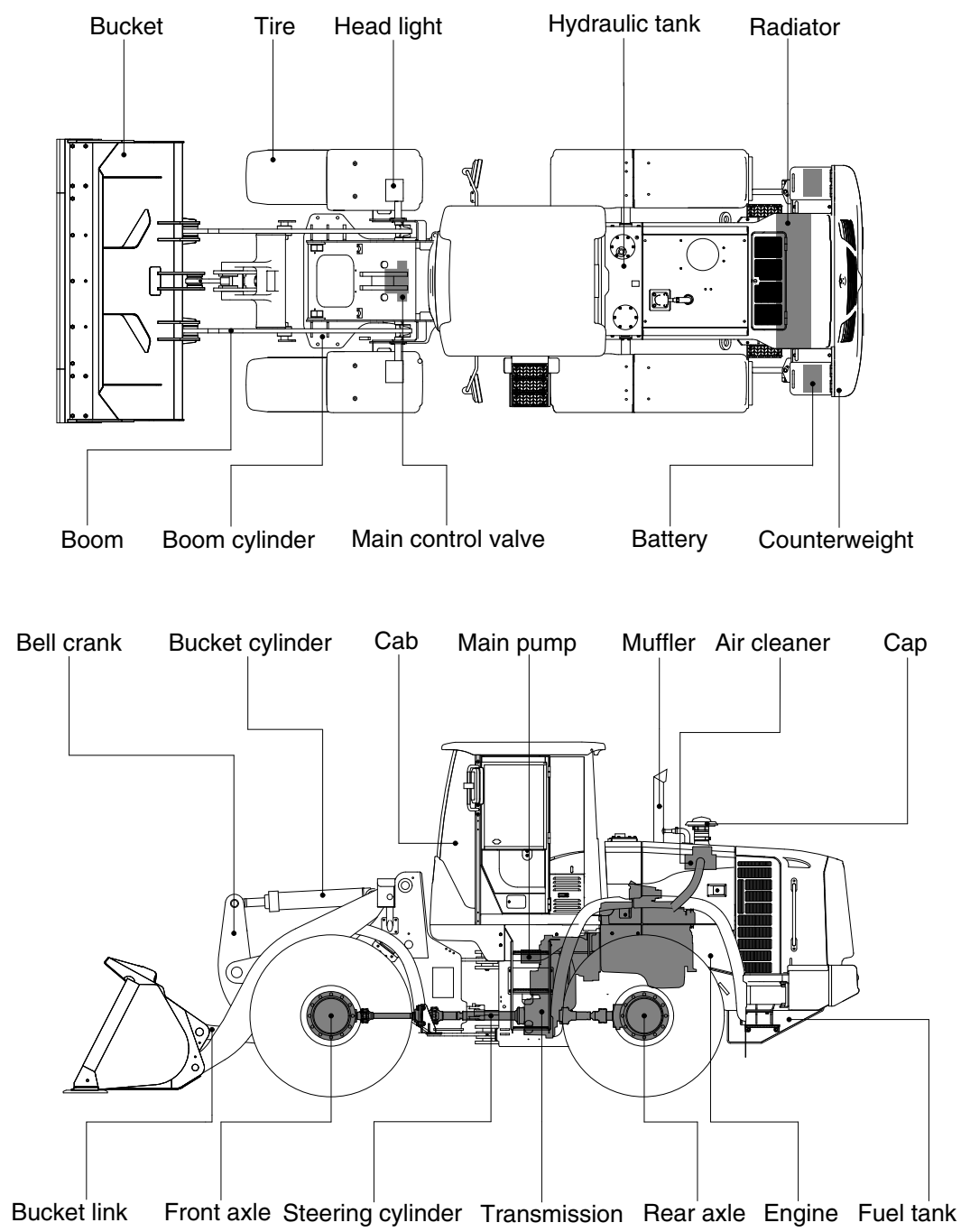


# 2. SPECIFICATIONS

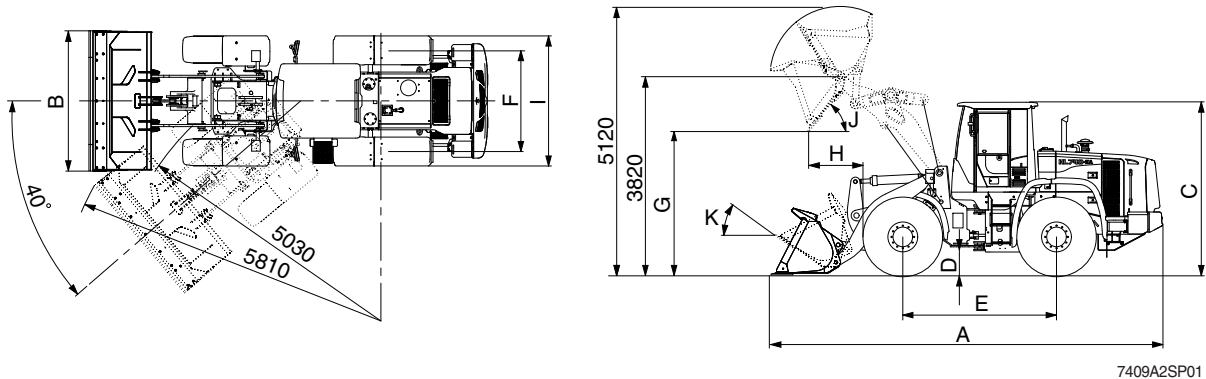
## 1. MAJOR COMPONENTS



7409A2SP05

