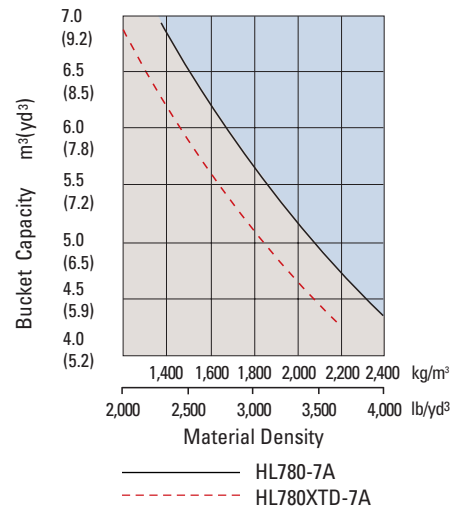


Bucket Selection Guide



Supplemental Specifications

Description	Change in operating weight kg(lb)	Change in static tipping load-straight kg(lb)	Change in static tipping load-40° turn kg(lb)
26.5-25 32PR L3	-112 (-247)	-90 (-198)	-80 (-176)
29.5-25 28PR L3	+352 (+776)	+280 (+617)	+240 (+529)
29.5-25 28PR L5	+1240 (+2,734)	+980 (+2,160)	+860 (+1,896)
29.5 R25 XHA *	+500 (+1,102)	+400 (+882)	+350 (+772)

Standard Equipment

Adjustable steering column	Drawbar, fixed	· Turn signals	Fenders, front	Steering knob
Air cleaner, double-element type (dry type with dust valve)	Fuel warmer	Lights	Frame lock	Differential
Alarm, back-up	Starting aid (air intake heater)	· Two cabin lights	Horn, electric	· Front axle (limited slip)
Alternator, 70A	Alarms, audible and visual	· Two head lights	Intermittent wiper and washers	· Rear axle (limited slip)
Anti- freeze	· Air filter clogging	· Two rear lights	Intake air heater	Tires(29.5-25, 22PR L3)
Automatic boom kickout	· Engine water temperature	· Two stop, and tail lights	Sunvisor	2 spool, single lever, pilot control for boom and bucket actuation
Automatic bucket positioner	· Hydraulic oil temperature	· Four turn signal	Ladders, left and right	Guard
Batteries, 1000 CCA, 12V(2)	· Low alternator voltage	Switches	License plate light	· crankcase
Boom lock safety valve	· Low brake oil pressure	· Clutch cut-off	Master switch	· transmission
Brake system, includes	· Low transmission oil pressure	· Emergency travel	Muffler	· Rear view mirrors(2 out side)
· Service, enclosed wet-disc	· Parking brake	· Hazard	Radiator	· Rear view mirrors(2 in side)
· Parking, disc type on front axle	Gauges	· Head light	Hydraulic oil cooler	· Rain cap
Cab, ROPS/FOPS	· Engine water temperature	· Illumination	Transmission oil cooler	engine air intake
(sound suppressed and pressurized)	· Fuel level	· Parking	External axle oil cooler	
with :	· Speedometer	· Rear washer	Seat	
Counterweight	· Voltmeter	· Rear wiper	· Adjustable deluxe suspension	
Cup holder	· T/M oil temp gauge	· Work light	· Cloth seat with armrests	
Lighter & ashtray	Indicator lights	Fan, blower	· Seat belt	
	· High beam	Fan guard	Wrist rest	

Optional Equipment

Air conditioner with heater & defroster	Rotation beacon	suspension(vinyl)	Tool kit	additional counter weight,
Cutting edge, bolt-on type	Reversible Cooling Fan System	· 3" retractable seat belt & adjustable mechanical suspension	Tires	564kg(1,240lb)
Fire extinguisher	Ride control system	· 3" retractable seat belt & adjustable air suspension	· 29.5-25 28PR L3	Valve, 3-spool
Joystick with travel switch	Rear view mirrors, heated	Sliding door window	· 29.5-25 28PR L5	Pre-cleaner
Pallet forks	Secondary steering system	Tooth, 2 pieces, bolt-on type	· 26.5-25 32PR L3	engine air intake
Quick attachment coupler	Seat		· 29.5 R25 XHA *	
Radio MP3 player	· 2" static seat belt & adjustable mechanical		Two lever	
			High lift arrangement with	

Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine shown may vary according to International standards. All US measurement rounded off to nearest pounds or inches.

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HYUNDAI WHEEL LOADER **Applied Tier 3 Engine**

HL780-7A

HYUNDAI
HEAVY INDUSTRIES CO.,LTD.

We build a better future

Hardworking Hyundai Loaders



Meet the new generation wheel loader in Hyundai.

