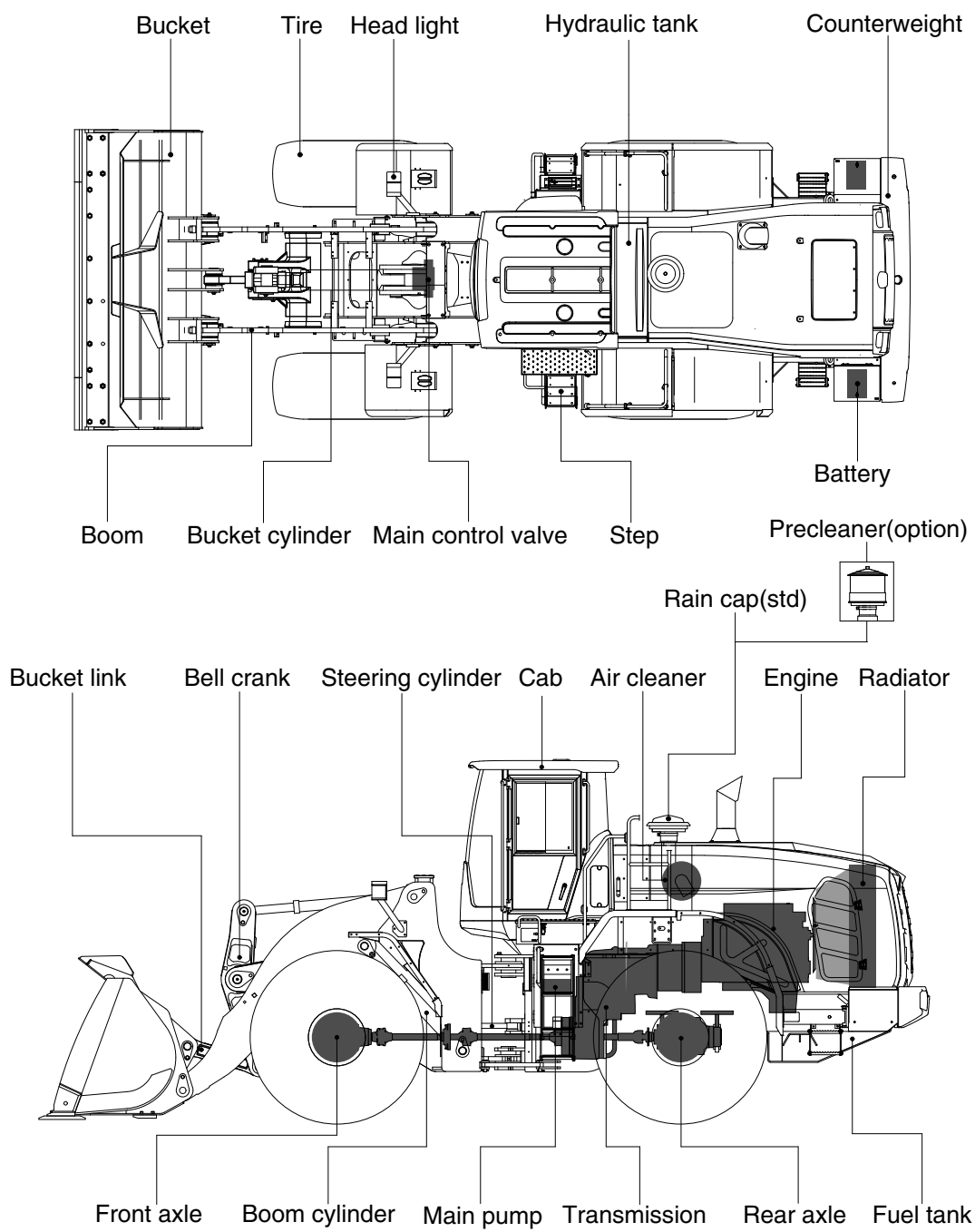


# 2. SPECIFICATIONS

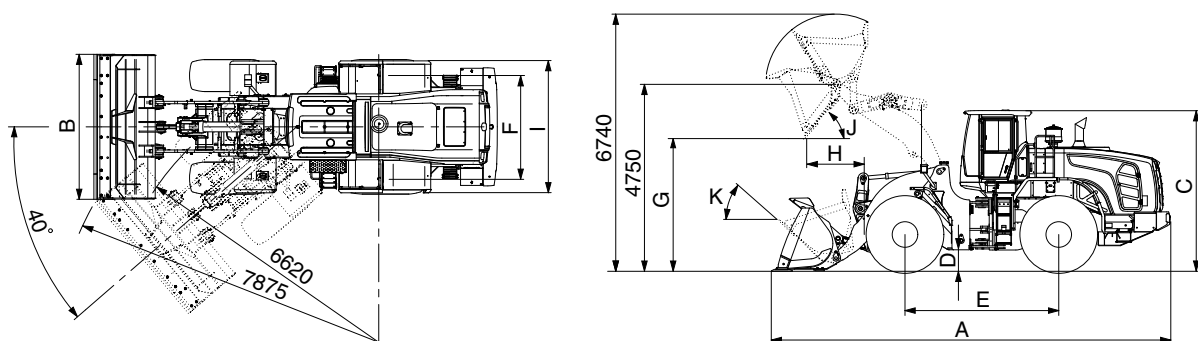
## 1. MAJOR COMPONENTS



985A2SE01

## 2. SPECIFICATIONS

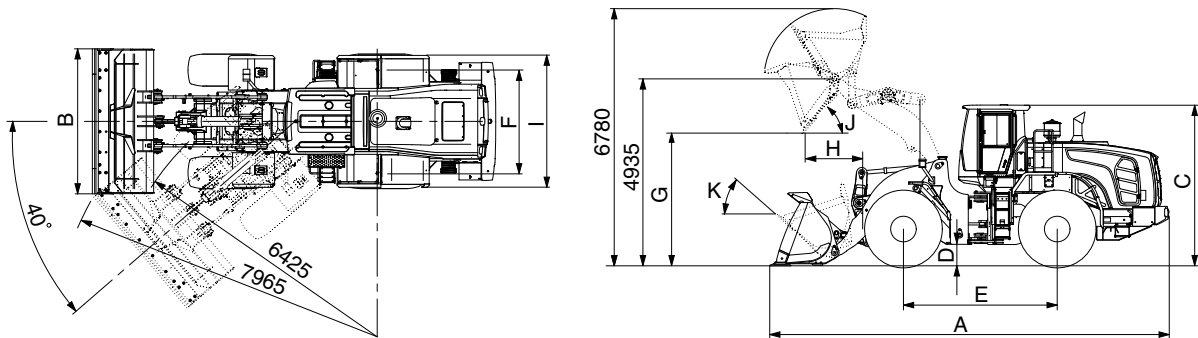
### 1) WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL985A)



985A2SE03

Description			Unit	Specification
Operating weight			kg (lb)	33800 (74520)
Bucket capacity	Struck		m³ (yd³)	5.6 (7.3)
	Heaped			6.5 (8.5)
Overall length	A		mm (ft-in)	10000 (32' 10")
Overall width	B			3600 (11' 10")
Overall height	C			3865 (12' 8")
Ground clearance	D			495 (1' 7")
Wheelbase	E			3800 (12' 6")
Tread	F			2540 (8' 4")
Dump clearance at 45°	G			3360 (11' 0")
Dump reach (full lift)	H			1550 (5' 1")
Width over tires	I			3420 (11' 3")
Dump angle	J			degree (°)
Rollback angle (carry position)	K		47	
Cycle time	Lift (with load)		sec	6.1
	Dump (with load)			1.7
	Lower (empty)			4.3
Maximum travel speed			km/hr (mph)	40.0 (24.9)
Braking distance			m (ft-in)	13.3 (43' 8")
Minimum turning radius (center of outside tire)				6.62 (21' 9")
Gradeability			degree (°)	30
Breakeout force			kg (lb)	28400 (62615)
Travel speed	Forward	First gear	km/hr (mph)	6.2 (3.9)
		Second gear		12.0 (7.5)
		Third gear		18.6 (11.6)
		Fourth/Fifth gear		27.2(16.9)/40.0 (24.9)
	Reverse	First gear		6.2 (3.9)
		Second gear		12.0 (7.5)
		Third gear		27.2 (16.9)