## 2. SPECIFICATIONS

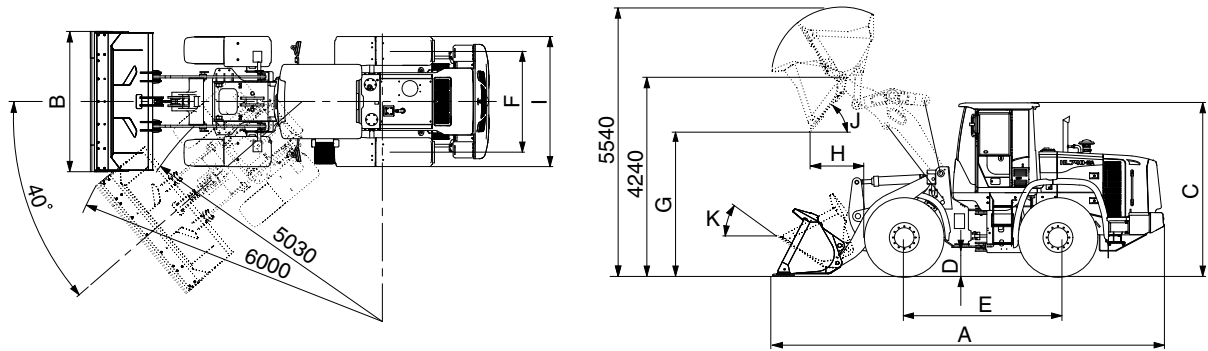
### 1) WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL740-9A)