The HL780-7A will give you the satisfaction in higher power.
Lower fuel consumption, more comfort and lower emission.

Come and experience what Hyundai has created for you by bringing power and technology.

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HL780-7A Additional Option



Reversible Fan

Reversible Hydrostat-driven fan is able to clean out dust and foreign bodies located a radiator and hydraulic oil cooler.



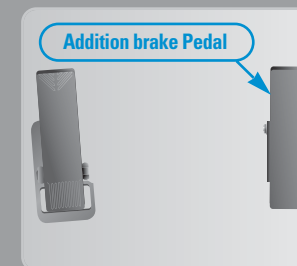
Rear View Mirror

Heated rear view mirror is added electric heating to keep mirrors free of ice and mist.



FNR Switch on Joystick Control Lever

It is possible to change the direction of travel as well as control Hydraulic system.



Dual Service Brake Pedal



■ Some of the photos may include optional equipment.

New Generation, Innovative Solution in Construction **HL780-7A**

The Centralized Display & Switch Panel

The centralized digital display shows the status and conditions of your machine at a glance. Easy-to-read gauges with an instrument panel provide constant, and accurate information.



■ Some of the photos may include optional equipment.



Control Center

The all-new, deluxe operating space is engineered with 3-D modeling for your ultimate control center. The wide, tinted and laminated front windshield has no framing cutting through to ensure excellent visibility.

Adjustable steering column



Joystick Controls

Pilot-operated controls for bucket operation by the Joystick are easy and comfortable to operate.



Finger Control Lever (Option)



FNR Switch on Joystick Control Lever (Option)

It is possible to change the direction of travel as well as controlling Hydraulic system.

Full automatic shift lever



A single lever on the left side of the steering column gives the operator fast, easy control of speed and direction. Push the lever forward to go forward, pull it back for reverse. Travelling is automatically changed from 1st stage to given stage according to travel speed and tractive effort. The operator can select two kinds of automatic modes (1st ↔ 4th, 2nd ↔ 4th). These exclusive features contribute to a step-up in productivity and reduction of operator's fatigue.

The Air Conditioning and Heating System

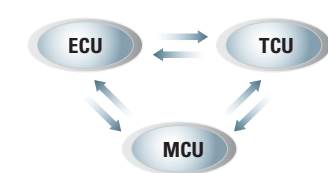


The operator can easily control the temperature and air flow. The defroster on the front windshield and rear window makes it convenient for winter working usage.

- ① Power Outlet & Cigar Jack
- ② Cup Holder & Console Box
- ③ Magazine Box
- ④ Cool & Hot Box



Up-to-Date-technology CAN System



Engine control Unit(ECU), Transmission control Unit(TCU) and Machine control Unit(MCU) realize the optimal performance through the mutual CAN communications.

Ride control system (Option)

Ride control system functions such as shock absorbers gives smooth operation without losing of the load even over a rough terrain condition. Therefore the system allows faster travelling and improved safety and productivity.



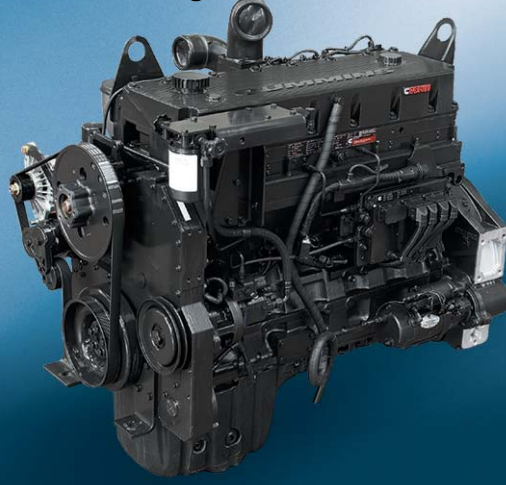
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■ Some of the photos may include optional equipment.

CUMMINS QSM11 Engine



The CUMMINS QSM11 electronic control engine combines full-authority electronic controls with the reliable performance. The combination of improved airflow and evenly dispersed fuel results in increased power, improved transient response and reduced fuel consumption. And the QSM11 uses advanced electronic controls to meet the emission standards. (EPA Tier-3, EU StageIII-A)

A Well Rounded System

Maximize the productivity of your business with HL780-7A. With our vast experience in the production of construction equipment, Hyundai is able to meet the demands of consumers.



Left and right access door



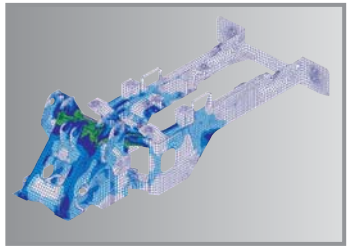
Bucket cylinder guard

This guard helps to prevent possible damage from load material.



