## **BUCKET SELECTION GUIDE**

## SUPPLEMENTAL SPECIFICATIONS

- cigar lighter & ashtray

Description

20.5-25 16PR L3

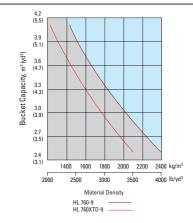
23.5 R25 XHA\*

Change in operating

weight kg(lb)

-872 (-1,922)

+8 (+18)



## **STANDARD EQUIPMENT**

Electrical system Alternator, 70A Alarms, audible and visual - air filter clogging - transmission error alternator voltage - brake oil pressure engine oil pressure - parking brake - fuel level - hydraulic oil temperature - coolant temperature - service brake oil pressure Alarm, back-up Batteries, maintenance-free 950 CCA, 12V, (2) Gauges - engine coolant temperature - fuel level - hydraulic oil temperature - speedometer - transmission oil temperature - voltmeter Horn, electric Indicator lights - clutch cut-off - high beam - turn signal LCD Display - clock and fault code - operating hour counter - engine rpm

### indicator - coat hook iob time and distance temperature(coolant, hydraulic oil, t/m oil) Liahtina system - 1 LED dome lights - 2 stop and tail lights - 4 turn signals - brake lights(counterweight) 2 head lights on front tower - 2 working lights on front roof - 2 working lights on grill Switches - clutch cut-off - hazard - Ignition key, start/stop switch - main light (illumination and head light) - parking - rear wiper & washer - work light - pilot cut-off Pedals - battery master switch Starter, electric Starting and charging system (24-volt) Cab Cab, ROPS/FOPS Engine

- transmission gear range

(sound suppressed and pressurized) with a

## **OPTIONAL EQUIPMENT**

24-volt to 12-volt DC converter High lift arrangement with additional counterweight, Climate control - air conditioner only 605kg (1,330 lb) - heater only Hydraulic control, 2 lever Beacon light, rotating Hydraulic control, 3 lever Auxiliary, 2 working lights on front roof 3rd spool for auxiliary function (Xenon working lights) Joystick with travel switch (FNR) Auxiliary, 2 working lights on rear roof Mud guard Cutting edge, bolt-on type Operator suit Secondary steering system Pallet forks Fire extinguisher Heated rear view mirrors

### Automatic climate control - air conditioner & heater - defroster intermittent wiper and washer. front and rear Personal storage space - console box - holder, can and cup Rear view mirrors (1 inside) Rear view mirrors (2 outside) 2" retractable seat belt & adjustable suspension seat with armrests Steering column, tilt and telescopic Steering wheel with knob Roller type sunshade (front window) Tinted safety glass Two door cab Magazine pocket - one accelerator pedal - one brake pedal Radio/USB player Rubber floor mat Wrist rest

Antifreeze Engine, Cummins QSB6.7

Seat

Tires :

(2 outside)

Reversible cooling fan

mechanical suspension (vinyl)

- 3" static seat belt & adjustable

adjustable air suspension (heated)

mechanical suspension

- 2" retractable seat belt &

Ride control system

- Low Emission Diesel, Tier-III Engine enclosure, lockable Engine fuel priming pump 3 operating mode (power / standard / econo) Fan guard Fuel/water separator Muffler, under hood with large exhaust stack Rain cap, engine air intake Radiator Starting aid (air intake heater) Water sensor on fuel filter Fuel warmer Power Train Brakes : Service, enclosed wet-disc

## Parking brake

Torque converte Transmission, computer-controlled, electronic soft shift, auto-shift and kick-shift features included Transmission oil cooler

### Hvdraulics

Boom kickout, automatic Bucket positioner, automatic Diagnostic pressure taps Hydraulic oil cooler Hvdraulic system, - 2 spool, single lever, pilot control for boom and bucket actuation

Steering, load-sensing Remote cooling fan. hydraulically-driven. temperature sensing type

load-40° turn kg(lb)

-590 (-1,300)

+5 (+11)

### Others Articulation locking bar

Change in static tipping Change in static tipping

load-straight kg(lb)

-670 (-1,470)

+6 (+13)