7409A2SP01

Description			Unit	Specification
Operating weight			kg (lb)	12700 (28000)
Bucket capacity	Struck		m³ (yd³)	2.0 (2.6)
	Heaped			2.3 (3.0)
Overall length	A		mm (ft-in)	7345 (24' 1")
Overall width	B			2600 (8' 6")
Overall height	C			3260 (10' 8")
Ground clearance	D			417 (1' 4")
Wheelbase	E			2900 (9' 6")
Tread	F			1900 (6' 3")
Dump clearance at 45°	G			2785 (9' 2")
Dump reach (full lift)	H			1025 (3' 4")
Width over tires	I			2430 (8' 0")
Dump angle	J			degree (°)
Roll back angle (carry position)	K		47	
Cycle time	Lift (with load)		sec	5.5
	Dump (with load)			1.1
	Lower (empty)			3.0
Maximum travel speed			km/hr (mph)	39.5 (24.5)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				5.03 (16' 6")
Gradeability			degree (°)	30
Brakeout force			kg (lb)	11250 (24800)
Travel speed	Forward	First gear	km/hr (mph)	6.9 (4.3)
		Second gear		12.5 (7.8)
		Third gear		24.1 (15.0)
		Fourth gear		39.5 (24.5)
	Reverse	First gear		7.2 (4.5)
		Second gear		13.1 (8.1)
		Third gear		25.3 (15.7)

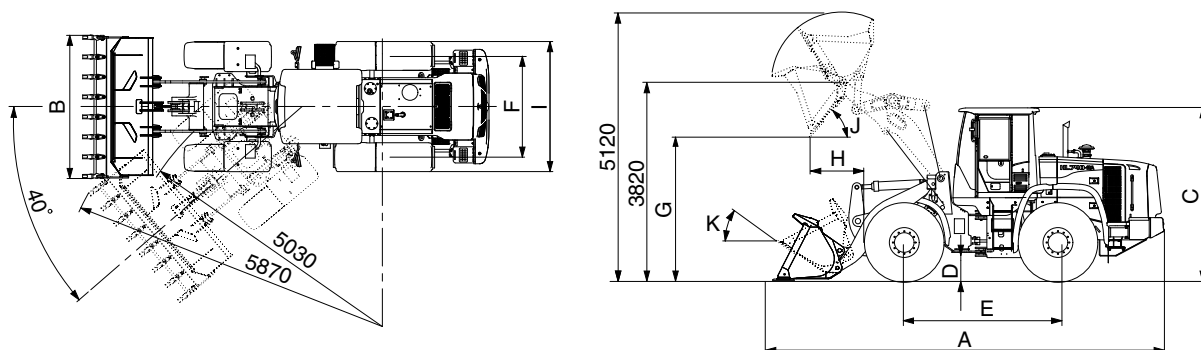
## WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL740XTD-9A)



7409A2SP02

Description			Unit	Specification
Operating weight			kg (lb)	13000 (28660)
Bucket capacity	Struck		m³ (yd³)	2.0 (2.6)
	Heaped			2.3 (3.0)
Overall length	A		mm (ft-in)	7785 (25' 6")
Overall width	B			2600 (8' 6")
Overall height	C			3260 (10' 8")
Ground clearance	D			417 (1' 4")
Wheelbase	E			2900 (9' 6")
Tread	F			1900 (6' 3")
Dump clearance at 45°	G			3210 (10' 6")
Dump reach (full lift)	H			1020 (3' 4")
Width over tires	I			2430 (8' 0")
Dump angle	J			degree (°)
Roll back angle (carry position)	K		49	
Cycle time	Lift (with load)		sec	5.5
	Dump (with load)			1.1
	Lower (empty)			3.0
Maximum travel speed			km/hr (mph)	39.5 (24.5)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				5.03 (16' 6")
Gradeability			degree (°)	30
Brakeout force			kg (lb)	11090 (24450)
Travel speed	Forward	First gear	km/hr (mph)	6.9 (4.3)
		Second gear		12.5 (7.8)
		Third gear		24.1 (15.0)
		Fourth gear		39.5 (24.5)
	Reverse	First gear		7.2 (4.5)
		Second gear		13.1 (8.1)
		Third gear		25.3 (15.7)