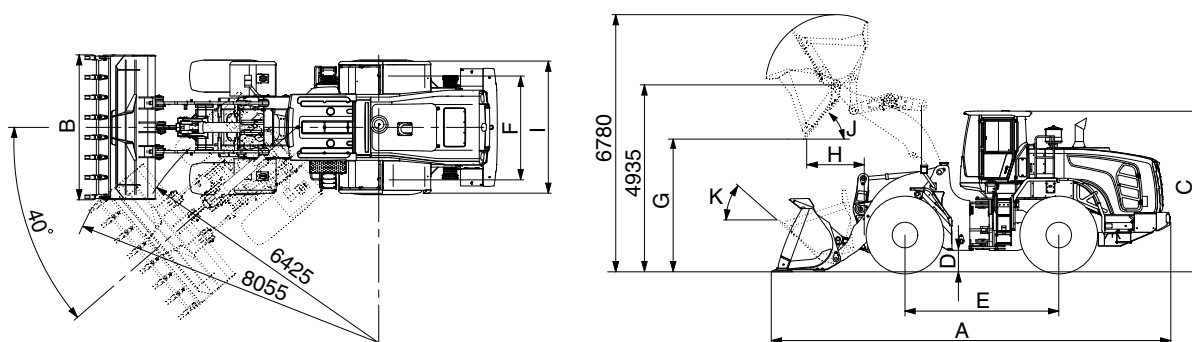
## WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL985A)



985A2SE03-1

Description			Unit	Specification
Operating weight			kg (lb)	34080 (75135)
Bucket capacity	Struck		m³ (yd³)	5.9 (7.7)
	Heaped			7.0 (9.2)
Overall length	A		mm (ft-in)	10300 (32' 10")
Overall width	B			3600 (11' 10")
Overall height	C			3865 (12' 8")
Ground clearance	D			495 (1' 7")
Wheelbase	E			3800 (12' 6")
Tread	F			2540 (8' 4")
Dump clearance at 45°	G			3145 (10' 4")
Dump reach (full lift)	H			1760 (5' 9")
Width over tires	I			3420 (11' 3")
Dump angle	J			degree (°)
Rollback angle (carry position)	K		47	
Cycle time	Lift (with load)		sec	6.1
	Dump (with load)			1.7
	Lower (empty)			4.3
Maximum travel speed			km/hr (mph)	40.0 (24.9)
Braking distance			m (ft-in)	13.3 (43' 8")
Minimum turning radius (center of outside tire)				6.62 (21' 9")
Gradeability			degree (°)	30
Brokeout force			kg (lb)	23800 (52475)
Travel speed	Forward	First gear	km/hr (mph)	6.2 (3.9)
		Second gear		12.0 (7.5)
		Third gear		18.6 (11.6)
		Fourth/Fifth gear		27.2(16.9)/40.0 (24.9)
	Reverse	First gear		6.2 (3.9)
		Second gear		12.0 (7.5)
		Third gear		27.2 (16.9)

# WITH 2-PIECE TOOTH & SEGMENT TYPE BUCKET (HL985A)



985A2SE04

Description			Unit	Specification
Operating weight			kg (lb)	34210 (75425)
Bucket capacity	Struck		m³ (yd³)	5.9 (7.7)
	Heaped			7.0 (9.2)
Overall length	A		mm (ft-in)	10495 (34' 5")
Overall width	B			3600 (11' 10")
Overall height	C			3865 (12' 8")
Ground clearance	D			495 (1' 7")
Wheelbase	E			3800 (12' 6")
Tread	F			2540 (8' 4")
Dump clearance at 45°	G			2995 (9' 10")
Dump reach (full lift)	H			1885 (6' 2")
Width over tires	I			3420 (11' 3")
Dump angle	J			degree (°)
Rollback angle (carry position)	K		47	
Cycle time	Lift (with load)		sec	6.1
	Dump (with load)			1.7
	Lower (empty)			4.3
Maximum travel speed			km/hr (mph)	40.0 (24.9)
Braking distance			m (ft-in)	13.3 (43' 8")
Minimum turning radius (center of outside tire)				6.62 (21' 9")
Gradeability			degree (°)	30
Brokeout force			kg (lb)	23800 (52475)
Travel speed	Forward	First gear	km/hr (mph)	6.2 (3.9)
		Second gear		12.0 (7.5)
		Third gear		18.6 (11.6)
		Fourth/Fifth gear		27.2(16.9)/40.0 (24.9)
	Reverse	First gear		6.2 (3.9)
		Second gear		12.0 (7.5)
		Third gear		27.2 (16.9)

