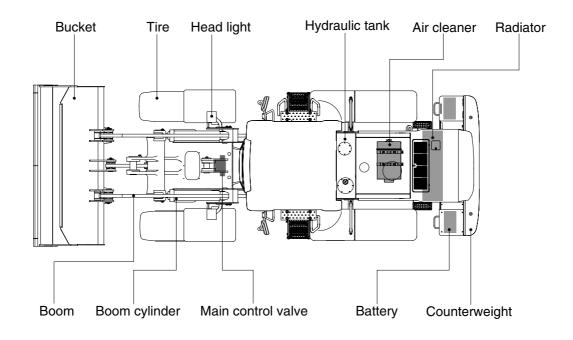
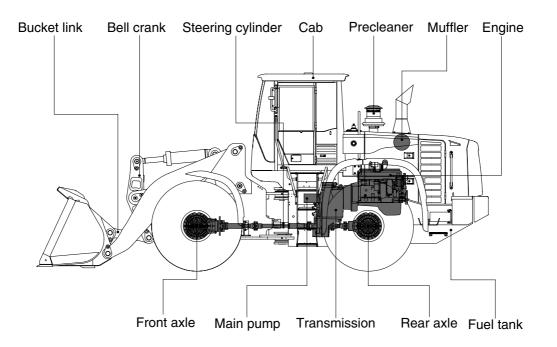
# 2. SPECIFICATIONS

## 1. MAJOR COMPONENTS

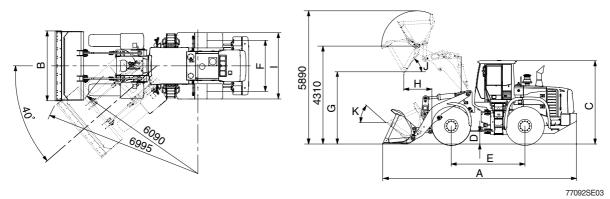




77092SE01

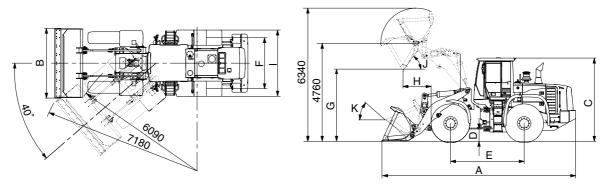
## 2. SPECIFICATIONS

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



Description			Unit	Specification
Operating weight			kg (lb)	23100 (50930)
D. al. al. a. a. a. a. a.		Struck	m³ (yd³)	3.6 (4.7)
Вискет сарасп	Bucket capacity			4.2 (5.5)
Overall length		A		8700 (28' 7")
Overall width		В		3100 (10' 2")
Overall height		С		3560 (11' 8")
Ground cleara	nce	D		480 (1' 7")
Wheelbase		E	mm (ft-in)	3500 (11' 6")
Tread		F		2300 (7' 7")
Dump clearand	ce at 45°	G		3090 (10' 2")
Dump reach (f	ull lift)	Н		1295 (4' 3")
Width over tire	S	I		2975 (9' 9")
Dump angle		J	d = (°)	48
Roll back angle (carry position)		К	degree (°)	49
		Lift (with load)	sec	5.4
Cycle time		Dump (with load)		1.3
		Lower (empty)		2.8
Maximum trave	el speed		km/hr (mph)	41.0 (25.5)
Braking distant	ce		(ft. i.e.)	12 (39' 4")
Minimum turnii	ng radius (cente	r of outside tire)	m (ft-in)	6.09 (20' 0")
Gradeability			degree (°)	30
		First gear		6.9 (4.3)
Travel speed	Forward	Second gear		12.3 (7.7)
	TUIWalu	Third gear		26.9 (16.8)
		Fourth gear	km/hr (mph)	41.0 (25.5)
		First gear		6.9 (4.3)
	Reverse	Second gear		12.3 (7.7)
		Third gear		26.9 (16.8)

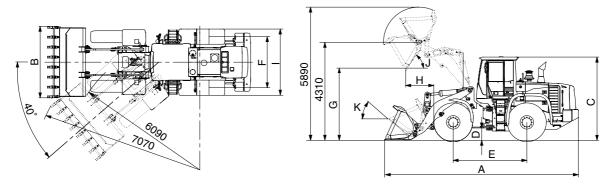
### WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL770XTD-9)



