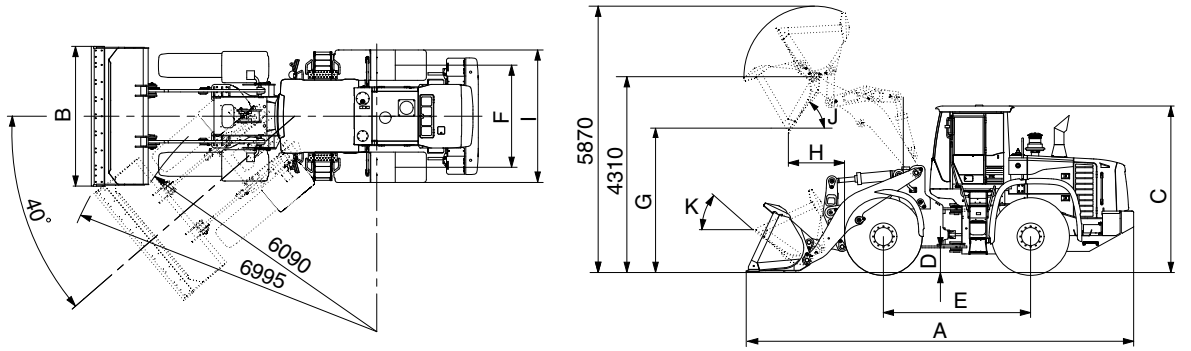




7709S2SE01

2. SPECIFICATIONS

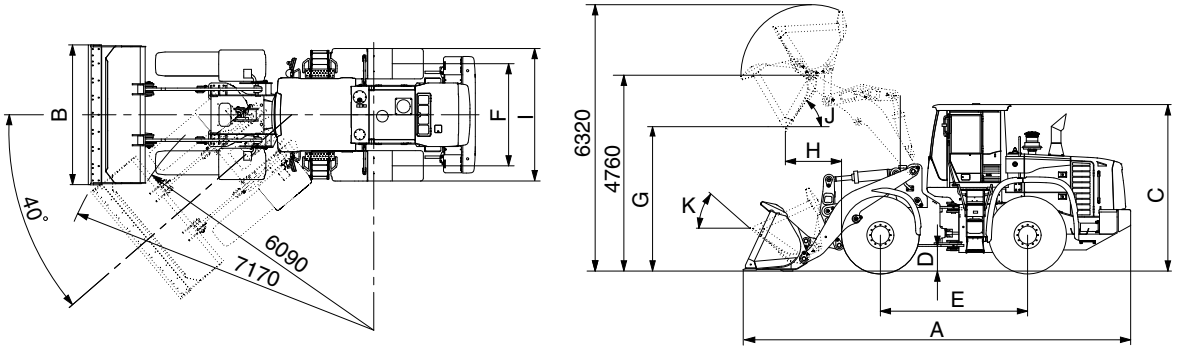
1) WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL770-9S)



7709S2SE03

Description			Unit	Specification
Operating weight			kg (lb)	22500 (49600)
Bucket capacity		Struck	m^3 (yd^3)	3.45 (4.5)
		Heaped		4.0 (5.2)
Overall length		A	mm (ft-in)	8650 (28' 5")
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		3117 (10' 3")
Dump reach (full lift)		H		1254 (4' 1")
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	5.7
		Dump (with load)		1.4
		Lower (empty)		2.7
Maximum travel speed			km/hr (mph)	38.0 (23.6)
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)	20760 (45770)
Travel speed	Forward	First gear	km/hr (mph)	6.9 (4.3)
		Second gear		12.1 (7.5)
		Third gear		25.8 (16.0)
		Fourth gear		38.0 (23.6)
	Reverse	First gear		6.9 (4.3)
		Second gear		12.1 (7.5)
		Third gear		25.8 (16.0)