### 3. WEIGHT

Item	kg	lb
Front frame assembly	3112	6865
Rear frame assembly	3346	7380
Front fender (LH/RH)	53/53	116/116
Rear fender (LH/RH)	86/86	190/190
Counterweight	2625	5790
Cab assembly	936	2065
Engine assembly	860	1895
Transmission assembly (5-speed)	816	1800
Driveshaft (front)	32	75
Driveshaft (center)	103	230
Driveshaft (rear)	31	70
Front axle (include differential)	1820	4015
Rear axle (include differential)	1820	4015
Tire (875/65 R29 L3 ★★)	860	1900
Hydraulic tank assembly	251	555
Fuel tank assembly	498	1100
Main pump assembly	65	145
Steering pump assembly	65	145
Fan & brake pump assembly	13	30
Main control valve (2 spool/3 spool)	95/110	210/245
Steering valve(Priority valve)	29	65
Boom assembly	2260	4985
Bell crank assembly	700	1545
Bucket link	103	227
5.6 m³ bucket, with bolt on cutting edge	3080	6795
7.0 m³ bucket, with bolt on cutting edge	3360	7410
7.0 m³ bucket, with tooth and segment	3490	7695
Boom cylinder assembly (LH/RH)	326/326	660/660
Bucket cylinder assembly	330	730
Steering cylinder assembly (LH/RH)	62/62	135/135
Seat (Including suspension and armrest)	70	155
Battery (1EA)	53	120
Under guard kit	110	245
Engine hood assembly	473	1045
Mud guard assembly (LH/RH)	38/38	80/80

## 4. SPECIFICATION FOR MAJOR COMPONENTS

### 1) ENGINE

Item	Specification
Model	Cummins X12
Type	4-cycle turbocharged, charge air cooled electronic controlled diesel engine
Cooling method	Water cooled
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	132 × 144 mm (5.2" × 5.7")
Piston displacement	11800 cc (720 cu in)
Compression ratio	17.0 : 1
Gross power	430 hp (321 kW) at 2100 rpm
Net power	420 hp (313 kW) at 2100 rpm
Maximum power	473 hp (353 kW) at 1700 rpm
Peak gross torque	235 kgf · m (1696 lbf · ft) at 1400 rpm
Engine oil quantity	34 ℓ (9.0 U.S. gal)
Wet weight	860 kg (1896 lb)
Starting motor	24 V - 7.5 kW
Alternator	28 V - 110 Amp
Battery	2 × 12 V × 220 Ah

### 2) MAIN PUMP

Item	Specification
Type	Load sensing hydraulic system
Pump	Variable displacement piston pump
Rated oil quantity	520 ℓ /min (137.4 U.S.gpm)
System pressure	320 kgf/cm <sup>2</sup> (4569 psi)

### 3) STEERING PUMP

Item	Specification
Type	Load sensing hydrostatic articulated steering
Pump	Variable displacement piston pump
Rated oil quantity	280 ℓ /min (74 U.S.gpm)
System pressure	210 kgf/cm <sup>2</sup> (3046 psi)

#### 4) FAN + BRAKE PUMP

Item	Specification
Type	Variable piston pump
Capacity	28 cc/rev
Maximum operating pressure	250 kgf/cm <sup>2</sup> (3980 psi)
Rated oil quantity	74.3 ℓ /min (19.6 U.S.gpm)

#### 5) MAIN CONTROL VALVE

Item	Specification
Type	2 spool / 3 spool
Operating method	Hydraulic pilot assist
Main relief valve pressure	315 bar
Overload relief valve pressure	365 bar

#### 6) ELECTRO-HYDRAULIC BLOCK

Item	Specification
Type	Proportional pressure reducing valve
Control current	0~950 mA
Resistance	10.5 Ω
Normal flow	12 ℓ /min (3.17 U.S.gpm)

#### 7) REMOTE CONTROL VALVE (EH TYPE)

Item	Specification
Type	Fingertip
Axle	Single axle for boom, bucket, auxiliary
Operating voltage	4.5~5.5 V
Output signal	0.5~4.5 V (neutral 2.5 V)

#### 8) REMOTE CONTROL VALVE (FNR TYPE)

Item	Specification
Type	Joystick
Axle	Two axle for boom, bucket, roller for auxiliary
Operating type	CAN J1939
Baud rate	500 kbps

## 9) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	Ø 190 × Ø 110 × 890 mm
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø 210 × Ø 115 × 550 mm
Steering cylinder	Bore dia × Rod dia × Stroke	Ø 110 × Ø 60 × 460 mm

## 10) DYNAMIC POWER TRANSMISSION DEVICES

Item			Specification
5-speed transmission	Model		ZF 5WG 310
	Type	Converter	3-Elements, Single-stage, Single-phase
		Transmission	Full-automatic power shift
	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)
	Travel speed	Forward 1/2/3/4/5	6.2 / 12/18.6/27.2/ 40.0 km/hr
		Reverse 1/2/3	6.2/ 112/ 27.2 km/hr
Axle	Drive devices		4-wheel drive
	Front		Front fixed location
	Rear		Oscillation ± 11° of center pin-loaded
Wheels	Tires		875/65 R29 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