

HL760-9A

With Tier 4 Interim Engine installed

MOVING YOU FURTHER

HYUNDAI HEAVY INDUSTRIES



*Photo may include optional equipment.



HYUNDAI

CONSTRUCTION EQUIPMENT AMERICAS, INC.

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!



HL760-9A

Machine Walk-Around

Reliable Main Components

Engine Technology

Proven, reliable, fuel efficient, low emission, low noise Cummins Tier 4 Interim & EU Stage III B 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
DPF - Clean emission aftertreatment module
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 shift modes (Manual / Light / Normal / Heavy) for different working conditions
Protective transmission at low temperature (Automatic warm-up system)
Self-diagnostic & Memory of malfunction history
Minimum travel shift shock by applying proportional controlling modulation valve / Self adjusting Clutch gap
Kick-down button & FNR switch for operating comfort

Axle

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 with relocated cooling fan & radiator, 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

Increased cooling & heating capacity with fully automatic climate control system
Tilting & telescopic steering column
Adjustable wrist rest for reduced operating stress
Multiple storage compartments
AM/FM Radio with MP3 interface and USB input and bluetooth hands-free
Improved ladder with 20 degree incline and large, deep tread, aluminum cast steps for safer access and exit from the cab

Advanced 5.7" Color Monitor with Touch Screen

Easy-to-read new color LCD display equipped with natural screen movement
Newly designed multimedia function for an enjoyable work experience
Auto boom kick out and bucket positioner - fully adjustable from within the cab
Integrated load weighing 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

The tilting transmission and hydraulic oil coolers swing open for easy access and regular 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

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PRECISION & PERFORMANCE

Innovative hydraulic system technologies make the 9A series wheel loaders fast, smooth and easy to control. 9A series is designed for maximum performance to keep the operator working productively.



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Improved Durability & Reliability



An enhanced axle improves driving over variable ground conditions. Self-adjusting brakes automatically regulate disc clearance, reduce service time and improve brake reliability and performance. The new load sensing hydraulic system with a variable displacement piston pump and closed center main control valve provide efficient hydraulic power and additional energy savings.

Variable Operating Modes



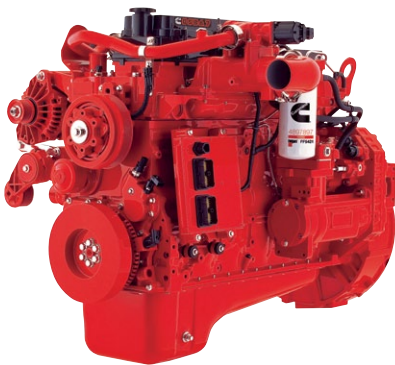
9A series wheel loaders are designed to allow the operator to customize the machine's engine power, automatic transmission shift timing and clutch cut-off activation based on the job condition and personal operator preference. Convenient rotary type switches allow for easy adjustment of the engine power mode, transmission power shift mode, and clutch cut-off mode. Additionally, the optional ride control system has shock absorbing accumulators that cushion the boom, improve operator comfort and reduce material loss. The versatility of the 9A 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
 E (Economy) Mode : Light duty work

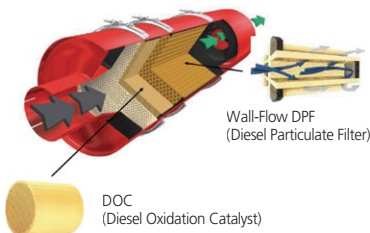
4 Mode Transmission Power Shift System
 M (Manual) Mode
 Auto L (Light) Mode : Light duty & long distance carry
 Auto N (Normal) Mode : General excavating & loading
 Auto H (Heavy) Mode : Heavy duty excavating & loading

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



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 Tier 4 interim and EU Stage III-B.



DPF - Clean Emission Aftertreatment Module
 DPF - Robust Clean Emission Aftertreatment Module - contains a DOC (Diesel Oxidation Catalyst) and DPF (Diesel Particulate Filter). High efficient DPF reduces more than 90% of particulate matter. Regeneration, the process by which soot is removed from DPF, is automatically done in both passive and active way depending on the soot level and does not interrupt the daily machine operation. The operator can also initiate regeneration manually or disable regeneration on the job.

