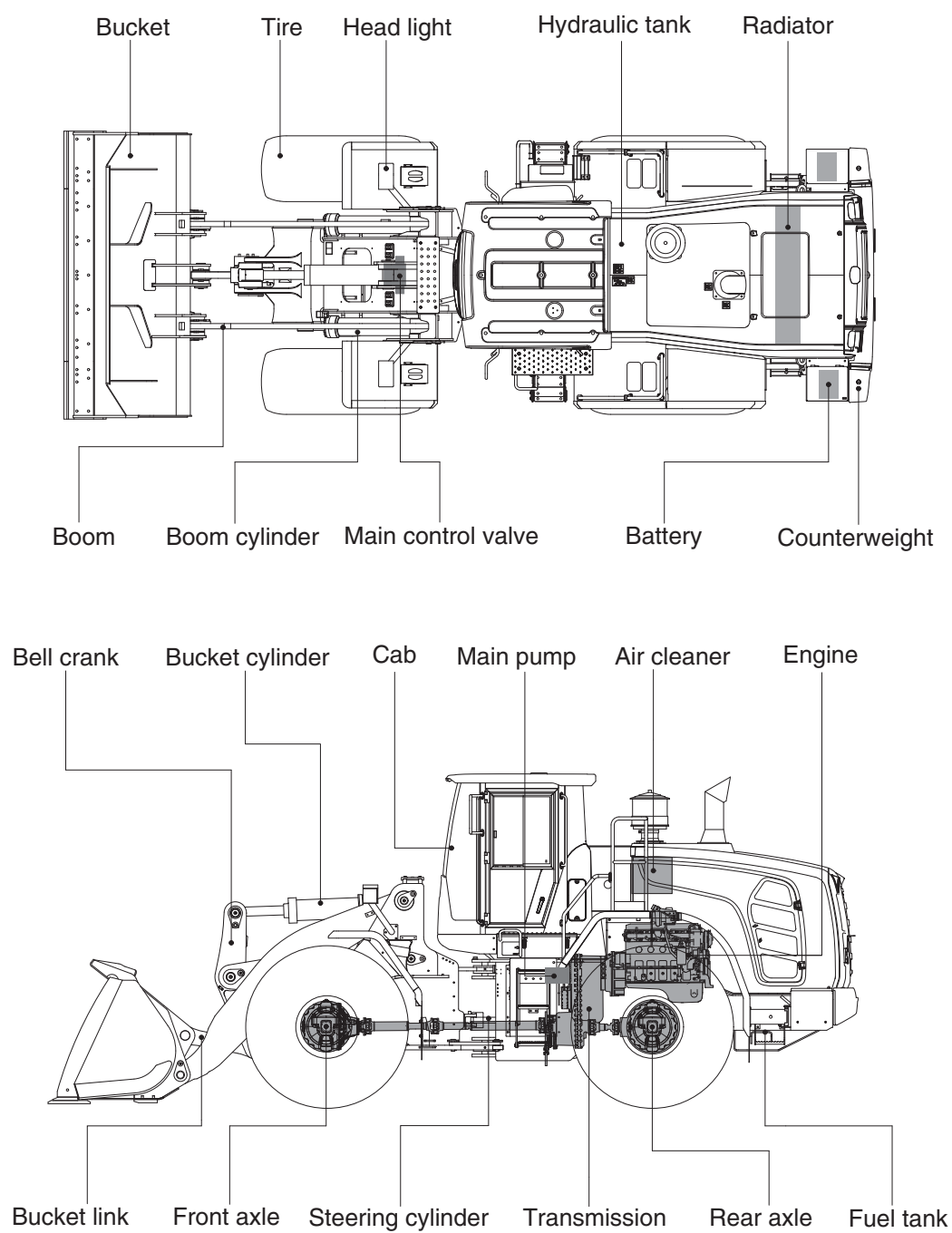


2. SPECIFICATIONS

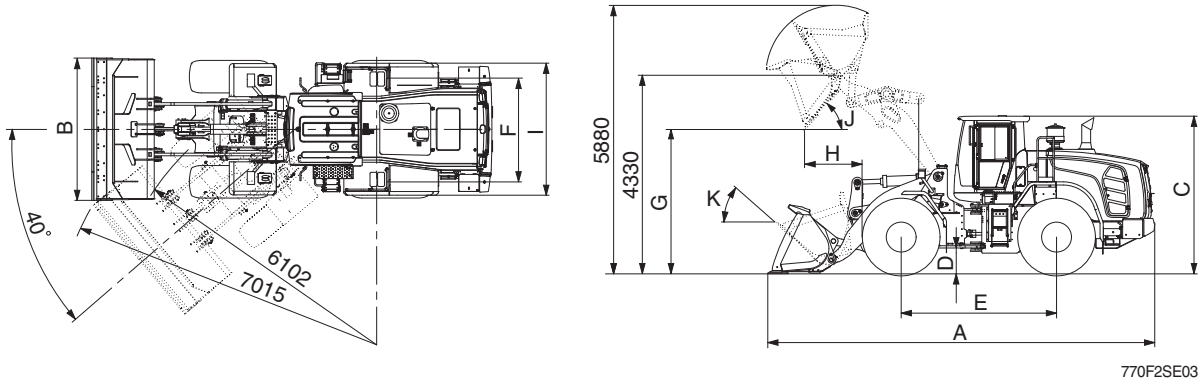
1. MAJOR COMPONENTS



770F2SE01

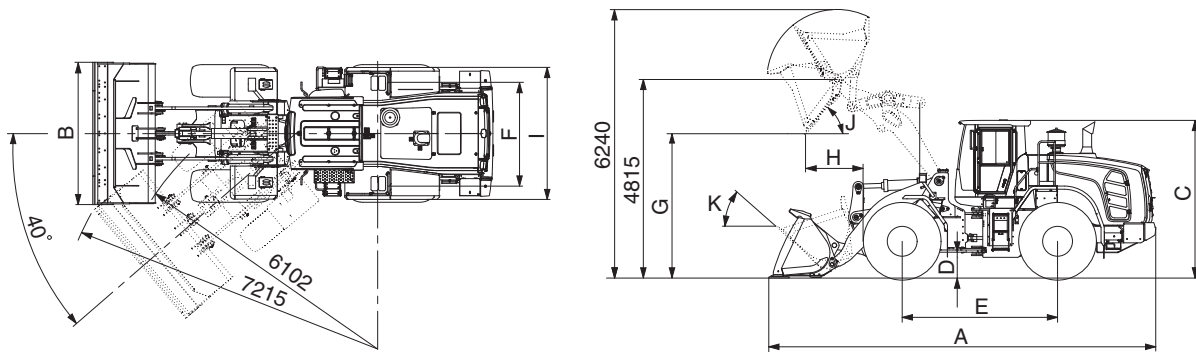
2. SPECIFICATIONS

1) WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL970)



Description			Unit	Specification
Operating weight			kg (lb)	23500 (51810)
Bucket capacity	Struck		m³ (yd³)	3.6 (4.7)
	Heaped			4.2 (5.5)
Overall length	A		mm (ft-in)	8740 (28' 8")
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			3080 (10' 1")
Dump reach (full lift)	H			1270 (4' 2")
Width over tires	I			2975 (9' 9")
Dump angle	J			degree (°)
Roll back angle (carry position)	K		47	
Cycle time	Lift (with load)		sec	5.7
	Dump (with load)			1.4
	Lower (empty)			3.1
Maximum travel speed			km/hr (mph)	40.0 (24.9))
Braking distance			m (ft-in)	13 (42' 8")
Minimum turning radius (center of outside tire)				6.10 (20' 0")
Gradeability			degree (°)	30
Breakout force			kg (lb)	21720 (47880)
Travel speed	Forward	First gear	km/hr (mph)	7.3 (4.5)
		Second gear		12.2 (7.6)
		Third gear		27.2 (16.9)
		Fourth gear		40.0 (24.9)
	Reverse	First gear		7.3 (4.5)
		Second gear		12.2 (7.6)
		Third gear		27.2 (16.9)