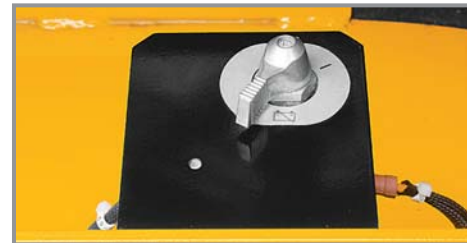
Wear plate

This close up shows the protective plating found underneath the rear of the bucket and is used to prevent excessive wear and tear when digging into material.



High-rigidity frames

Front and rear frames are designed for work in the toughest applications to provide high rigidity for the power train and loader equipment. The high-rigidity frames, together with the reinforced loader linkage, resist loading stress and shock.



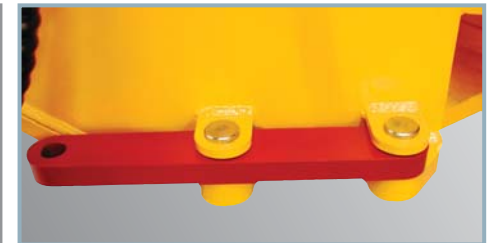
Master switch

A master switch disconnects the battery power to protect the electrical system.



Sealed loader linkage

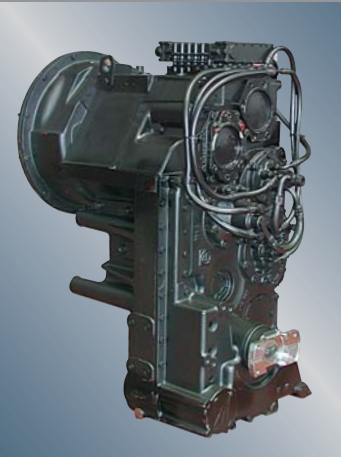
Fully protected fitting is and the sealed loader linkage with dust seals and o-ring will extend lubrication intervals remarkably.



Frame lock

Machine can be locked by this locking bar to prevent movement during transportation.

Multi Function Transmission



The newly developed transmission control represents the beating heart of transmission. The hydraulic system for gearshifts is working with proportional valves, which allow very precise control of the clutches. For each gearchange, the control unit performs a monitoring function to ensure that the specified shift curve is adhered to the range, and readjusts the shift pressure applied to the clutches accordingly. This results in smooth gearshifts-even under the load-with no traction interruptions. This helps to avoid standstill of the vehicle, sudden load changes and torque peaks under all conditions, for example application on steep terrain with full load. In addition, there is the option for the driver to make gearshifts manually.

Accessible and Serviceable

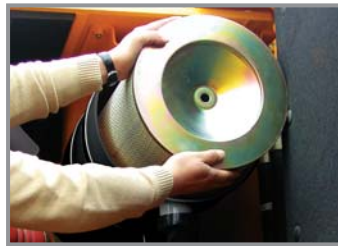
New Generation, Innovative Solution in Construction **HL780-7A**

An ideal arrangement of component parts ensures easy access and convenience for maintenance.
Highly accessible engine compartment assures fast and efficient maintenance.



Accessible grease fittings

Grease fittings are highlighted and available around the machine for the fast access when doing your service checks.



Simple air filter replacements

The air cleaner is easily replaceable by turning the wing nut on the outer shell counterclockwise.



Chromium - Plated PIN is applied

With the application of Chromium Plated PIN whose durability and precision are improved and the life cycle became longer.



Remote type drain port

It is now easier to change your engine oil, coolant and hydraulic oil with the remote drain port.



Hydraulic tank

The hydraulic tank is located behind the cab to increase the accessibility of hydraulic hoses and pipings.



Oil sight gauge

The hydraulic oil check sight gauge is installed on the side of the hydraulic tank for the convenient checks from on the ground level.



Transmission oil port

The transmission oil change port is also located for with open accessibility and comes with an anti-vandalism lock for your machine protection.



Some of the photos may include optional equipment.



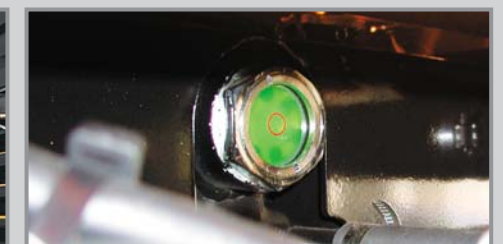
Central electric controllers & Fuse Box

Electric controllers for Hyundai loader are centralized to improve serviceability. A concentrated fuse box for easy inspection.



Cabin Air Fresh Filter

The internal pressure is maintained to be slightly higher than that of outside to exclude dust and to reduce noise levels.



Coolant Sight Gauge

The coolant sight gauge is installed on the top of radiator for convenient checks of coolant level.

