HL740-9A

With Tier 4 Interim Engine installed

MOVING YOU FURTHER

HYUNDAI HEAVY INDUSTRIES

HYUNDAI HL740-9A (S 40 -

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!*



HL740-9A

Machine Walk-Around

Reliable Main Components

Engine Technology

Proven, reliable, fuel efficient, low emission, low noise Cummins Tier 4 Interim & EU Stage IIIB 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

DOC - 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

HL740.9/

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 environment 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

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.



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 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 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, improves operator comfort and reduces 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: Less power loss in touque converter and lower temperature on brake side



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.

DOC - Clean Emission Aftertreatment Module

Reduces Particulate Matter (PM) through a chemical reaction with no cleaning or maintenance required. A DOC(Diesel Oxidation Catalyst) consists of a catalytic coating on a cordierite or metallic substrate for oxidizing exhaust particulate matter. It operates in a passive-only mode and can act as a stand alone aftertreatment solution for those engines requiring a moderate PM reduction.

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 at low & high engine speed.



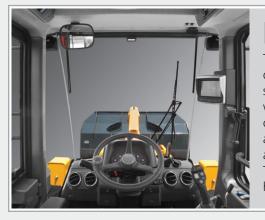
Fully Automatic Transmission

Fully automatic transmission designed for minimum 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 faults are recorded and accessible through the monitor.

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.

*Photo may include optional equipment.



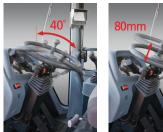
Wide and Convenient Cab

The newly designed cabin was conceived for 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 of visibility on 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 preheater) 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 of 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 in cold weather conditions.







Wrist rest



FNR switch (Option)



Rear sunshade (Option)



Heated

(Option)

side mirrors



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

Tilting / telescopic steering column

Reduced Stress

Hyundai's 9A series cabin offers lots of 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 with MP3 interface and USB input, plus remotely located controls is perfect for listening to music favorites.

Smart Key System (Option)



User authentication and antitheft system are reinforced with smart key system (optional).

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, newly designed multimedia menu provides a music & video player function for an enjoyable work experience.

Monitor Tilt Range



Horizontal Total : 30°



Vertical Total : 14^o





PROFITABILITY

9A 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.



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 70 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	Bore x Stroke	107 mm (4.21") x 124 mm (4.88")
Туре	Watercooled, 4-cycle, turbocharged,	Displacement	6.7 l (409 cu in)
туре	charge aircooled direct injection, electronic controlled diesel engine	Compression ratio	17.3 : 1
Cross pouror		Air cleaner	Dry, Two stages dual elements
Gross power	158 HP (118 kW) / 2,100rpm	Alternator	24V, 70 Amp
Net power	156 HP (116 kW) / 2,100rpm	, accinator	
Maximum torque	82 kg·m (591 lb·ft) / 1,500rpm	Battery	2 x 12V, 92 Ah.
No. of cylinders	6	Starting motor	24V, 7.8 kW

% No derating for continuous operating required up to 3,658m (12,000ft). This engine meets the EPA(Tier III) / EU(Stage III-A) Emission regulation.

TRANSMISSION

Torque converter type	3-elements, single-stage single-phase		
Tire	20.5-25, L3		
	and the second sec		

%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	6.9 (4.3)
	2nd	12.5 (7.8)
	Зrd	24.1 (15.0)
	4th	39.5 (24.5)
Reverse	1st	7.2 (4.5)
	2nd	13.1 (8.1)
	Зrd	25.3 (15.7)

AXLES

Drive system	Four-wheel drive system
Mount	Rigid front axle and oscillating rear axle
Rear axle oscillation	\pm 12° (total 24°)

Hub reduction	Planetary reduction at wheel end	
Differential	Conventional	
Reduction ratio	21.53	

HYDRAULIC SYSTEM

Туре	Load-sensing hydraulic system
Pump	Variable axial piston type, 155 lpm (40.9 gal/min) @governed rpm
Control valve	2spool (Bucket, Boom) 3spool (Bucket, Boom, Aux) Pilot pressure controlled type System pressure : 280 kgf/cm ² (3.982PSI)

Bucket Type Controls		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.	
Cylinders		Type : Double acting No. of cylinders-bore x stroke;	
Lift HL740-9A Tilt HL740-9A		2-ø110 mm x 738 mm (4.3" x 29.5") 1-ø125 mm x 505 mm (4.9" x 19.9")	
Cycle Time		HL740TM-9A	
Raise(with load) Dump Lower(empty) Total		5.5 sec 1.1 sec 3.0 sec 9.6 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	220 liters (58.1 USgal)
Cooling system	34 liters (9.0 USgal)
Crankcase	18 liters (4.8 USgal)
Transmission	25 liters (6.6 USgal)

STEERING SYSTEM

Туре		Load-sensing hydrostatic articulated steering	
Pump		Piston pump, 155 lpm (40.9 gal/min) @governed rpm	
Relief Valve Setting		210 kg/cm (2,986 psi)	
Cylinder Type Bore x Stroke		Double acting 65mm x 429mm (2.6" x 16.9")	
Steering Angle		40° (each direction)	

Features

- Center-point frame articulation. - Tilt and telescopic steering column.