Coolant level sight gauge Counterweight Door and cab locks, one key Doors, service access(locking) Drawbar with pin Engine oil level dipstick gauge Ergonomically located and slip resistant, left & right handrails - ladders - platforms - steps Fenders(front) Guard, bucket cylinder rod Hydraulic oil level sight gauge License plate bracket Lift and tie-down hooks Loader linkage, sealed Z-bar design Steering stops, cushioned Tires(23.5-25, 20PR,L3) Transmission oil site level Vandalism protection caplocks

- 20.5 - 25, 16PR, L3 - 23.5 - 25, 20PR, L5 - 23.5 R25 XHA Tool kit - 2" static seat belt & adjustable Tooth, 1 piece, bolt-on type

Tooth, 2 pieces, bolt-on type

Pre-cleaner, engine air intake

Guards

- crankcase

Wheel chock

- transmission

Dual-brake pedal Joystick-steering Roller type sunshade (rear window) License plate & lamp Hi-Mate(Remote Management System) Rearview camera Limited slip differential(Front, Rear)

Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to International standards. All imperial measurements rounded off to the nearest pound or inch.

PLEASE CONTACT	
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# **Pride at Work**

Hyundai Heavy Industries strives to build state-of-the art earthmoving equipment to give every operator maximum performance, more precision, versatile machine preferences, and proven quality. Take pride in your work with Hyundai!



### **Reliable Main Components**

### Engine Technology

Proven, reliable, fuel efficient, low noise Cummins Tier-III QSB6.7 engine. Electronically controlled for optimum fuel to air ratio and clean, efficient combustion. HPCR(High Pressure Common Rail) fuel system / Self-diagnostic system. 3 engine modes, P (Power), S (Standard), E (Economy) for full power or reduced fuel consumption according to operator preference.

### **Fully Automatic Transmission**

4 step(Manual / Light / Normal / Heavy) shift mode by working condition Protective transmission at low temperature(Automatic warm-up system) Self-diagnostic & Memory of malfunction history Kick-down button & FNR switch for operating comfort

### Axle

Limited slip differentials (front & rear) for easy driving on variable ground condition(opt.) Self-adjusting & wheel speed wet disc brake

## Improved Durability

Load sensing hydraulic system with variable displacement piston pump and closed-center MCV (main control valve). Long-life cooling system, designed for additional durability, resistant to thermal shock, impulse and vibration. Redesigned steering cylinder lug and bucket link, now cast steel for additional strength and reliability.

## **Enhanced Operator Comfort**

Improved Visibility

Larger operator's cab for additional comfort. Redesigned cab with rounded front glass and larger door glass for a larger field of view.

### Improved Convenience

Tilting & telescopic steering column. Adjustable wrist rest for reduced operating stress. Multiple storage compartments. AM/FM Radio with MP3 interface and USB input.

## Advanced 5.7" Color Monitor

Easy-to-read new color LCD display. Auto boom kick out and bucket positioner - fully adjustable from within the cab. Integrated load weight system, viewable through the monitor, for improved work efficiency and overload prevention. Self diagnostic & monitoring system with active display of engine, hydraulic system, transmission and electrical component information.

Color, rear-view, back-up camera for improved safety and convenience.

## Serviceability

Reversible, swing-out, cooling fan for easy service and improved cooler maintenance. Ground level access to critical service points, filters and sight gauges for easy maintenance. Long life hydraulic filter and oil for reduced operating costs.

