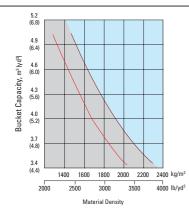
BUCKET SELECTION GUIDE



SUPPLEMENTAL SPECIFICATIONS

		1	
Description	Change in operating	Change in static tipping	Change in static tipping
Description	weight kg(lb)	load-straight kg(lb)	load-40° turn kg(lb)
23.5-25 20PR L3	-472 (-1041)	-350 (-770)	-310 (-680)
26.5-25 28PR L3	-4 (-9)	-3 (-7)	-2 (-4)
26.5-25 32PR L3	+164 (+362)	+120 (+265)	+110 (+240)
26.5 R25 XHA*	+108 (+238)	+80 (+175)	+70 (+155)

STANDARD EQUIPMENT

HI 770XTD-9S

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, 1100 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

on front/rear roof

Beacon light, rotating

OPTIONAL EQUIPMENT

24-volt to 12-volt DC converter

- 3.9 m3 1 piece tooth, bolt-on type

- 3.9 m³ 1 piece tooth, bolt-on type

- 3.9 m³ 1 piece tooth, bolt-on type

- 5.0 m³ 1 piece tooth, bolt-on type

- 5.2 m³ Cutting edge, bolt-on type

- 2.7 m³ Spade nose & segment, rock

- 3.7 m³ Spade nose & segment, rock

- Pallet Fork, Pin on type

Secondary steering system

Additional, 4 working lights

- engine rpm

- transmission gear range 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 grill

Switches - clutch cut-off

- Ignition key, start/stop switch - main light

(illumination and head light) - parking

- rear wiper & washer

- work light - battery master switch Starter, electric

Starting and charging system(24-

ROPS(ISO 3471) / FOPS(ISO 3449) (sound suppressed and pressurized) with:

- cigar lighter

Automatic climate control

- defroster

Personal storage space

- holder, can and cup

Rear view mirrors (2 outside) 2" static seat belt & mechanical

suspension seat with armrests Steering column, tilt Steering wheel with knob

window) Two door cab

- one accelerator pedal

- air conditioner & heater

- intermittent wiper and washer, front and rear

- console box

Rear view mirrors (1 inside)

Roller type sunshade (front

Tinted safety glass Magazine pocket

- one brake pedal Radio/USB player Rubber floor mat

Engine

Fire extinguisher

- Transmission

High lift arrangement with

1800kg (3,970lb)

Heated rear view mirrors

Reversible cooling fan

Optional counterweight,

3rd spool for auxiliary function

Extrapiping for auxiliary function

- crankcase

Mud guard

(2 outside)

Wrist rest

Engine, HYUNDAI HE8.9 - Low Emission Diesel, Tier3

Ride control system

suspension

suspension

(heated)

- 2" static seat belt &

- 2" static seat belt &

adjustable mechanical

- 3" retractable seat belt &

adjustable air suspension

Steering column, tilt and telescopic

Roller type sunshade(rear window)

adjustable mechanical

Engine fuel priming pump(Electric) 3 operating mode (power / standard / econo)

Engine enclosure, lockable

Fan guard Fuel/water separator Muffler, under hood with large

exhaust stack Rain cap, engine air intake 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 features included

Transmission oil cooler

Hydraulics

Bucket positioner, automatic Diagnostic pressure taps Hydraulic oil cooler Hydraulic system,

for boom and bucket actuation Remote cooling fan,

temperature sensing type

Others

Articulation locking bar Bucket

- 4.0 m3 Cutting edge, bolt-on type 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

- handrails

- ladders - platforms

resistant, left & right

- steps

Fenders (front / rear) Hydraulic oil level sight gauge Lift and tie-down hooks Loader linkage, sealed Z-Bar design Tires(26.5-25,20PR,L3) Transmission oil site level

Vandalism protection caplocks

2 spool, single lever, pilot control

hydraulically-driven,

- Finger tip lever - 2 spool

- Finger tip lever - 3 spool

- 2 Lever(Joystick) - 3 spool

Pre-cleaner, engine air intake License plate & lamp

- Mobile / Satellite

- 26.5 - 25, 28PR, L3 Rearview camera - 26.5 - 25, 32PR, L3 - 26.5 - 25, 20PR, L3

- 26.5 R25. L3* - 26.5 R25 XHA* Tool kit

Wheel chock

- 26.5 - 25, 20PR, L5

RCV control

Hi-Mate (Remote Management System)

Limited slip differential Quick coupler piping Autogrease system Fuel Warmer

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

A HYUNDAI CONSTRUCTION EQUIPMENT

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2019. 09 Rev. 9





Pride at Work

Hyundai Construction Equipment 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!