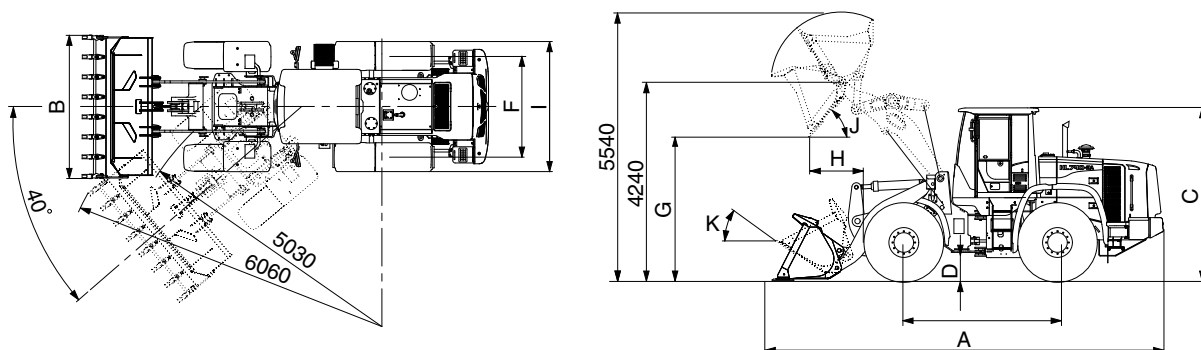
## 2) WITH TOOTH TYPE BUCKET (HL740-9A)



7409A2SP03

Description			Unit	Specification
Operating weight			kg (lb)	12700 (28000)
Bucket capacity	Struck		m³ (yd³)	1.9 (2.5)
	Heaped			2.2 (2.9)
Overall length	A		mm (ft-in)	7465 (24' 6")
Overall width	B			2650 (8' 8")
Overall height	C			3260 (10' 8")
Ground clearance	D			417 (1' 4")
Wheelbase	E			2900 (9' 6")
Tread	F			1900 (6' 3")
Dump clearance at 45°	G			2695 (8' 10")
Dump reach (full lift)	H			1100 (3' 7")
Width over tires	I			2430 (8' 0")
Dump angle	J			degree (°)
Roll back angle (carry position)	K		47	
Cycle time	Lift (with load)		sec	5.5
	Dump (with load)			1.1
	Lower (empty)			3.0
Maximum travel speed			km/hr (mph)	39.5 (24.5)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				5.03 (16' 6")
Gradeability			degree (°)	30
Brakeout force			kg (lb)	11250 (24800)
Travel speed	Forward	First gear	km/hr (mph)	6.9 (4.3)
		Second gear		12.5 (7.8)
		Third gear		24.1 (15.0)
		Fourth gear		39.5 (24.5)
	Reverse	First gear		7.2 (4.5)
		Second gear		13.1 (8.1)
		Third gear		25.3 (15.7)