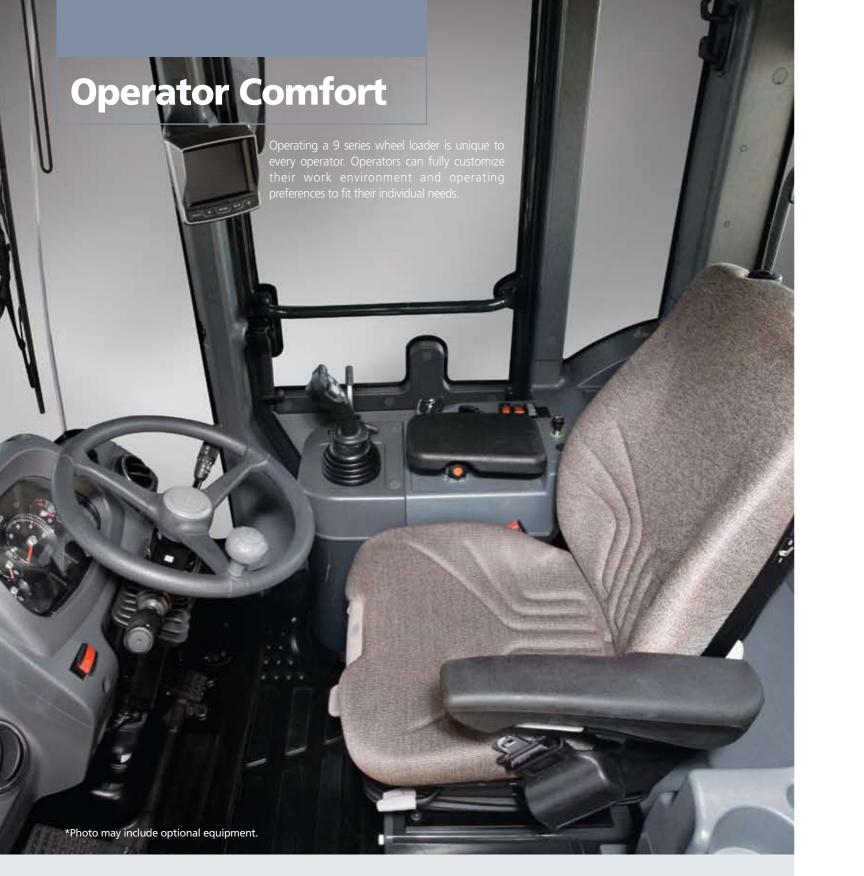
# HL760-9

## **Machine Walk-Around**

- Minimum travel shift shock by applying proportional controlling modulation valve / Self adjusting Clutch gap

Increased cooling & heating capacity with fully automatic climate control system.

Improved ladder with 20 Degree incline and large, deep tread, aluminum cast steps for safer access and exit from the cab.





## Wide and Convenient Cab

The newly designed cabin was conceived for more space, a wider field of view and operator comfort. The front glass is rounded and 17% wider than the previous 7A series. Special attention was given to a clean, open and convenient interior with plenty of visibility on the machine surroundings and the job at hand. This well balanced combination of cab ergonomics puts the operator in the perfect position to work safely and securely. The 9 series cab's fully automatic climate control system features 11 air vents and increased cooling and heating capacity for optimum temperature control. The defroster vents located on the front and rear windows and a PTC (electric pre-heater) make working in cold weather more hospitable.

In the 9 series cabin you can easily adjust the steering column and wrist rest to best suit Operator Comfort your preferred comfort level. Pilot-operated joystick controls are easy and comfortable to operate. An FNR (Forward/Neutral/Reverse) switch on the control lever facilitates easy selection of travel direction. Roller type sunshades on the front window and rear window allow the operator to reduce glare and improve visibility. Heated side mirrors feature built-in hot wires for quick defrosting during cold weather conditions.

FNR switch



Tilting / telescopic steering column

## **Reduced Stress**

Work is stressful enough. Your work environment should be stress free. Hyundai's 9 series cabin offers lots of amenities, additional space and a comfortable seat to minimize stress to the operator. A powerful climate control system provides the operator with optimum air temperature. An advanced audio system with AM/FM stereo with MP3 interface and USB input, plus remotely located controls is perfect for listening to music favorites.

## **Advanced Color Monitor**



The advanced new monitor with 5.7 inch wide color LCD screen allows the operator to easily and efficiently control the machine. The operator can adjust boom kick-out and bucket position via switches overhead while monitoring the adjustment settings through the monitor. An integrated load weight system that contributes to improved work efficiency, can also be viewed through the monitor. Self diagnostics, color rear-view camera maintenance check lists and startup machine security, were integrated into the monitor to make the machine more versatile and the operator more productive. The new monitor display unit is mounted on an adjustable swivel mount to reduce glare and position according to operator preference.