HL770-98

Machine Walk-Around

Reliable Main Components

Engine Technology

Well proven, reliable, fuel efficient, low noise HYUNDAI Tier-III HE8.9 engine. 3 operating mode (Power / Standard / Econo).

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

Kick-down

Self-adjusting & wheel speed wet disc brake

Improved Durability

Long-life cooling system, designed for additional durability, resistant to thermal shock, impulse and vibration.

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.

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, non-slip for safer access and exit from the cab.

Advanced 5.7" Color Monitor

Easy-to-read new color LCD display.

Self diagnostic & monitoring system with active display of 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.





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 9S 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, Option) make working in cold weather more hospitable.

Operator Comfort

In the 9S 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. Roller type sunshades on the front 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(OPT)

Reduced Stress

Work is stressful enough. Your work environment should be stress free. Hyundai's 9S 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. 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.

Monitor Tilt Range





Precision & Performance

Innovative hydraulic system technologies make the 9S series wheel loader fast, smooth and easy to control. 9S 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. Service and clean-out are easier on the 9S 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

Variable Operating Modes



9S series wheel loaders are designed to allow the operator to customize 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 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 9S 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 HCEC HE8.9 Engine

The HYUNDAI HE8.9 electronic control engine combines fullauthority electronic controls with the reliable performance. The combination of high pressure common rail system and advanced incylinder combustion technology results in increased power, improved transient response and reduced fuel consumption. And HYUNDAI HE8.9 uses advanced electronics controls to meet the emission standards (EPA Tier3, EU StagellI-A)



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

*Photo may include optional equipment.

9S 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. This new fan design contributes to reduced fuel consumption and machine noise. (Option: The fan is designed to auto reverse periodically or manually reverse to keep debris from accumulating on the coolers)



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 9S series



Full Fenders and Mud Guards (Option)

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



Hydraulic O (5,000 hr)

Extended Life Components

The 9S series is designed for longer lubrication intervals and extended component life. 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	HYUNDAI HE 8.9
Туре	Watercooled, 4-cycle, turbocharged, charge aircooled direct injection, electronic controlled diesel engine
Gross power	280HP(209 kW) / 2,000rpm
Net power	266HP(198 kW) / 2,000rpm
Max. power	310HP(231 kW) / 1,600~1,700rpm
Maximum torque	148kg.m(1,070 lb.ft) / 1,400rpm
No. of cylinders	6
Bore x Stroke	114 mm (4.5") x 145 mm (5.7")
Displacement	8.9ℓ (543 cu in)
Compression ratio	17.8 : 1
Air cleaner	Dry, two stage dual elements
Alternator	24V, 70 Amp
Battery	2 x 12V, 160 Ah.
Starting motor	24V, 7.8 kW

% No derating for continuous operating required up to 1,829m (6,000ft). This engine meets the EPA(Tier \parallel) / EU(Stage \parallel -A) Emission regulation.

TRANSMISSION

Torque converter type	3-elements, single-stage single-phase
Tire	26.5-25, L3, 20PR

% 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	12.1(7.5)
	3rd	25.8(16.0)
	4th	38.0(23.6)
Reverse	1st	6.9(4.3)
	2nd	12.1(7.5)
	3rd	25.8(16.0)

AXLES

Drive system	Four-wheel drive system
Mount	Rigid front axle and oscillating rear axle
Rear axle oscillation	<u>±</u> 11° (total 22°)
Hub reduction	Planetary reduction at wheel end
Differential	Conventional
Reduction ratio	23.334

HYDRAULIC SYSTEM

Туре		Open-centered, tandem circuit system
Pump		Gear type, 434 liters/min
		(114.6 gal/min)@gal/min
Control val	ve	2 Spool (Bucket, Boom)
		3 Spool (Bucket, Boom, Aux)
		Pilot pressure controled type
System pre	ssure	210 kgf/cm² (2,990 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; 2-180 mm x 765 mm 1-200 mm x 570 mm
Cycle Time		Raise: 6.0 sec Dump: 1.4 sec Lower: 2.6 sec Total: 10.0 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 0.85kg refrigerant consisting of a CO₂ equivalent 1.22kg 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 & 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.