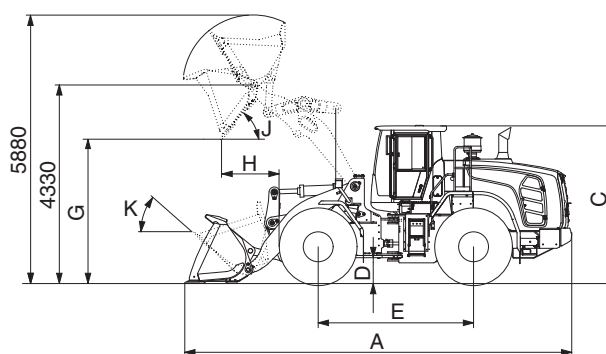
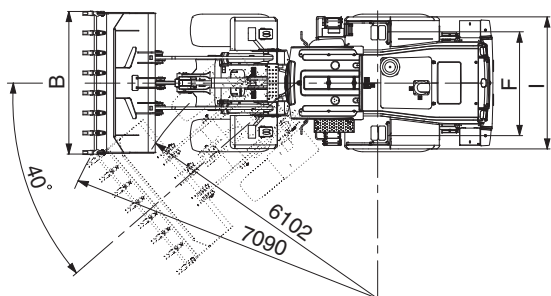
WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL970 XT)



770F2SE03-1

Description			Unit	Specification
Operating weight			kg (lb)	24200 (53350)
Bucket capacity	Struck		m³ (yd³)	3.6 (4.7)
	Heaped			4.2 (5.5)
Overall length	A		mm (ft-in)	9270 (30' 5")
Overall width	B			3100 (10' 2")
Overall height	C			3560 (11' 8")
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			1265 (4' 2")
Width over tires	I			2975 (9' 9")
Dump angle	J		degree (°)	50
Roll back angle (carry position)	K			48
Cycle time	Lift (with load)		sec	5.8
	Dump (with load)			1.2
	Lower (empty)			3.8
Maximum travel speed			km/hr (mph)	40.0 (24.9)
Braking distance			m (ft-in)	13 (42' 8")
Minimum turning radius (center of outside tire)				6.10 (20' 0")
Gradeability			degree (°)	30
Breakout force			kg (lb)	21700 (47840)
Travel speed	Forward	First gear	km/hr (mph)	7.3 (4.5)
		Second gear		12.2 (7.6)
		Third gear		27.2 (16.9)
		Fourth gear		40.0 (24.9)
	Reverse	First gear		7.3 (4.5)
		Second gear		12.2 (7.6)
		Third gear		27.2 (16.9)

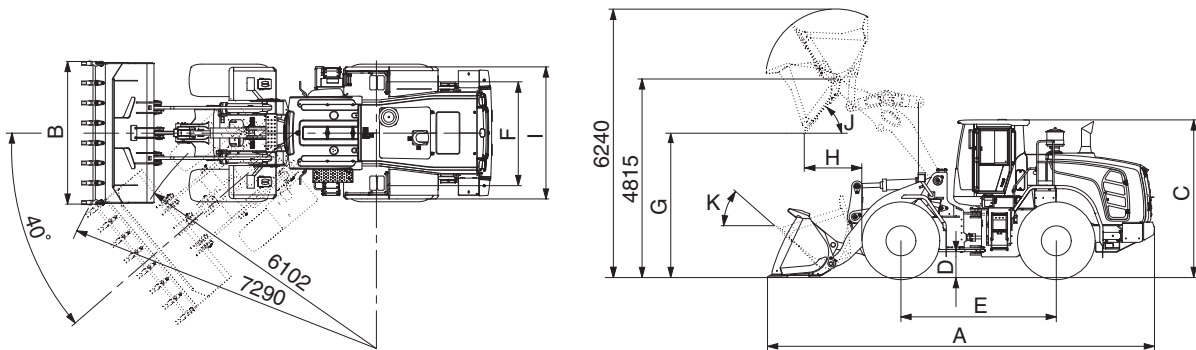
2) WITH TOOTH TYPE BUCKET (HL970)



