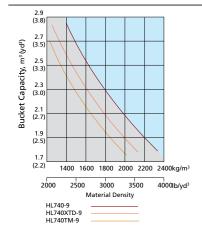
## **BUCKET SELECTION GUIDE**



## **STANDARD EQUIPMENT**

## 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

Electrical system

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

- transmission gear range - cigar lighter & ashtray indicator - job time and distance temperature(coolant, hydraulic oil, T/M oil) Lighting system - 1 LED dome light - 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 - 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 Starter, electric Starting and charging system (24-volt) Cab Cab. ROPS(ISO3471)/FOPS(ISO3449) (sound suppressed and pressurized) with :

### - 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 <u>Engine</u> Antifreeze Engine, HYUNDAI HE6.7 - low Emission Diesel, Tier-III

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)

3 operating mode power/standard/econo Engine enclosure, lockable Engine fuel priming pump Fan guard Fuel/water separator Fuel warmer Muffler, under hood with large exhaust stack 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 quick-shift features included Transmission oil cooler **Hydraulics** Boom kickout, automatic Bucket positioner, automatic Diagnostic pressure taps Hydraulic system, - 2 spool, single lever, pilot control for boom and bucket actuation Steering, load-sensing Remote cooling fan,

hydraulically-driven, temperature sensing type <u>Others</u> 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 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 site level

Change in static tipping Change in static tipping

load-straight kg(lb)

-220 (-480)

-170 (-375)

-45 (-100)

-110 (-240)

+360 (+790)

load-40° turn kg(lb)

-190 (-420)

-150 (-330)

-40 (-90)

-100 (-220)

+310 (+680)

Ergonomically located and slip Vandalism protection caplocks

## **OPTIONAL EQUIPMENT**

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

## HYUNDAI CONSTRUCTION EQUIPMENT

## Head Office (Sales office)

First tower, 55, Bundang-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea





# **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!

# HL740-9 \*Photo may include optional equipment.

## **Reliable Main Components**

## Engine Technology

Proven, reliable, fuel efficient, low noise HYUNDAI HE 6.7 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. Minimum travel shift shock by applying proportional controlling modulation valve / Self adjusting clutch gap. Kick-down button & FNR switch for operating comfort.

## Axles

Limited slip differential(front & rear) for easy driving on variable ground condition(opt.) Self adjusting brake & wheel speed 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, 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. 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

Easy-to-read new color LCD display. 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

Reversible remote cooling fan for the minimum fuel consumption and low noise. Ground level of service points and sight gauges for easy maintenance. Extended life of hydraulic filter & oil to reduce operating costs.

# HL740-9

## Machine Walk-Around



every operator. Operators can fully customize

\*Photo may include optional equipn



## **Spacious 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.



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 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 mount to reduce glare and position according to operator preference.





FNR switch

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 operator working productively.

\*Photo may include optional equipment.

# 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 clean-out. Additionally, the redesigned steering cylinder lug is 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 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





**Eco-friendly** HYUNDAI HE 6.7 ENGINE

HYUNDAI HE 6.7 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. HYUNDAI HE 6.7 engine complies with current emissions standards including EPA Tier3 and EU Stage III-A.

## 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**

The 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.

series.



# 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. 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.



# **Extended Life Components**

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

Hydraulic filter (1,000 hr)

Hydraulic Oil (5,000 hr)

operator time and money.



# 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



# 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.

# **Specifications & Dimensions**

## ENGINE

Maker/Model	HYUNDAI HE 6.7 ENGINE
Туре	Watercooled, 4-cycle, turbocharged, charge aircooled direct injection, electronic controlled diesel engine
Gross power	145 HP(108 kW) / 2,100rpm
Net power	143 HP(107 kW) / 2,100rpm
Max. power	146 HP(109 kW) / 1,800~2,000rpm
Maximum torque	69 kg·m(499 lb·ft) / 1,400rpm
No. of cylinders	6
Bore x Stroke	107 mm (4.21") x 124 mm (4.88")
Displacement	6.7ℓ (409 cu in)
Compression ratio	17.2 : 1
Air cleaner	Dry, Two stages dual elements
Alternator	24V, 70 Amp
Battery	2 x 12V, 100 Ah.
Starting motor	24V, 4.8 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	20.5-25, 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	6.7(4.2)
	2nd	12.2(7.6)
	3rd	23.8(14.8)
	4th	39.0(24.2)
Reverse	1st	7.1(4.4)
	2nd	12.9(8.0)
	3rd	25.1(15.6)