STEERING SYSTEM

Туре		Full hydraulic power steering
Pump		Gear, 282 liters/min (74.5 gal/min)
Relief Val	ve Setting	210 kg/cm ² (2,990 psi)
Cylinder Type Bore x Stroke		Double acting 100mm(3.7") x 480mm(18.9")
Steering Angle		40°(each direction)

Features

- Center-point frame articulation.
- Tilt and telescopic steering column.
- Load-sensing, flow amplified system.

SERVICE REFILL CAPACITIES

Fuel tank	362 liters (95.6 USgal)
Cooling system	56 liters (14.8 USgal)
Crankcase	23 liters (6.1 USgal)
Transmission	43 liters (11.4 USgal)

OVERVIEW

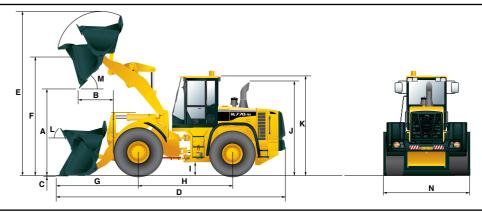
Description		UNIT	HL770-9S	HL770XTD-9S
Operating weight		kg (lb)	22,500 (49,600)	23,250 (51,260)
Pucket capacity	Heaped	m³(yd³)	4.0 (5.2)	4.0 (5.2)
Bucket capacity	Struck	m³(yd³)	3.45 (4.5)	3.45 (4.5)
Breakout force-bucket		kg (lb)	20,760 (45,770)	20,430 (45,040)
Tipping load	Straight	kg (lb)	17,400 (38,360)	15,660 (34,520)
	Full turn	kg (lb)	14,950 (32,960)	13,360 (29,450)

Front axle	51 liters (13.5 USgal)
Rear axle	40 liters (10.6 USgal)
Hydraulic tank	185 liters (48.9 USgal)
Hydraulic system (including tank)	295 liters (77.9 USgal)

TIRES

Туре	Tubeless, loader design tires
Standard	26.5-25, L3, 20PR
Options include	26.5 R25 XHA* 26.5-25, 28 PR, L3 26.5-25, 32 PR, L3 26.5-25, 20 PR, L3 26.5-25, 20 PR, L5 26.5 R25, L3*

DIMENSIONS



Description			UNIT	HL770-9S	HL770XTD-9S
Bucket Type		General purpose bolt-on cutting edge			
A.	A. Dumping clearance at max. height and 45° dump angle.			3,117 (10′ 3″)	3,570 (11′ 9″)
В.	Reach	Full lift	mm (ft-in)	1,254 (4′ 1″)	1,260 (4' 2")
		7ft height	mm (ft-in)	1,890 (6' 2")	2,250 (7′ 5″)
C.	C. Digging depth		mm (in)	98 (3.9")	130 (5.1")
D.	Overall length	on ground	mm (ft-in)	8,650 (28' 5")	9,135 (30′ 0″)
		at carry	mm (ft-in)	8,550 (28' 1")	9,050 (29' 8")
E.	Overall height (fully raised)		mm (ft-in)	5,870 (19' 3")	6,320 (20′ 9″)
F.	Bucket pivot max. height		mm (ft-in)	4,310 (14' 2")	4,760 (15′ 7″)

Description		UNIT	HL770-9S	HL770XTD-9S
G. Front overhand)	mm (ft-in)	2,940 (9' 8")	3,350 (12′ 0″)
H. Wheelbase		mm (ft-in)	3,440 (11′ 3″)	3,440 (11′ 3″)
Ground clearance		mm (ft-in)	480 (1′ 7″)	480 (1′ 7″)
J. Height over ex	Height over exhaust		3,150 (10′ 4″)	3,150 (10′ 4″)
K. Height over ca	b	mm (ft-in)	3,590 (11′ 9″)	3,590 (11′ 9″)
L. Roll-back angle	(on ground/at carry)	deg	44/49	44/50
M. Dump angle		deg	48	48
Clearance circle	2	mm (ft-in)	13,990 (45′ 11″)	14,340 (47′ 1″)
N. Overall width	with bucket	mm (ft-in)	3,100 (10′ 2″)	3,100 (10′ 2″)
N. Overall Width	without bucket	mm (ft-in)	3,100 (10′ 2″)	3,100 (10′ 2″)