770F2SE04

Description			Unit	Specification
Operating weight			kg (lb)	23400 (51590)
Bucket capacity	Struck		m³ (yd³)	3.4 (4.4)
	Heaped			4.0 (5.2)
Overall length	A		mm (ft-in)	8895 (29' 2")
Overall width	B			3150 (10' 4")
Overall height	C			3560 (11' 8")
Ground clearance	D			480 (1' 7")
Wheelbase	E			3500 (11' 6")
Tread	F			2300 (7' 7")
Dump clearance at 45°	G			2955 (9' 8")
Dump reach (full lift)	H			1375 (4' 6")
Width over tires	I			2975 (9' 9")
Dump angle	J			degree (°)
Roll back angle (carry position)	K		48	
Cycle time	Lift (with load)		sec	5.8
	Dump (with load)			1.2
	Lower (empty)			3.8
Maximum travel speed			km/hr (mph)	40.0 (24.9)
Braking distance			m (ft-in)	13 (42' 8")
Minimum turning radius (center of outside tire)				6.10 (20' 0")
Gradeability			degree (°)	30
Breakout force			kg (lb)	22980 (50660)
Travel speed	Forward	First gear	km/hr (mph)	7.3 (4.5)
		Second gear		12.2 (7.6)
		Third gear		27.2 (16.9)
		Fourth gear		40.0 (24.9)
	Reverse	First gear		7.3 (4.5)
		Second gear		12.2 (7.6)
		Third gear		27.2 (16.9)

WITH TOOTH TYPE BUCKET (HL970 XT)



770F2SE04-1

Description			Unit	Specification
Operating weight			kg (lb)	24100 (53130)
Bucket capacity	Struck		m³ (yd³)	3.4 (4.4)
	Heaped			4.0 (5.2)
Overall length	A		mm (ft-in)	9440 (31' 0")
Overall width	B			3150 (10' 4")
Overall height	C			3560 (11' 8")
Ground clearance	D			480 (1' 7")
Wheelbase	E			3500 (11' 6")
Tread	F			2300 (7' 7")
Dump clearance at 45°	G			3695 (12' 1")
Dump reach (full lift)	H			1350 (4' 5")
Width over tires	I			2975 (9' 9")
Dump angle	J		degree (°)	50
Roll back angle (carry position)	K			48
Cycle time	Lift (with load)		sec	5.8
	Dump (with load)			1.2
	Lower (empty)			3.8
Maximum travel speed			km/hr (mph)	40.0 (24.9)
Braking distance			m (ft-in)	13 (42' 8")
Minimum turning radius (center of outside tire)				6.10 (20' 0")
Gradeability			degree (°)	30
Breakout force			kg (lb)	22980 (50660)
Travel speed	Forward	First gear	km/hr (mph)	7.3 (4.5)
		Second gear		12.2 (7.6)
		Third gear		27.2 (16.9)
		Fourth gear		40.0 (24.9)
	Reverse	First gear		7.3 (4.5)
		Second gear		12.2 (7.6)
		Third gear		27.2 (16.9)