## WITH TOOTH TYPE BUCKET (HL740XTD-9A)



7409A2SP04

Description			Unit	Specification
Operating weight			kg (lb)	13000 (28660)
Bucket capacity	Struck		m³ (yd³)	1.9 (2.5)
	Heaped			2.2 (2.9)
Overall length	A		mm (ft-in)	7905 (25' 11")
Overall width	B			2650 (8' 8")
Overall height	C			3260 (10' 8")
Ground clearance	D			417 (1' 4")
Wheelbase	E			2900 (9' 6")
Tread	F			1900 (6' 3")
Dump clearance at 45°	G			3120 (10' 3")
Dump reach (full lift)	H			1100 (3' 7")
Width over tires	I			2430 (8' 0")
Dump angle	J			degree (°)
Roll back angle (carry position)	K		49	
Cycle time	Lift (with load)		sec	5.5
	Dump (with load)			1.1
	Lower (empty)			3.0
Maximum travel speed			km/hr (mph)	39.5 (24.5)
Braking distance			m (ft-in)	12 (39' 4")
Minimum turning radius (center of outside tire)				5.03 (16' 6")
Gradeability			degree (°)	30
Brakeout force			kg (lb)	11090 (24450)
Travel speed	Forward	First gear	km/hr (mph)	6.9 (4.3)
		Second gear		12.5 (7.8)
		Third gear		24.1 (15.0)
		Fourth gear		39.5 (24.5)
	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		904	1990
Rear frame assembly		1313	2890
Front fender (LH & RH)		45	99
Counterweight	HL740-9A	400	882
	HL740XTD-9A	600	1320
Cab assembly		700	1540
Engine assembly		580	1280
Transmission assembly		410	904
Drive shaft (front)		18	40
Drive shaft (center)		16	35
Drive shaft (rear)		13	29
Drive shaft (upper)		7	15
Front axle (include differential)		750	1650
Rear axle (include differential)		750	1650
Tire (20.5-25, 16PR, L3)		203	448
Hydraulic tank assembly		212	467
Fuel tank assembly		292	644
Main pump assembly		28	62
Fan & brake pump assembly		12	26
Main control valve (2/3 spool)		34/41	75/90
Boom assembly	HL740-9A	725	1600
	HL740XTD-9A	815	1800
Bell crank assembly		230	510
Quick coupler assembly		215	474
Bucket link		37	80
2.3 m <sup>3</sup> bucket, with bolt on cutting edge		1075	2370
Boom cylinder assembly		90	198
Bucket cylinder assembly		111	245
Steering cylinder assembly		19	42
Seat		40	88
Battery		28	62

## 4. SPECIFICATION FOR MAJOR COMPONENTS

### 1) ENGINE

Item	Specification
Model	Cummins QSB6.7
Type	4-cycle turbocharged and charge air-cooled 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	107 × 124 mm (4.2" × 4.9")
Piston displacement	6700 cc (408 cu in)
Compression ratio	17.3 : 1
Rated gross horse power	158 hp at 2100 rpm
Maximum gross torque at 1500rpm	82 kgf · m (591 lbf · ft)
Engine oil quantity	18 ℓ (4.8 U.S. gal)
Dry weight	580 kg (1279 lb)
High idling speed	2230 ± 50rpm
Low idling speed	900 ± 25 rpm
Rated fuel consumption (at rated)	224 g/kw · hr
Starting motor	Nippondenso PA90L (24 V-7.8 kW)
Alternator	Delco Remy 24SI (24V-70Amp)
Battery	2 × 12V × 92Ah

## 2) MAIN PUMP

Item	Specification
Type	Variable piston pump
Capacity	74 cc/rev
Maximum operating pressure	280 kgf/cm <sup>2</sup> (3980 psi)
Maximum operating speed	2100 rpm
Rated output flow	155 ℓ /min (40.9 U.S.gpm)

## 3) FAN AND BRAKE PUMP

Item	Specification	
	Fan	Brake
Type	Variable piston pump	
Capacity	28cc/rev	
Maximum operating pressure	250 bar	150 bar
Maximum operating speed	2100rpm	
Rated output flow	56 ℓ /min (14.8 U.S.gpm)	

## 4) MAIN CONTROL VALVE

Item	Specification
Type	2 spool (sectional block)
Operating method	Hydraulic pilot assist
Main relief valve set pressure	280 kgf/cm <sup>2</sup> (3980 psi)
Overload relief valve set pressure	340 kgf/cm <sup>2</sup> (4840 psi) / *300 kgf/cm <sup>2</sup> (4270 psi)

\* : Bucket dump

## 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 110 × Ø 65 × 738 mm
Bucket cylinder	Bore dia × Rod dia × Stroke Ø 125 × Ø 70 × 505 mm
Steering cylinder	Bore dia × Rod dia × Stroke Ø 65 × Ø 40 × 429 mm



## 7) DYNAMIC POWER TRANSMISSION DEVICES

Item		Specification
Torque converter	Model	ZF 4WG160
	Type	Single-stage, single-phase
	Ratio	2.30 : 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 $\pm 12^\circ$ of center pin-loaded
Wheels	Tires	20.5-25, 16PR (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