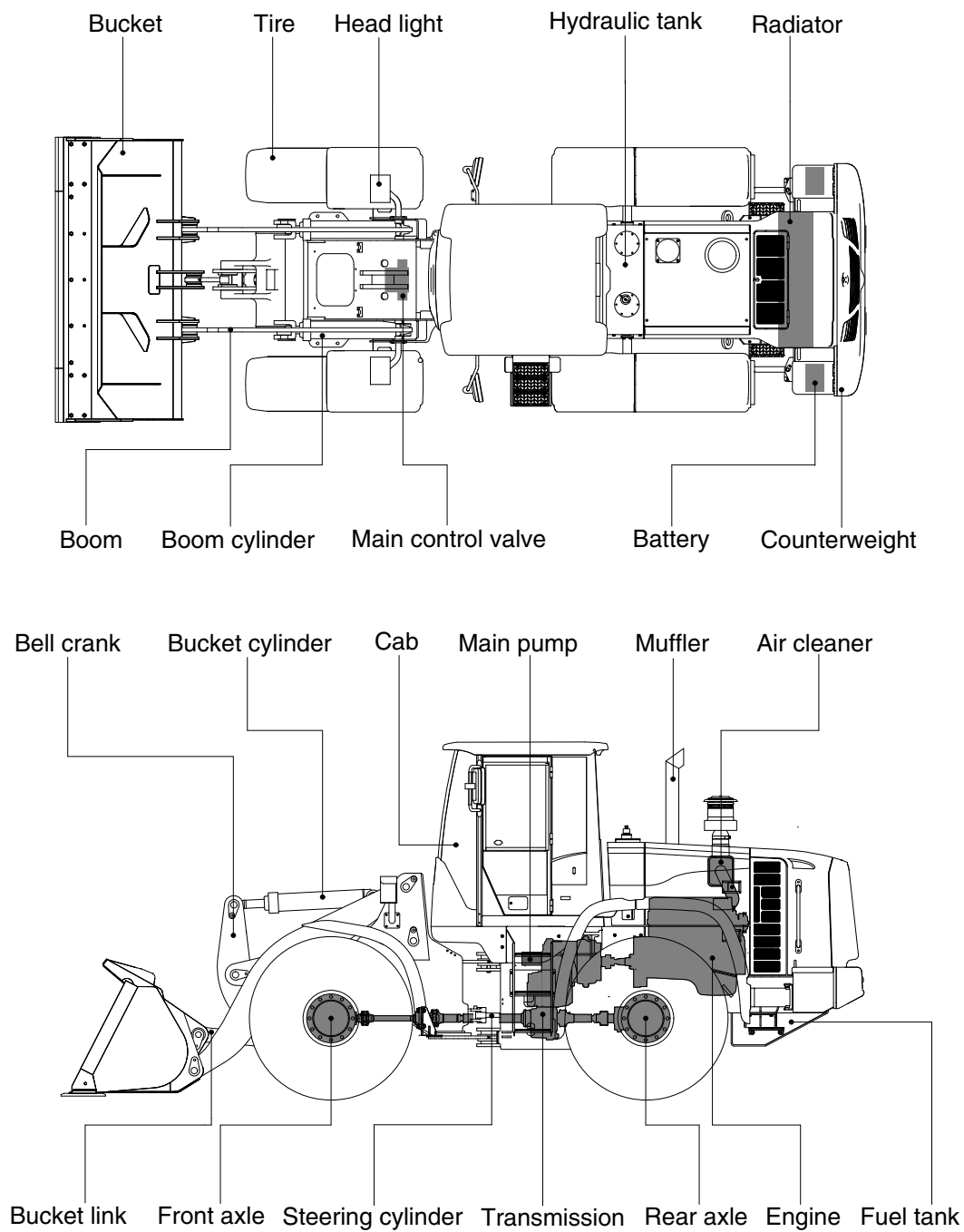


## 2. SPECIFICATIONS

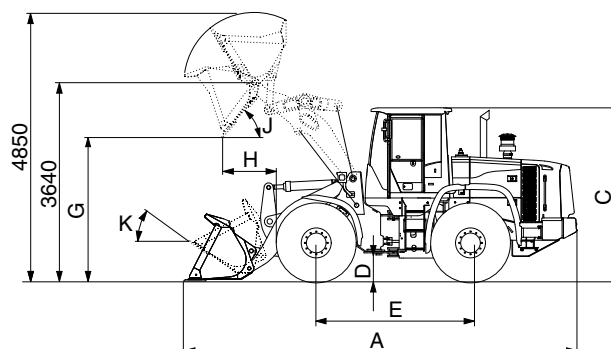
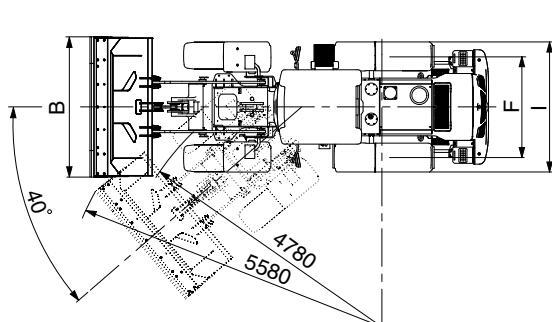
### 1. MAJOR COMPONENTS



7309A2SP05

## 2. SPECIFICATIONS

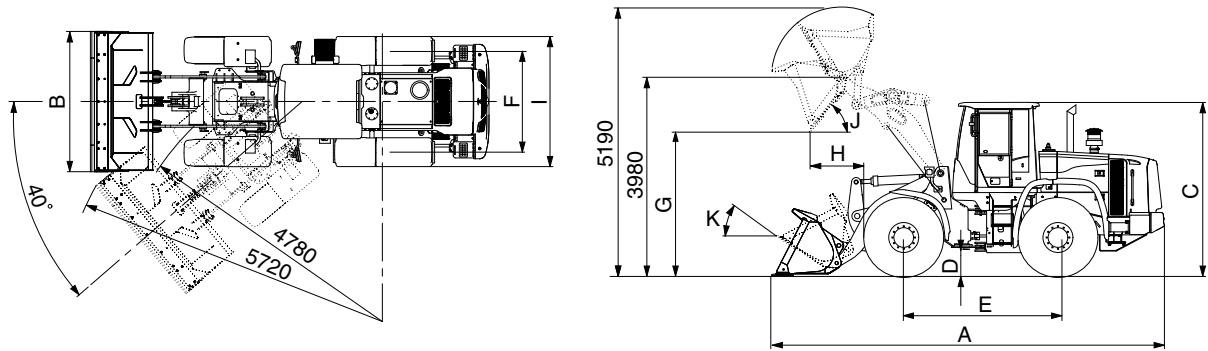
### 1) WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL730-9A)



7309A2SP01

Description			Unit	Specification
Operating weight			kg (lb)	10500 (23150)
Bucket capacity	Struck		m³ (yd³)	1.6 (2.1)
	Heaped			1.9 (2.5)
Overall length	A		mm (ft-in)	7000 (23' 0")
Overall width	B			2450 (8' 0")
Overall height	C			3170 (10' 5")
Ground clearance	D			370 (1' 3")
Wheelbase	E			2800 (9' 2")
Tread	F			1850 (6' 0")
Dump clearance at 45°	G			2700 (8' 10")
Dump reach (full lift)	H			1040 (3' 5")
Width over tires	I			2295 (7' 6")
Dump angle	J			degree (°)
Roll back angle (carry position)	K		47	
Cycle time	Lift (with load)		sec	5.4
	Dump (with load)			1.0
	Lower (empty)			2.8
Maximum travel speed			km/hr (mph)	39.2 (24.4)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				4.78 (15' 8")
Gradeability			degree (°)	30
Breakout force			kg (lb)	9150 (20170)
Travel speed	Forward	First gear	km/hr (mph)	6.8 (4.2)
		Second gear		12.4 (7.7)
		Third gear		24.1 (15.0)
		Fourth gear		39.2 (24.4)
	Reverse	First gear		7.2 (4.5)
		Second gear		13.1 (8.1)
		Third gear		25.3 (15.7)