Front sunshade



Heated side mirrors



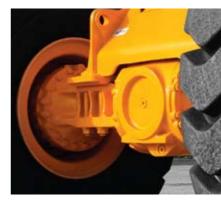
AM/FM Radio with MP3/ AC control



# **Precision & Performance**

Innovative hydraulic system technologies make the 9 series wheel loader fast, smooth and easy to control. 9 series wheel loaders are designed for maximum performance to keep the

## **Improved Durability & Reliability**



An enhanced axle improves driving over variable ground conditions. Self adjusting brakes that automatically regulate disc clearance, reduce service time and improve brake reliability and performance. The new load sensing hydraulic system with a variable volume piston pump and closed center main control valve, provide efficient hydraulic power and additional energy savings. Service and clean-out are easier on the 9 series, now equipped with a completely redesigned, parallel-mounted, cooler configuration and non louvered fins to prevent clogging. All coolers are designed with aluminum bar plate configuration and undergo strict factory tests for thermal shock, impulse and vibration to assure long term durability. Top mounted non-louvered aluminum air condenser and variable displacement A/C compressor are designed for maximum cooling capacity, energy savings and easy cleanout. Additionally, the redesigned steering cylinder lug and bucket link, are now cast steel for additional strength and reliability.

## Variable Operating Modes



9 series wheel loaders are designed to allow the operator to customize the machine's engine power, automatic transmission shift timing and clutch cut-off activation based on the job condition and personal operator preference. Convenient rotary type switches allow for easy adjustment of engine power mode, transmission power shift mode, and clutch cut-off mode. Additionally, if equipped with the optional ride control system, the operator has the option to turn the system on or off with an overhead switch. The ride control system has a shock absorbing accumulator that cushions the boom, improves operator comfort and reduces material loss. The versatility of the 9 series operating modes contributes to improved productivity, enhanced operator comfort and reduced fuel consumption.



3 Mode Engine Power Selection P(Power) Mode : Heavy duty work S(Standard) Mode : General work

4 Mode Transmission Power Shift System M(Manual) Mode Auto L(Light) Mode : Light duty & long distance carry E(Economy) Mode : Light duty work Auto N(Normal) Mode : General excavating & loading Auto H(Heavy) Mode : Heavy duty excavating & loading





**Eco-friendly** Cummins QSB 6.7 Engine

The CUMMINS QSB6.7 engine combines advanced electronic controls and a self-diagnostic system with reliable performance. The combination of a high pressure common rail system and an advanced in-cylinder combustion technology results in increased power, improved transient response and reduced fuel consumption. The QSB6.7 Cummins engine complies with current emissions standards including EPA Tier3 and EU Stage III-A.

\*Photo may include optional equipment.

HL76 )-9

3 Mode Clutch Cut-Off System L(Low) Mode : Short distance & faster loading M(Medium) Mode : General loading H(High) Mode : Slope ground

## **Fully Automatic** Transmission

Fully automatic transmission designed for maximum durability, Minimum power loss, improved travel speed and low noise. Improved clutch control and minimized shifting shock when traveling, contribute to a smoother ride. Error messages and transmission fault history are recorded and accessible through the monitor.

# **Profitability**

9 series is designed to maximize profitability through improved efficiencies, enhanced service features and longer life components.





## Hi-mate (Remote Management System)

Hi-mate, Hyundai's proprietary remote management system, provides operators and dealer service personnel access to vital service and diagnostic information on the machine from any computer with internet access. Users can pinpoint machine location using digital mapping and set machine work boundaries, reducing the need for multiple service calls. Hi-mate saves time and money for the owner and dealer by promoting preventative maintenance and reducing machine downtime.

The remote mounted, hydraulically powered cooling fan regulates fan speed according to working temperatures for coolant, intake air, transmission oil and hydraulic oil. This

new fan design contributes to reduced fuel consumption

and machine noise. The fan is designed to auto reverse periodically or manually reverse to keep debris from





accumulating on the coolers.

The 9 series is designed for longer lubrication intervals and extended component life. Long life hydraulic filters now have 1,000 hours service intervals and Hyundai certified hydraulic oil can last up to 5,000 hours before changing. Also, a new center pivot roller bearing design, now double tapered, requires less maintenance as well. Long life and extended wear components save the operator time and money.