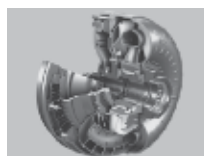


VGT (Variable Geometry Turbocharger)
 Newly designed VGT with electric actuator delivers optimum air flow resulting in cleaner exhaust gas, quick transient acceleration and improved fuel economy by combining the benefits of low & high engine speed.



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 faults are recorded and accessible through the monitor.



Complete with a New 5 Speed & Lock up Clutch (Option)

By using the 5 speed & Lock up Clutch, the operator can enjoy both the reduction of consumption and the use of various gears depending on the working condition.

OPERATOR COMFORT

Operating a 9A series wheel loader is unique to every operator. Operators can fully customize their work environment and operating preferences to fit their individual needs.



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Wide and Convenient Cab

The newly designed cabin has more space, a wider field of view and operator comfort. The front windshield is rounded and 17% wider than our previous series. Special attention was given to a clean, open and convenient interior with wide visibility of the machine surroundings and the job at hand. This well-balanced combination of cab ergonomics puts the operator in a perfect position to work safely and conveniently. The 9A 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 at the front and rear windows and the PTC (electric pre-heater) makes working in cold weather more comfortable.

Operator Comfort

In the 9A series cabin you can easily adjust the steering column and wrist rest to best suit 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 and rear window allow the operator to reduce glare and improve visibility. Heated side mirrors feature built-in hot wires for quick defrosting in cold weather conditions.



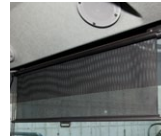
Tilting / telescopic steering column



Wrist rest



FNR switch



Rear sunshade (Option)



Heated side mirrors (Option)



AM/FM Radio with MP3 and Bluetooth Hands-free / AC control

Reduced Stress

Hyundai's 9A series cabin offers many amenities, additional space and a comfortable seat to minimize stress of the operator. A powerful climate control system provides the operator with optimum air temperature. An advanced audio system with AM/FM stereo, MP3 interface and USB input, plus remotely located controls, is perfect for listening to your favorite music.

Smart Key System (Option)



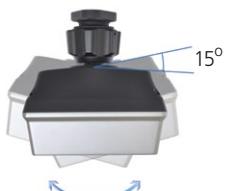
User authentication and anti-theft system are reinforced with smart key system (optional). This allows the operator to start the engine with the push of a starter button rather than inserting a key into the ignition.

Advanced Color Monitor

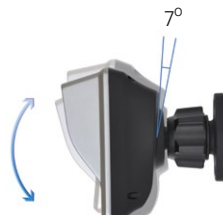


The advanced new monitor with 5.7-inch wide color LCD with touch screen allows the operator to easily and efficiently control the machine. The operator can adjust boom kick-out and bucket position via overhead switches while monitoring the adjustment settings through the monitor. An integrated load weighing system that contributes to improved work efficiency can also be viewed through the monitor. Self-diagnostics, color rear-view camera maintenance check lists and start-up 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 to reduce glare and position according to operator preference. Also, the newly designed multimedia menu provides a music & video player function for an enjoyable work experience.

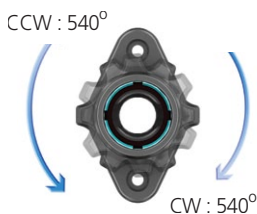
Monitor Tilt Range



Horizontal
Total : 30°



Vertical
Total : 14°



PROFITABILITY

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



*Photo may include optional equipment.



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.



Remote-mounted Cooling Fan

The remote mounted, hydraulically powered cooling fan regulates fan speed according to working temperatures for coolant, intake air, transmission oil and hydraulic oil. The fan drive with variable piston pump contributes to reduce fuel consumption and improve cooling capacity. The fan is designed to auto reverse periodically or manually reverse to keep debris from accumulating in the coolers.



Easy Access

The tilting transmission and hydraulic oil coolers swing open for easy access and regular maintenance, and the rear door can be open to over 90 degrees. Conveniently located 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 in the 9A series.

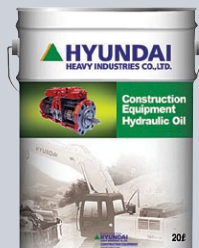


Full Fenders and Mud Guards (Option)

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



Hydraulic filter
(1,000 hr)



Hydraulic Oil
(5,000 hr)

Extended Life Components

The 9A 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.