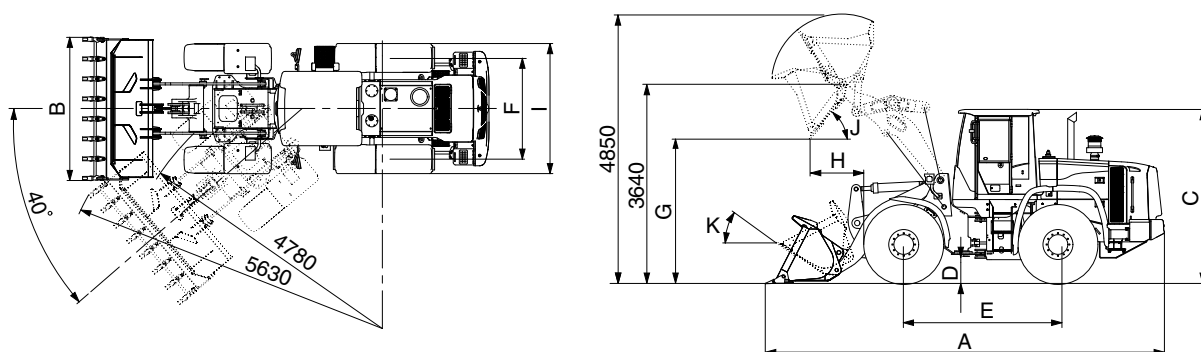
## WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL730XTD-9A)



7309A2SP02

Description			Unit	Specification
Operating weight			kg (lb)	10700 (23590)
Bucket capacity	Struck		m³ (yd³)	1.6 (2.1)
	Heaped			1.9 (2.5)
Overall length	A		mm (ft-in)	7290 (23' 11")
Overall width	B			2450 (8' 0")
Overall height	C			3170 (10' 5")
Ground clearance	D			370 (1' 3")
Wheelbase	E			2800 (9' 2")
Tread	F			1850 (6' 0")
Dump clearance at 45°	G			3035 (9' 11")
Dump reach (full lift)	H			1010 (3' 4")
Width over tires	I			2295 (7' 6")
Dump angle	J		degree (°)	48
Roll back angle (carry position)	K			49
Cycle time	Lift (with load)		sec	5.4
	Dump (with load)			1.0
	Lower (empty)			2.8
Maximum travel speed			km/hr (mph)	39.2 (24.4)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				4.78 (15' 8")
Gradeability			degree (°)	30
Breakout force			kg (lb)	9070 (20000)
Travel speed	Forward	First gear	km/hr (mph)	6.8 (4.2)
		Second gear		12.4 (7.7)
		Third gear		24.1 (15.0)
		Fourth gear		39.2 (24.4)
	Reverse	First gear		7.2 (4.5)
		Second gear		13.1 (8.1)
		Third gear		25.3 (15.7)

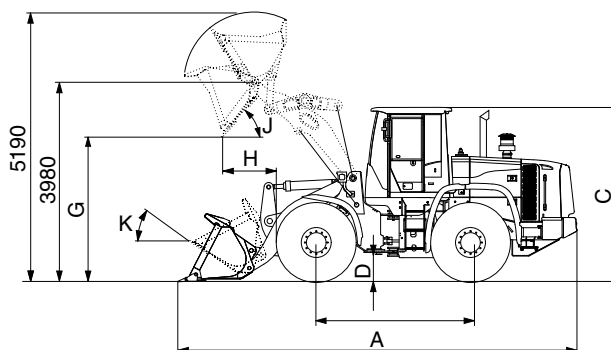
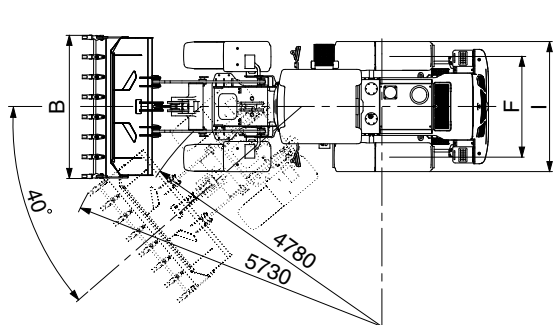
## 2) WITH TOOTH TYPE BUCKET (HL730-9A)