Front axle	24 liters (6.3 USgal)
Rear axle	23 liters (6.1 USgal)
Hydraulic tank	142 liters (37.5 USgal)
Hydraulic system (including tank)	175 liters (46.2 USgal)

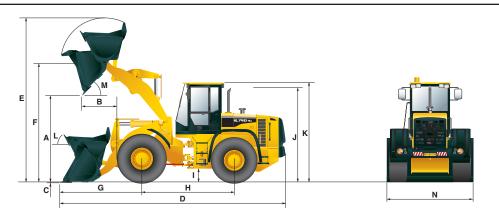
OVERVIEW

Description		UNIT	HL740-9A	HL740XTD-9A	HL740TM-9A
Operating weight		kg (lb)	12,700 (28,000)	13,000 (28,660)	13,300 (29,320)
Bucket capacity	Heaped	m³(yd³)	2.3 (3.0)	2.3 (3.0)	2.3 (3.0)
	Struck	m³(yd³)	2.0 (2.6)	2.0 (2.6)	2.0 (2.6)
Breakout force-bucket		kg (lb)	11,250 (24,800)	11,090 (24,450)	10,830 (23,880)
Tipping load	Straight	kg (lb)	9,870 (21,760)	8,810 (19,420)	8,150 (17,970)
	Full turn	kg (lb)	8,490 (18,720)	7,640 (16,840)	7,000 (15,430)

DIMENSIONS

TIRES

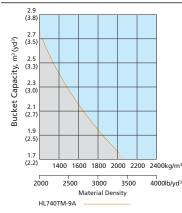
Туре	Tubeless, loader design tires
Standard	20.5-25, 16 PR, L3
Options include	17.5-25, 12 PR, L3
	20.5-25, 16 PR, L2
	20.5 R25 XHA*
	20.5-25, 16 PR, L5
	23.1-26, 16.PR, LS2



	Description			111 740 04		111 740 784 04
De	Description		UNIT	HL740-9A	HL740XTD-9A	HL740TM-9A
	Bucket Type		General purpose bolt-on cutting edge			
А.	Dumping clearance at max. height and 45° dump angle.		mm (ft-in)	2,785 (9' 2")	3,210 (10' 6")	2,840 (9' 4")
Β.	Reach	Full lift	mm (ft-in)	1,025 (3' 4")	1,020 (3' 4")	1,330 (4' 4'')
		7ft height	mm (ft-in)	1,530 (5')	1,890 (6' 2")	1,805 (5' 11")
C.	Digging depth		mm (in)	90 (3.5")	130 (5.1")	100 (3.9")
D	Overall length	on ground	mm (ft-in)	7,345 (24' 4'')	7,785 (25' 6")	7,570 (24' 10")
D.		at carry	mm (ft-in)	7,285 (23' 11")	7,735 (25' 5")	7,370 (24' 2")
E.	Overall height (fully raised)		mm (ft-in)	5,120 (16' 10")	5,540 (18' 2")	5,260 (17' 3")
F.	Bucket pivot max. height		mm (ft-in)	3,820 (12' 6")	4,240 (13' 11")	3,980 (13' 1")

Description		UNIT	HL740-9A	HL740XTD-9A	HL740TM-9A	
G.	6. Front overhang		mm (ft-in)	2,480 (8' 2")	2,890 (9' 6")	2,715 (8' 11")
Н.	. Wheelbase		mm (ft-in)	2,900 (9' 6")	2,900 (9' 6")	2,900 (9' 6")
I.	Ground clearance		mm (ft-in)	417 (1' 4")	417 (1' 4")	417 (1' 4")
J.	Height over exhaust		mm (ft-in)	3,024 (9' 11")	3,170 (10' 5")	3,024 (9' 11")
К.	Height over cab		mm (ft-in)	3,260 (10' 8")	3,260 (10' 8")	3,260 (10' 8")
L.	Roll-back angle	on ground	deg	42	42	50
		at carry	deg	47	49	54
M.	Dump angle		deg	48	47	50
	Clearance circle		mm (ft-in)	11,620 (38' 1")	12,000 (39' 4")	11,665 (38' 3")
N.	Overall width		mm (ft-in)	2,600 (8' 6")	2,600 (8' 6")	2,550 (8' 4")