Hydraulic filter (1,000 hr)

Hydraulic Oil (5.000 hr)

\*Photo may include optional equipment.



## Easy Access

The engine fan is integrated into the rear door which swings open to over 45 degrees for easy access and regular maintenance. Conveniently located coolant and transmission oil site gauges make checking fluid levels fast and efficient. Ground-line access to fuel and oil filters grease fittings, fuses, machine computer components and wide open compartments makes service more convenient on the 9 series.



## Full Fenders and Mud Guards (Option)

9 series wheel loaders can be equipped with optional full rear fenders and front and rear mud flaps to reduce material splatter to the cab and machine frame.

## **Extended Life Components**

# **Specifications & Dimensions**

## ENGINE

Maker/Model	CUMMINS QSB6.7	Bore x Stroke	107 mm (4.21") x 124 mm (4.88")
Туре	Watercooled, 4-cycle, turbocharged,	Displacement	6.7 (409 cu in)
iype	charge aircooled direct injection, electronic controlled diesel engine	Compression ratio	17.2 : 1
		Air cleaner	Dry, two stage dual elements
Gross power	215 HP(160 kW) / 2,100rpm	Alternator	24V, 70 Amp
Net power	212 HP(158 kW) / 2,100rpm	Battery	2 x 12V, 130 Ah.
Maximum torque	97 kg·m(700 lb·ft) / 1,500rpm		
No. of cylinders	6	Starting motor	24V, 3.7 kW

\*\* No derating for continuous operating required up to 3,048m (10,000ft). This engine meets the EPA(Tier III) / EU(Stage III-A) Emission regulation.

## TRANSMISSION

Torque converter type	3-elements, single-stage single-phase
Tire	23.5-25, L3

\*Full automatic power shift, countershaft type with soft-shift in range and direction. Properly matched torque converter to engine and transmission for excellent working ability

Travel speed		km/h (mph)
Forward	1st	6.3(3.9)
	2nd	12.0(7.5)
	Зrd	24.0(14.9)
	4th	38.1(23.7)
Reverse	1st	6.7(4.2)
	2nd	12.6(7.8)
	3rd	25.2(15.7)

## AXLES

Drive system	Four-wheel drive system
Mount	Rigid front axle and oscillating rear axle
Rear axle oscillation	±11° (total 22°)

Hub reduction	Planetary reduction at wheel end
Differential	Conventional
Reduction ratio	24.666

## HYDRAULIC SYSTEM

Туре	Load sensing hydraulic system
Pump	Variable axial piston pump, 233 liters/min
	(61.6 gal/min)@governed rpm
Control valve	2 Spool (Bucket, Boom)
	3 Spool (Bucket, Boom, Aux)
	Pilot pressure controled type
System pressure	280 kgf/cm <sup>2</sup> (3,982 psi)

Bucket Controls	Туре	Pilot operated lift and tilt circuit, single-lever(joystick) control standard.
	Lift Circuit	The valve has four functions ; raise, hold, lower and float. Can adjust automatic kickout from horizontal to full lift.
	Tilt Circuit	The valve has three functions ; tilt back, hold and dump. Can adjust automatic bucket positioner to desired load angle.
Cylinder		Type : Double acting No. of cylinders-bore x stroke; Lift 2-140 mm(5.5") x 757 mm(29.8")
	HL760-9 HL760XTD-9	Tilt 1-160 mm(6.2") x 530 mm(20.8") Tilt 1-160 mm(6.2") x 515 mm(20.3")
Cycle Time		Raise : 5.8 sec Dump : 1.2 sec Lower : 3.1 sec Total : 10.1 sec

## BRAKES

Service Brakes	Hydraulically actuated, wet disc brakes actuate all 4 wheels independent axle-by-axle system. Self adjusting & wheel speed brake.
Parking Brake	Spring-applied, hydraulically released brake
Emergency Brake	When brake oil pressure drops, indicator light alerts operator and parking brake automatically applies.