7309A2SP03

Description			Unit	Specification
Operating weight			kg (lb)	10500 (23150)
Bucket capacity	Struck		m³ (yd³)	1.5 (2.0)
	Heaped			1.8 (2.4)
Overall length	A		mm (ft-in)	7110 (23' 4")
Overall width	B			2480 (8' 2")
Overall height	C			3170 (10' 5")
Ground clearance	D			370 (1' 3")
Wheelbase	E			2800 (9' 2")
Tread	F			1850 (6' 0")
Dump clearance at 45°	G			2610 (8' 7")
Dump reach (full lift)	H			1100 (3' 8")
Width over tires	I			2295 (7' 6")
Dump angle	J			degree (°)
Roll back angle (carry position)	K		47	
Cycle time	Lift (with load)		sec	5.4
	Dump (with load)			1.0
	Lower (empty)			2.8
Maximum travel speed			km/hr (mph)	39.2 (24.4)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				4.78 (15' 8")
Gradeability			degree (°)	30
Breakout force			kg (lb)	9150 (20170)
Travel speed	Forward	First gear	km/hr (mph)	6.8 (4.2)
		Second gear		12.4 (7.7)
		Third gear		24.1 (15.0)
		Fourth gear		39.2 (24.4)
	Reverse	First gear		7.2 (4.5)
		Second gear		13.1 (8.1)
		Third gear		25.3 (15.7)

## WITH TOOTH TYPE BUCKET (HL730XTD-9A)



7309A2SP04

Description			Unit	Specification
Operating weight			kg (lb)	10700 (23590)
Bucket capacity	Struck		m³ (yd³)	1.5 (2.0)
	Heaped			1.8 (2.4)
Overall length	A		mm (ft-in)	7400 (24' 3")
Overall width	B			2480 (8' 2")
Overall height	C			3170 (10' 5")
Ground clearance	D			370 (1' 3")
Wheelbase	E			2800 (9' 2")
Tread	F			1850 (6' 0")
Dump clearance at 45°	G			2950 (9' 8")
Dump reach (full lift)	H			1080 (3' 7")
Width over tires	I			2295 (7' 6")
Dump angle	J			degree (°)
Roll back angle (carry position)	K		49	
Cycle time	Lift (with load)		sec	5.4
	Dump (with load)			1.0
	Lower (empty)			2.8
Maximum travel speed			km/hr (mph)	39.2 (24.4)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				4.78 (15' 8")
Gradeability			degree (°)	30
Breakout force			kg (lb)	9070 (20000)
Travel speed	Forward	First gear	km/hr (mph)	6.8 (4.2)
		Second gear		12.4 (7.7)
		Third gear		24.1 (15.0)
		Fourth gear		39.2 (24.4)
	Reverse	First gear		7.2 (4.5)
		Second gear		13.1 (8.1)
		Third gear		25.3 (15.7)

### 3. WEIGHT

Item		kg	lb
Front frame assembly		805	1770
Rear frame assembly		1095	2410
Front fender (LH & RH)		31	68
Counterweight	HL730-9A	300	660
	HL730XTD-9A	410	900
Cab assembly		700	1540
Engine assembly		390	860
Transmission assembly		425	940
Drive shaft (front)		17	37
Drive shaft (center)		17	37
Drive shaft (rear)		9	20
Drive shaft (upper)		7	15
Front axle (include differential)		520	1150
Rear axle (include differential)		530	1170
Tire (17.5-25, 12PR, L3)		130	290
Hydraulic tank assembly		192	420
Fuel tank assembly		264	580
Main pump assembly		26	57
Fan & brake pump assembly		7	15
Main control valve (2/3 spool)		34/41	75/90
Boom assembly	HL730-9A	558	1230
	HL730XTD-9A	626	1380
Bell crank assembly		135	298
Bucket link		29	64
1.9 m <sup>3</sup> bucket, with bolt on cutting edge		810	1790
1.8 m <sup>3</sup> bucket, with tooth		730	1610
Boom cylinder assembly		70	150
Bucket cylinder assembly		78	170
Steering cylinder assembly		15	30
Seat		40	88
Battery		28	62