77092SE03-1

Description			Unit	Specification
Operating weight			kg (lb)	23850 (52580)
D. al. al. a. a. a. a. a.		Struck	- ( )-)	3.6 (4.7)
Вискет сарасіту	Bucket capacity		m³ (yd³)	4.2 (5.5)
Overall length		A		9175 (30' 1")
Overall width		В		3100 (10' 2")
Overall height		С		3560 (11' 8")
Ground clearar	nce	D		480 (1' 7")
Wheelbase		Е	mm (ft-in)	3500 (11' 6")
Tread		F		2300 (7' 7")
Dump clearance	e at 45°	G		3540 (11' 7")
Dump reach (fu	ıll lift)	Н		1295 (4' 3")
Width over tires	3	I		2975 (9' 9")
Dump angle		J	dograe (°)	48
Roll back angle (carry position)		К	degree (°)	50
				5.4
Cycle time		Dump (with load)	sec	1.3
		Lower (empty)		2.8
Maximum trave	l speed		km/hr (mph)	41.0 (25.5)
Braking distance	е		m (ft-in)	12 (39' 4")
Minimum turnir	ng radius (cente	r of outside tire)	III (ICIII)	6.09 (20' 0")
Gradeability			degree (°)	30
		First gear		6.9 (4.3)
Travel speed	Forward	Second gear		12.3 (7.7)
	1 Olwalu	Third gear		26.9 (16.8)
		Fourth gear	km/hr (mph)	41.0 (25.5)
		First gear		6.9 (4.3)
	Reverse	Second gear		12.3 (7.7)
		Third gear		26.9 (16.8)

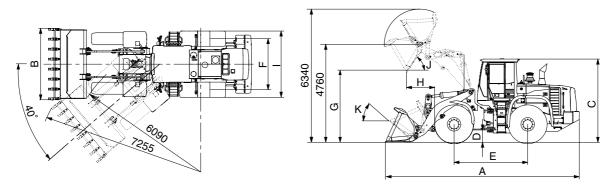
### 2) WITH TOOTH TYPE BUCKET (HL770-9)



77092SE04

Description			Unit	Specification
Operating weight			kg (lb)	23100 (50930)
D 1 1 1		Struck	(	3.4 (4.4)
Bucket capacity	/	Heaped	m³ (yd³)	4.0 (5.2)
Overall length		A		8820 (28' 11")
Overall width		В		3150 (10' 4")
Overall height		С		3560 (11' 8")
Ground clearar	nce	D		480 (1' 7")
Wheelbase		E	mm (ft-in)	3500 (11' 6")
Tread		F		2300 (7' 7")
Dump clearanc	e at 45°	G		2965 (9' 9")
Dump reach (fu	ıll lift)	Н		1380 (4' 6")
Width over tires	3	I		2975 (9' 9")
Dump angle		J	d = = = = (°)	48
Roll back angle	(carry position)	К	degree (°)	49
				5.4
Cycle time		Dump (with load)	sec	1.3
		Lower (empty)		2.8
Maximum trave	l speed		km/hr (mph)	41.0 (25.5)
Braking distance	е		(61.1)	12 (39' 4")
Minimum turnin	ng radius (cente	r of outside tire)	m (ft-in)	6.09 (20' 0")
Gradeability			degree (°)	30
		First gear		6.9 (4.3)
	Forward	Second gear		12.3 (7.7)
	Forward	Third gear		26.9 (16.8)
Travel speed		Fourth gear	km/hr (mph)	41.0 (25.5)
		First gear		6.9 (4.3)
	Reverse	Second gear		12.3 (7.7)
		Third gear		26.9 (16.8)