## 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	22.0

## HYDRAULIC SYSTEM

Туре		Load	-sensing hydraulic system		
Pump		Variable axial p	biston type, 163 liters/min (43.1 gal/min)		
Control valve		Pilo	2spool (Bucket, Boom, pool (Bucket, Boom, Aux) t pressure controlled type e : 280 kgf/cm <sup>2</sup> (3.982PSI)		
Bucket Controls	Туре	Pilot operated lift and tilt circu single-lever(joystick) control standa			
	Lift Circuit	ra Can	valve has four functions ; ise, hold, lower and float. adjust automatic kickout from horizontal to full lift.		
	Tilt Circuit	Car	valve has three functions ; tilt back, hold and dump. n adjust automatic bucket ner to desired load angle.		
Cylinders Lift HL740-9/740XTD-9/740TM-9 Tilt HL740-9/740XTD-9 HL740TM-9		Type : Double acting No. of cylinders-bore x stroke; 2-ø110 mm x 738 mm(4.3" x 29.5") ø125 mm x 505 mm(4.9" x 19.9") 2-ø95 mm x 745 mm(3.7" x 29.3")			
Cycle Time		HL740-9 / HL740XTD-9	HL740TM-9		
Raise(with load) Dump Lower(empty) Total		5.5 sec 1.1 sec 3.0 sec 9.6 sec	5.5 sec 1.6 sec 3.0 sec 10.1 sec		

## **AIR CONDITIONING SYSTEM**

The air condition system for the machine contains the fluorinated greenhouse gas with global warming potential of R134a. (Global Warming Potential : 1430) The system hold 0.75kg refrigerant consisting of a CO<sub>2</sub> equivalent 1.07kg metric tonne. For more information, Please refer to the manual.

## BRAKES

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

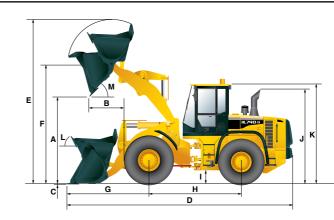
## SERVICE REFILL CAPACITIES

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)

## **OVERVIEW**

Description		UNIT	HL740-9	HL740XTD-9	HL740TM-9
Operating weight		kg (lb)	12,000 (26,460)	12,300 (27,100)	12,600 (27,780)
Ducket conscitu	Heaped	m³(yd³)	2.3 (3.0)	2.3 (3.0)	2.3 (3.0)
Bucket capacity	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)
Tinning load	Straight	kg (lb)	9,600 (21,160)	8,580 (18,920)	7,950 (17,530)
Tipping load	Full turn	kg (lb)	8,300 (18,300)	7,440 (16,400)	7,000 (15,430)

## DIMENSIONS



De	scription		UNIT	HL740-9	HL740XTD-9	HL740TM-9	
	Bucket Type		General purpose bolt-on cutting edge				
А.	Dumping clearar	ice at max.	mm (ft-in)	2,785 (9' 2")	3,210 (10' 6")	2,840 (9' 4")	
	height and 45° dump angle.			,,		_, ( ,	
В	Reach	Full lift	mm (ft-in)	1,025 (3' 4")	1,020 (3' 4")	1,330 (4' 4")	
В. К	NedCII	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	Querell length	on ground	mm (ft-in)	7,380 (24' 3")	7,830 (25' 8")	7,660 (25' 2")	
D. Ov	Overall length	at carry	mm (ft-in)	7,320 (24')	7,780 (25' 6")	7,460 (24' 6")	
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")	

## **STEERING SYSTEM**

Туре		Load-sensing hydrostatic articulated steering	
Pump		Piston pump, 163 ℓ /min (43.1 gal/min)@governed rpm	
Relief Valve	e Setting	210 kg/cm <sup>2</sup> (2,986 psi)	
Cylinder Type Bore x Stroke		Double acting 65mm x 429mm(2.6" x 16.9")	
Steering A	ngle	40°(each direction)	

Features

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

Front axle	21.8 liters (5.8 USgal)
Rear axle	21.8 liters (5.8 USgal)
Hydraulic tank	152 liters (40.2 USgal)
Hydraulic system (including tank)	184 liters (48.6 USgal)

## 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, 16PR, LS 2		



Des	Description			HL740-9	HL740XTD-9	HL740TM-9
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)	3,170 (10' 5")	3,170 (10' 5")	3,170 (10' 5")
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.	N. Overall width		mm (ft-in)	2,600 (8' 6")	2,600 (8' 6")	2,550 (8' 4")