3. WEIGHT

Item		kg	lb
Front frame assembly		2110	4650
Rear frame assembly		2370	5220
Front fender (LH & RH)		76	168
Counterweight (HL970)		1100	2430
Counterweight (HL970 XT)		1600	3730
Cab assembly		1070	2360
Engine assembly		975	2150
Transmission assembly (4-speed/5-speed)		760/810	1680/1790
Drive shaft (front)		42	93
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 R25, ★ L3)		420	926
Hydraulic tank assembly		168	370
Fuel tank assembly		384	847
Main pump assembly		55	121
Fan & brake pump assembly		12	26
Main control valve (2 spool/3 spool)		34/41	75/90
Flow amplifier		29	64
Boom assembly	HL970	1205	2660
	HL970 XT	1425	3140
Bell crank assembly		360	794
Bucket link		55	121
4.2 m ³ bucket, with bolt on cutting edge		1830	4030
4.0 m ³ bucket, with tooth		1750	3860
Boom cylinder assembly		222	489
Bucket cylinder assembly		233	514
Steering cylinder assembly		29	64
Seat		80	176
Battery		55	121

4. SPECIFICATION FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Scania DC09
Type	4-cycle turbocharged, charge air cooled diesel engine
Control type	Electronic control
Cooling method	Water cooling
Number of cylinders and arrangement	5 cylinders, in-line
Firing order	1-2-4-5-3
Combustion chamber type	Direct injection type
Cylinder bore × stroke	130 × 140 mm (5.1" × 5.7")
Piston displacement	9300 cc (568 cu in)
Compression ratio	17 : 1
Rated gross horse power	311 hp (232 kW) at 2100 rpm
Maximum gross torque (1200 rpm)	182 kgf · m (1317 lbf · ft)
Engine oil quantity	36 ℓ (9.5 U.S. gal)
Wet weight	975 kg (2150 lb)
High idling speed	2100 ± 50 rpm
Low idling speed	800 ± 25 rpm
Rated fuel consumption	210 g/kW · hr
Starting motor	Nippondenso (24 V - 6.0 kW)
Alternator	Bosch (24 V - 100 Amp)
Battery	2 × 12 V × 200 Ah

2) MAIN PUMP

Item	Specification	
	Steering	Loader
Type	Variable tandem piston pump	
Capacity	110 cc/rev	61 cc/rev
Maximum operating pressure	210 kgf/cm ² (2990 psi)	280 kgf/cm ² (3980 psi)
Rated oil quantity	208 ℓ /min (54.9 U.S.gpm)	115 ℓ /min (30.4 U.S.gpm)
Maximum speed	2100 rpm	

3) FAN + BRAKE PUMP

Item	Specification
Type	Variable piston pump
Capacity	28 cc/rev
Maximum operating pressure	250 kgf/cm ² (3560 psi)
Rated oil quantity	63 l /min (16.6 U.S.gpm)
Maximum speed	2100 rpm

4) MAIN CONTROL VALVE

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

5) 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)

6) 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)

7) 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

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø 160 × ø 95 × 780 mm
Bucket cylinder (HL970)	Bore dia × Rod dia × Stroke	ø 180 × ø 95 × 565 mm
Bucket cylinder (HL970 XT)	Bore dia × Rod dia × Stroke	ø 180 × ø 95 × 570 mm
Steering cylinder	Bore dia × Rod dia × Stroke	ø 95 × ø 50 × 480 mm

9) DYNAMIC POWER TRANSMISSION DEVICES

Item			Specification
4-speed transmission (std)	Model		ZF 4WG 260
	Type	Converter	Single-stage, single-phase
		Transmission	Full-automatic power shift
	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 ℓ /min (35.7 U.S.gpm) at 2000 rpm
	Travel speed		See the page 2-2.
5-speed transmission (opt)	Model		ZF 5WG 260
	Type	Converter	Single-stage, double-phase (with lock up clutch)
		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)
	Pump rated flow		135 ℓ /min (35.7 U.S.gpm) at 2000 rpm
	Travel speed	Forward 1/2/3/4/5	7.2/12.4/19.7/28.1/40.0 km/hr
		Reverse 1/2/3	7.2/12.4/28.1 km/hr
Axle	Drive devices		4-wheel drive
	Front		Front fixed location
	Rear		Oscillation ± 11° of center pin-loaded
Wheels	Tires		26.5 R25, ★(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