### WITH TOOTH TYPE BUCKET (HL770XTD-9)



77092SE04-1

Description			Unit	Specification
Operating weight			kg (lb)	23850 (52580)
D. al al assessit		Struck		3.4 (4.4)
Вискет сарасіт	Bucket capacity		m³ (yd³)	4.0 (5.2)
Overall length		A		9320 (30' 7")
Overall width		В		3150 (10' 4")
Overall height		С		3560 (11' 8")
Ground clearar	nce	D		480 (1' 7")
Wheelbase		Е	mm (ft-in)	3500 (11' 6")
Tread		F		2300 (7' 7")
Dump clearand	ce at 45°	G		3415 (11' 2")
Dump reach (fo	ull lift)	Н		1380 (4' 6")
Width over tire	S	I		2975 (9' 9")
Dump angle		J	de avec (°)	48
Roll back angle	(carry position)	К	degree (°)	50
		Lift (with load)		5.4
Cycle time		Dump (with load)	sec	1.3
		Lower (empty)		2.8
Maximum trave	el speed		km/hr (mph)	41.0 (25.5)
Braking distand	ce		m (ft in)	12 (39' 4")
Minimum turnii	ng radius (cente	r of outside tire)	m (ft-in)	6.09 (20' 0")
Gradeability			degree (°)	30
		First gear		6.9 (4.3)
	Forward	Second gear		12.3 (7.7)
	ruiwaiu	Third gear		26.9 (16.8)
Travel speed		Fourth gear	km/hr (mph)	41.0 (25.5)
		First gear		6.9 (4.3)
	Reverse	Second gear		12.3 (7.7)
		Third gear		26.9 (16.8)

# 3. WEIGHT

Item		kg	lb
Front frame assembly		2154	4750
Rear frame assembly		2417	5330
Front fender (LH & RH)		48	106
Counterweight		1300	2870
Additional counterweight (F	IL770XTD-9)	490	1080
Cab assembly		1050	2320
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 different	ial)	1150	2540
Rear axle (include differenti	al)	1050	2310
Tire (26.5-25 20PR, L3)		394	870
Hydraulic tank assembly		306	670
Fuel tank assembly		440	970
Main pump assembly		80	176
Fan & brake pump assemb	ly	7	15
Main control valve (3 spool)		75	165
Flow amplifier		29	64
Poom occombly	HL770-9	1610	3550
Boom assembly	HL770XTD-9	1820	4010
Bell crank assembly		460	1010
Bucket link		73	160
4.2 m³ bucket, with bolt on cutting edge		2160	4760
4.0 m³ 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 QSL / HYUNDAI HE8.9
Туре	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 ± 50 rpm
Rated fuel consumption	178 g/ps · hr
Starting motor	Nippondenso (24 V - 7.5kW)
Alternator	Delco Remy 22SI (24 V-70Amp)
Battery	2×12V×200Ah

#### 2) MAIN PUMP

ltem -	Specification	
Item	Steering	Loader
Туре	Variable tandem piston pun	np
Capacity	110 cc/rev	61 cc/rev
Maximum operating pressure	280 kgf/cm² (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

ltom	Specification	
Item	Fan	Brake
Туре	Fixed displacement tanderr	n gear pump
Capacity	22.4 cc/rev	11.9 cc/rev
Maximum operating pressure	120 kgf/cm² (1710 psi)	150 kgf/cm² (2130 psi)
Rated oil quantity	44.8 l /min (11.8 U.S.gpm)	23.8 ½ /min (6.3 U.S.gpm)
Rated speed	2000 rpm	

### 4) MAIN CONTROL VALVE

Item	Specification
Туре	2 spool
Operating method	Hydraulic pilot assist
Main relief valve pressure	280 kgf/cm² (3980 psi)
Overload relief valve pressure	340 kgf/cm² (4840 psi)
Overload relief valve pressure (dump)	310 kgf/cm² (4410 psi)

### 5) REMOTE CONTROL VALVE

Item		Specification
Туре		Pressure reducing type
Operating procesure	Minimum	5 kgf/cm² (71 psi)
Operating pressure	Maximum	30 kgf/cm² (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
	Model		ZF 4WG260
	T	Converter	Single-stage, single-phase
	Type	Transmission	Full-automatic power shift
	Converter	stall ratio	2.09:1
Transmission	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 $\ell$ /min (35.7 U.S.gpm) at 2000 rpm
	Drive devices		4-wheel drive
Axle	Front		Front fixed location
	Rear		Oscillation $\pm 13^\circ$ of center pin-loaded
Wheels	Tires		26.5-25, 20PR (L3)
Brakes	Travel		Four-wheel, wet-disc type, full hydraulic
Dianes	Parking		Spring applied, hydraulic released brake
Steering	Туре		Full hydraulic, articulated
Sieering	Steering angle		40° to both right and left angle, respectively