BUCKET SELECTION GUIDE



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, 820 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

OPTIONAL EQUIPMENT

24-volt to 12-volt DC converter Climate control: - air conditioner only - heater only Beacon light, rotating Auxiliary, 2 working lights on front roof (Xenon working lights) Auxiliary, 2 working lights on rear roof 3 piece cutting edge, bolt-on type Secondary steering system

- transmission gear range indicator - job time and distance - temperature (coolant,

- hydraulic oil, T/M oil)
- Lighting 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 rear roof
- Switches
- work load
- clutch cut-off
- hazard
- Ignition key, start/stop switch
- main light (illumination and head light)
- parking
- rear wiper & washer
- work light - battery mater switch
- pilot cut-off

Fire extinguisher

600 kg (1,320 lb)

(2spool & 3spool)

Mud guard

Operator suit

Ride control system

High lift arrangement with

optional counterweight,

Hydraulic control Fingertip

with travel switch (FUR)

3rd spool for aux function joystick

Heated rear view mirrors (2 outside)

- Starter, electric
- Starting and charging system
- (24-volt) Cab
- Cab, ROPS(ISO3471)/FOPS(ISO3449) (sound suppressed and

pressurized) with - cigar lighter & ashtray

SUPPLEMENTAL SPECIFICATIONS

Description

17.5-25 12PR L2

17.5-25 12PR L3

20.5-25 16PR L2

17.5 R25 XHA*

20.5 R25 XHA*

Change in operating

weight kg (lb)

-308 (-679)

-248 (-547)

-64 (-141)

-160 (-353)

+507 (+1,118)

- coat hook
- Automatic climate control
- air conditioner & heater
- defroster
- intermittent wiper and
- washer, front and rear
- personal storage space:
- holder, can and cup
- rear view mirrors (1 inside)
- Rear view mirrors (2 outside)
- 2" retractable seat belt &
- adjustable suspension seat with armrests
- tilt / telescopic steering column
- steering wheel with knob
- roller type sunshade
- (front window)
- tinted safety glass Magazine pocket
- Pedals
- one accelerator pedal
- one brake pedal
- Rubber floor mat
- Wrist rest

Radio/USB plaver

Engine

Seat

Antifreeze Engine, Cummins QSB6.7

- 2" static seat belt &

suspension(vinyl)

suspension

- 3" static seat belt &

adjustable mechanical

adjustable mechanical

- 2" retractable seat belt &

adjustable air suspension (heated)

- low Emission Diesel, Tier4 Interim, EU Stage IIIB 3 operating mode - power/standard/economy Engine enclosure, lockable Engine fuel priming pump Fan guard Fuel/water separator Fuel warmer DOC

Rain cap, engine air intake Radiator (deaeration type) Starting aid (air intake heater) Water sensor on fuel filter

Power Train

Brakes : Service, enclosed wet-disc Parking brake Torque converter Transmission, computer-controlled, electronic soft shift, auto-shift and kick down-shift features included Transmission oil cooler

Hydraulics

Boom kickout, automatic Bucket positioner, automatic Diagnostic pressure taps Hydraulic system -2 spool, single leverm pilot coutrol

for boom and bucket actvation Steering, load-sensing Remote cooling fan,

hydraulically-driven, temperature sensing type

load-40° turn kg (lb)

-190 (-420)

-150 (-330)

-40 (-90)

-100 (-220)

+310 (+680)

Others

Change in static tipping Change in static tipping

load-straight kg (lb)

-220 (-480)

-170 (-375)

-45 (-100)

-110 (-240)

+360 (+790)

Articulation locking bar 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/rear) Guard, bucket cylinder rod Hydraulic oil level sight gauge License plate bracket Lift and tie-down hooks Steering stops, cushioned Tires(20.5-25, 16PR,L3)

Transmission oil level sight gauge Vandalism protection caplocks

Tires[.] - 17.5 - 25, 12PR, L2 - 17.5 - 25, 12PR, L3 - 20.5 - 25, 16PR, L2 - 17.5 R25 XHA - 20.5 R25 XHA - 23.1 - 26, 16PR, LS2

Tool kit Tooth, 1 piece, bolt-on type Tooth, 2 piece, bolt-on type Guards - crankcase - transmission Wheel chock HI-Mate (Remote Management System) Rear view camera Dual-brake pedal Roller type sunshade (rear window) License plate & lamp Pre-cleaner engine air intake Limited slip differential

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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