Specifications & Dimensions

ENGINE

Maker/Model	CUMMINS QSB6.7
Type	Watercooled, 4-cycle, turbocharged, charge aircooled direct injection, electronic controlled diesel engine
Gross power	255 HP (168 kW) / 2,100rpm
Net power	222 HP (166 kW) / 2,100rpm
Maximum torque	97 kg-m (700 lb-ft) / 1,500rpm
No. of cylinders	6

Bore x Stroke	107 mm (4.21") x 124 mm (4.88")
Displacement	6.7ℓ (409 cu in)
Compression ratio	17.3 : 1
Air cleaner	Dry, two stage dual elements
Alternator	24V, 70 Amp
Battery	2 x 12V, 130 Ah.
Starting motor	24V, 7.8 kW

※No derating for continuous operating required up to 2,652m (8,700ft). This engine meets the EPA(Tier 4 interim) / EU(Stage III-B) 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)
	3rd	24.0 (14.9)
	4th	38.4 (23.9)
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	± 12° (total 24°)

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

HYDRAULIC SYSTEM

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

Bucket Controls	Type	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") HL760-9A Tilt 1-160 mm (6.2") x 530 mm (20.8") HL760XTD-9A 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 disk brake
Emergency Brake	When brake oil pressure drops, indicator light alerts operator and parking brake automatically applies.

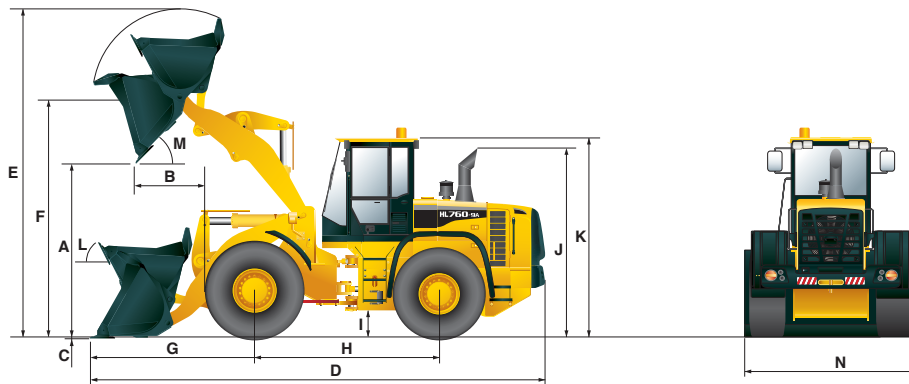
SERVICE REFILL CAPACITIES

Fuel tank	327 liters (86.4 USgal)
Cooling system	43 liters (11.3 USgal)
Crankcase	18 liters (4.8 USgal)
Transmission	32 liters (8.5 USgal)

OVERVIEW

Description	UNIT	HL760-9A	HL760XTD-9A
Operating weight	kg (lb)	18,350 (40,450)	19,150 (42,220)
Bucket capacity	Heaped	m ³ (yd ³) 3.3 (4.3)	3.3 (4.3)
	Struck	m ³ (yd ³) 2.8 (3.7)	2.8 (3.7)
Breakout force-bucket	kg (lb)	16,230 (35,780)	15,820 (34,880)
Tipping load	Straight	kg (lb) 14,300 (31,530)	12,690 (27,980)
	Full turn	kg (lb) 12,410 (27,360)	10,940 (24,120)

DIMENSIONS



Description	UNIT	HL760-9A	HL760XTD-9A
Bucket Type	General purpose bolt-on cutting edge		
A. Dumping clearance at max. 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')
	7ft height	mm (ft-in)	1,790 (5' 10")
C. Digging depth	mm (in)	90 (3.5")	86 (3.4")
D. Overall length	on ground	mm (ft-in)	8,100 (26' 7")
	at carry	mm (ft-in)	8,030 (26' 4")
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

Type	Load sensing hydrostatic articulated steering	
Pump	Piston pump, 126 liters/min (33.3 gal/min)	
Relief Valve Setting	250 kg/cm ² (3,555 psi)	
Cylinder	Type	Double acting
	Bore x Stroke	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

Type	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	HL760-9A	HL760XTD-9A
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")
L. Roll-back angle	on ground	deg	42
	at carry	deg	47
M. Dump angle	deg	47	47
Clearance circle	mm (ft-in)	13,130 (43' 1")	13,560 (44' 6")
N. Overall width	with bucket	mm (ft-in)	2,900 (9' 6")
	without bucket	mm (ft-in)	2,770 (9' 1")