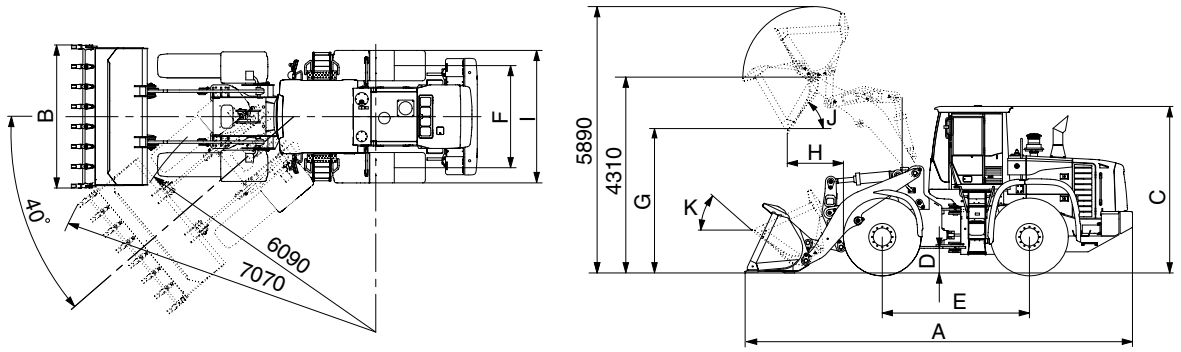
WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL770XTD-9S)



7709S2SE03-1

Description		Unit	Specification
Operating weight		kg (lb)	23250 (51260)
Bucket capacity	Struck	m^3 (yd^3)	3.45 (4.5)
	Heaped		4.0 (5.2)
Overall length	A	mm (ft-in)	9125 (29' 11")
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		3570 (11' 9")
Dump reach (full lift)	H		1260 (4' 2")
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	5.7
	Dump (with load)		1.4
	Lower (empty)		2.7
Maximum travel speed		km/hr (mph)	38.0 (23.6)
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)	20430 (45040)
Travel speed	Forward	First gear	km/hr (mph)	6.9 (4.3)
		Second gear		12.1 (7.5)
		Third gear		25.8 (16.0)
		Fourth gear		38.0 (27.6)
	Reverse	First gear		6.9 (4.3)
		Second gear		12.1 (7.5)
		Third gear		25.8 (16.0)

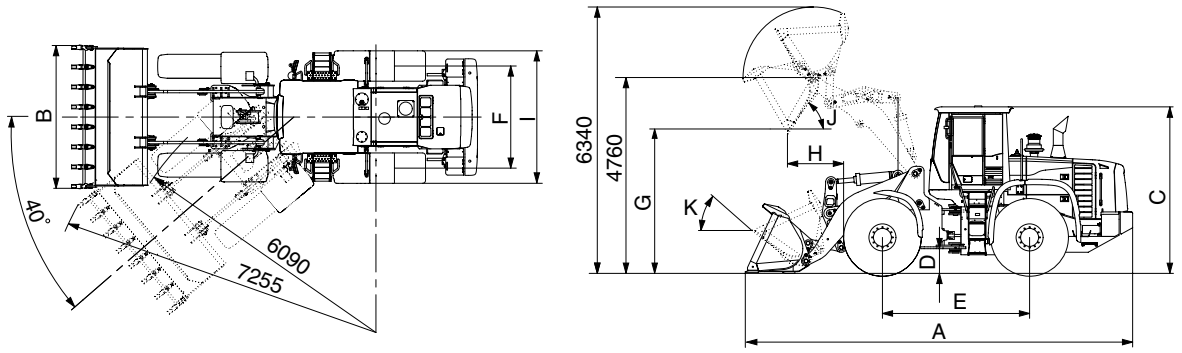
2) WITH TOOTH TYPE BUCKET (HL770-9S)



77092SE04

Description		Unit	Specification
Operating weight		kg (lb)	22500 (49600)
Bucket capacity	Struck	m^3 (yd^3)	3.4 (4.4)
	Heaped		3.9 (5.1)
Overall length	A	mm (ft-in)	8770 (28' 9")
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		3000 (9' 10")
Dump reach (full lift)	H		1340 (4' 5")
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	5.7
	Dump (with load)		1.4
	Lower (empty)		2.7
Maximum travel speed		km/hr (mph)	38.0 (23.6)
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)	22100 (48730)
Travel speed	Forward	First gear	km/hr (mph)	6.9 (4.3)
		Second gear		12.1 (7.5)
		Third gear		25.8 (16.0)
		Fourth gear		38.0 (23.6)
	Reverse	First gear		6.9 (4.3)
		Second gear		12.1 (7.5)
		Third gear		25.8 (16.0)