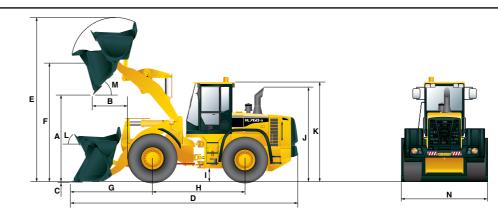
## SERVICE REFILL CAPACITIES

Fuel tank	334 liters (88.2 USgal)
Cooling system	39 liters (10.3 USgal)
Crankcase	18 liters (4.8 USgal)
Transmission	32 liters (8.5 USgal)

## OVERVIEW

Description		UNIT	HL760-9	HL760XTD-9
Operating weight		kg (lb)	17,900 (39,460)	18,700 (41,230)
Dualization and site	Heaped	m <sup>3</sup> (yd <sup>3</sup> )	3.3 (4.3)	3.3 (4.3)
Bucket capacity	Struck	m <sup>3</sup> (yd <sup>3</sup> )	2.8 (3.7)	2.8 (3.7)
Breakout force-bu	cket	kg (lb)	16,230 (35,780)	15,820 (34,880)
Tinning load	Straight	kg (lb)	13,840 (30,510)	12,200 (26,900)
Tipping load	Full turn	kg (lb)	12,100 (26,680)	10,500 (23,150)

## DIMENSIONS



Des	scription		UNIT	HL760-9	HL760XTD-9
	Bucket Type		Ge	neral purpose bolt-o	n cutting edge
А.	. Dumping clearance at max. mm (ft-in height and 45° dump angle.		mm (ft-in)	2,970 (9' 9")	3,460 (11' 4")
B.	Reach	Full lift	mm (ft-in)	1,220 (4')	1,235 (4' 1")
D. Nedch	7ft height	mm (ft-in)	1,790 (5' 10")	2,195 (7' 2")	
C.	Digging depth		mm (in)	90 (3.5")	86 (3.4")
D	Querell length	on ground	mm (ft-in)	8,100 (26' 7")	8,660 (28' 5")
D. Overall length	at carry	mm (ft-in)	8,030 (26' 4")	8,600 (28' 3")	
E.	Overall height (fully raised)		mm (ft-in)	5,575 (18' 3")	6,060 (19' 11")
F.	Bucket pivot max. height		mm (ft-in)	4,105 (13' 6")	4,600 (15' 1")

## STEERING SYSTEM

Туре		Load sensing hydrostatic articulated steering	
Pump		Piston pump, 126 liters/min (33.3 gal/min)	
Relief Valve Setting		250 kg/cm²(3,555 psi)	
Cylinder	Type Bore x Stroke	Double acting 75mm(2.9") x 440mm(17.3")	
Steering Angle		40°(each direction)	

Features

- Center-point frame articulation.

- Tilt and telescopic steering column.

Front axle	35 liters (9.2 USgal)		
Rear axle	35 liters (9.2 USgal)		
Hydraulic tank	178 liters (47 USgal)		
Hydraulic system (including tank)	252 liters (66.6 USgal)		

## TIRES

Туре	Tubeless, loader design tires	
Standard	23.5-25, 20 PR, L3	
Options include	20.5-25, 16 PR, L3	
	23.5-25, 20 PR, L5	
	23.5 R25 XHA*	

Description		UNIT	HL760-9	HL760XTD-9
G. Front overhang		mm (ft-in)	2,780 (9' 1")	3,245 (10' 8")
H. Wheelbase		mm (ft-in)	3,300 (10' 10")	3,300 (10' 10")
I. Ground clearance		mm (ft-in)	420 (1' 5")	420 (1' 5")
J. Height over exhaust		mm (ft-in)	2,960 (9' 9")	2,960 (9' 9")
K. Height over cab		mm (ft-in)	3,450 (11' 4")	3,450 (11' 4")
	on ground	deg	42	42
L. Roll-back angle	at carry	deg	47	49
M. Dump angle		deg	47	47
Clearance circle		mm (ft-in)	13,130 (43' 1")	13,560 (44' 6")
N. Our and the shifts	with bucket	mm (ft-in)	2,900 (9' 6")	2,900 (9' 6")
N. Overall width	without bucket	mm (ft-in)	2,770 (9' 1")	2,770 (9' 1")