## 4. SPECIFICATION FOR MAJOR COMPONENTS

### 1) ENGINE

Item	Specification
Model	Cummins QSB4.5
Type	4-cycle turbocharged and charge air-cooled diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	4 cylinders, in-line
Firing order	1-3-2-4
Combustion chamber type	Direct injection type
Cylinder bore × stroke	107 × 124 mm (4.2" × 4.9")
Piston displacement	4500 cc (275 cu in)
Compression ratio	17.2 : 1
Rated gross horse power	130 hp at 2200 rpm
Maximum gross torque at 1500rpm	63 kgf · m (457 lbf · ft)
Engine oil quantity	11 l (2.9 U.S. gal)
Dry weight	390 kg (860 lb)
High idling speed	2230 ± 50rpm
Low idling speed	900 ± 25 rpm
Rated fuel consumption (at rated)	221 g/kw · hr
Starting motor	Nippondenso PA90S (24 V-4.8 kW)
Alternator	Delco Remy 24SI (24V-70Amp)
Battery	2 × 12V × 100Ah

## 2) MAIN PUMP

Item	Specification
Type	Variable displacement piston pump
Capacity	36+32.3 cc/rev
Maximum operating pressure	250 kgf/cm <sup>2</sup> (3560 psi)
Rated operating speed	2200 rpm
Rated output flow	126 l /min (33.3 U.S.gpm)

## 3) FAN AND BRAKE PUMP

Item	Specification	
	Fan	Brake
Type	Fixed displacement tandem gear pump	
Capacity	11.9 cc/rev	9.17 cc/rev
Maximum operating pressure	120 kgf/cm <sup>2</sup> (1710 psi)	150 kgf/cm <sup>2</sup> (2130 psi)
Rated operating speed	2200 rpm	
Rated output flow	25 l /min (6.6 U.S.gpm)	19 l /min (5.0 U.S.gpm)

## 4) MAIN CONTROL VALVE

Item	Specification
Type	2 spool
Operating method	Hydraulic pilot assist
Main relief valve set pressure	250 kgf/cm <sup>2</sup> (3560 psi)
Overload relief valve set pressure	300 kgf/cm <sup>2</sup> (4270 psi)

## 5) REMOTE CONTROL VALVE

Item	Specification
Type	Joystick (or with aux lever)
Control pressure	Minimum 3.7 kgf/cm <sup>2</sup> (52.6 psi)
	Maximum 30 kgf/cm <sup>2</sup> (427 psi)

## 6) CYLINDER

Item	Specification
Boom cylinder	Bore dia × Rod dia × Stroke ø 100 × ø 65 × 750 mm
Bucket cylinder	Bore dia × Rod dia × Stroke ø 110 × ø 65 × 510 mm
Steering cylinder	Bore dia × Rod dia × Stroke ø 60 × ø 35 × 412 mm



## 7) DYNAMIC POWER TRANSMISSION DEVICES

Item		Specification
Torque converter	Model	ZF 4WG130
	Type	Single-stage, single-phase
	Ratio	2.381 : 1
Transmission	Type	Full-automatic power shift
	Gear shift	Forward fourth gear, reverse third gear
	Control	Electrical single lever type, kick-down system
	Pump rated flow	85 ℓ /min (22.5 U.S.gpm) at 2000 rpm
Axle	Drive devices	4-wheel drive
	Front	Front fixed location
	Rear	Oscillation $\pm 10^\circ$ of center pin-loaded
Wheels	Tires	17.5-25, 12PR (L3)
Brakes	Travel	Four-wheel, wet-disc type, full hydraulic
	Parking	Spring applied, hydraulic released brake on transmission
Steering	Type	Full hydraulic, articulated
	Steering angle	40° to both right and left angle, respectively