WITH TOOTH TYPE BUCKET (HL770XTD-9S)



77092SE04-1

Description			Unit	Specification
Operating weight			kg (lb)	23250 (51260)
Bucket capacity		Struck	m^3 (yd^3)	3.4 (4.4)
		Heaped		3.9 (5.1)
Overall length		A	mm (ft-in)	9270 (30' 5")
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		3445 (11' 4")
Dump reach (full lift)		H		1350 (4' 5")
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	5.7
		Dump (with load)		1.4
		Lower (empty)		2.7
Maximum travel speed			km/hr (mph)	38.0 (23.6)
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)	21690 (47820)
Travel speed	Forward	First gear	km/hr (mph)	6.9 (4.3)
		Second gear		12.1 (7.5)
		Third gear		25.8 (16.0)
		Fourth gear		38.0 (23.6)
	Reverse	First gear		6.9 (4.3)
		Second gear		12.1 (7.5)
		Third gear		25.8 (16.0)

3. WEIGHT

Item		kg	lb
Front frame assembly		2085	4600
Rear frame assembly		2422	5340
Front fender (LH & RH)		48	106
Counterweight	HL770-9S	1300	2870
	HL770XTD-9S	1900	4190
Cab assembly		785	1730
Engine assembly		738	1630
Transmission assembly		753	1660
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		275	606
Fuel tank assembly		270	595
Main pump assembly		39	85
Fan & brake pump assembly		7	15
Main control valve (3 spool)		115	253
Flow amplifier		29	64
Boom assembly	HL770-9S	1610	3550
	HL770XTD-9S	1805	3980
Bell crank assembly		497	1100
Bucket link		73	160
4.0 m^3 bucket, with bolt on cutting edge		2070	4560
3.9 m^3 bucket, with tooth		2000	4410
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 QSL / HYUNDAI HE 8.9
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	8900cc (543 cu in)
Compression ratio	17.8 : 1
Rated gross horse power	284 ps at 2000 rpm
Maximum gross torque at 1400rpm	148 kgf · m (1070 lbf · ft)
Engine oil quantity	23 ℓ (6.1 U.S. gal)
Wet weight	738 kg (1627 lb)
High idling speed	2030 ± 50 rpm
Low idling speed	800 ± 25 rpm
Rated fuel consumption	174 g/ps · hr
Starting motor	Nippondenso (24 V - 7.5 kW)
Alternator	Delco Remy 22SI (24 V - 70 Amp)
Battery	2 × 12 V × 200 Ah

2) MAIN PUMP

Item	Specification	
	Steering	Loader
Type	Vane pump	
Capacity	137.5 cc/rev	79.3 cc/rev
Maximum operating pressure	210 kgf/cm^2 (2990 psi)	210 kgf/cm^2 (2990 psi)
Rated oil quantity	251 ℓ /min (66.3 U.S.gpm)	145 ℓ /min (38.3 U.S.gpm)
Rated speed	2000 rpm	

3) FAN + BRAKE PUMP

Item	Specification
Type	Gear pump
Capacity	22.4 + 11.9 cc/rev
Maximum operating pressure	150 kgf/cm^2 (2130 psi)
Rated speed	2000 rpm

4) MAIN CONTROL VALVE

Item	Specification
Type	2 spool
Operating method	Hydraulic pilot assist
Main relief valve pressure	210 kgf/cm^2
Overload relief valve pressure	240 kgf/cm^2
Overload relief valve pressure (dump)	240 kgf/cm^2

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 180 × ø 100 × 765 mm
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 200 × ø 100 × 570 mm
Steering cylinder	Bore dia × Rod dia × Stroke	ø 100 × ø 50 × 480 mm

7) DYNAMIC POWER TRANSMISSION DEVICES

Item			Specification
Transmission	Model		ZF 4WG260
	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
	Pump rated flow		135 ℓ /min (35.7 U.S.gpm) at 2000 rpm
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
Steering	Type		Full hydraulic, articulated
	Steering angle		40˚ to both right and left angle, respectively