Easy Access to All Engine Accessories

Here you find the engine oil check, and the main and pre-filters. The large access engine-side-panels permit easy and safe inspections. The fuel filter can be spun on and off for quick replacements.



Up-to-date hydraulic remote cooling fan



The minimum fuel consumption and low noise is realized by applying hydraulic cooling fan that senses coolant temperature, intake air temperature, transmission oil temperature and hydraulic oil temperature.

Specification



Engine

Maker/Model	CUMMINS QSM11	Bore x Stroke	125 mm (4.9") x 147 mm (5.8")
Type	Watercooled, 4 cycle Diesel, 6-Cylinders in line, direct injection, Turbocharged, Charge aircooled, Low emission	Displacement	10.8ℓ (660 cu in)
Gross power	335HP(250 kW) / 2,000rpm	Compression ratio	16.3 : 1
Net power	320HP(239 kW) / 2,000rpm	Air cleaner	Dry, two stage dual elements
Maximum power	365HP(272 kW) / 1,800rpm	Alternator	24V, 70 Amp
Maximum torque	171kg·m(1,235 lb·ft) / 1,400rpm	Battery (5HA)	2 x 12V, 160 Ah.
No. of cylinders	6	Starting motor	24V, 7.5 kW

Net power output of standard engine as installed in this vehicle(per SAE J1349) complete with fan, air cleaner, alternator, water pump, lubricating oil pump and fuel pump. No derating for continuous operating required up to 2,438m (8,000ft). This engine meets the EPA(Tier III) / EU(Stage III-A) Emission regulation.



Transmission

Torque converter type	3-elements, single-stage single-phase	Travel speed	km/h (mph)
Stall torque ratio	2.987 :1	Forward	
		1st	6.2(3.9)
		2nd	11.5(7.1)
		3rd	17.6(10.9)
		4th	34.4(21.4)
		Reverse	
		1st	6.2(3.9)
		2nd	11.5(7.1)
		3rd	23.8(14.8)

※ 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



Axles

Drive system	Four-wheel drive system	Hub reduction	Planetary reduction at wheel end
Mount	Rigid front axle and oscillating rear axle	Differential	Limited slip differential
Rear axle oscillation	±13° (total 26°)	Reduction ratio	27.0
		Axle oil cooling	External oil cooling



Hydraulic System

Type	Open-centered, tandem circuit system. Pilot-operated controls. Closed with pressure and vacuum relief.	Bucket Controls	
Pump	Vane type, 482 liters/min (127 gal/min)@governed rpm	Type	Pilot operated lift and tilt circuit, single-lever(joystick) control standard.
Control Valve	Two function valve with single or two lever controls : Optional third-function valve with auxiliary lever.	Lift Circuit	The valve has four functions ; raise, hold, lower and float. Can adjust automatic kickout from horizontal to full lift.
Relief Valve Setting	210 kg/cm² (2,990 psi)	Tilt Circuit	The valve has three functions ; tilt back, hold and dump. Can adjust automatic bucket positioner to desired load angle.
Pilot System Type	Pilot oil pressure is generated by the pilot oil supply unit.	Cylinder	Type : Double acting Lift, bore x stroke 200 mm(7.9") x 863 mm(34.0") Tilt, bore x stroke 160 mm(6.3") x 580 mm(22.8")
Relief Valve Setting	30 kg/cm²(427 psi)	Cycle Time	Raise : 6.4 sec (with load) Dump : 1.4 sec Lower : 3.0 sec (empty) Total : 10.8 sec

Specification



Brakes

Service Brakes	Hydraulically actuated, wet disc brakes actuate all 4 wheels independent axle-by-axle system. Single pedal braking including clutch cut off dual pedals option.
Parking Brake	Spring-applied, hydraulically released disc brake on front axle input shaft
Emergency Brake	When brake oil pressure drops, indicator light alerts operator and parking brake automatically applies.



Service Refill Capacities

Fuel tank	470 liters (124.2 USgal)
Cooling system	65 liters (17.2 USgal)
Crankcase	38 liters (10.0 USgal)
Transmission	43 liters (11.4 USgal)



Overview

Description	UNIT	HL780-7A	HL780XTD-7A
Operating weight	kg (lb)	29,300 (64,600)	30,000 (66,100)
Bucket capacity	Heaped	m³ (yd³)	5.1 (6.7)
	Struck	m³ (yd³)	4.3 (5.6)
Breakout force-bucket	kg (lb)	24,820 (54,720)	23,880 (52,650)
Tipping load	Straight	kg (lb)	24,130 (53,200)
	Full turn	kg (lb)	20,800 (45,850)



Steering System

Type	Full hydraulic power steering	
Pump	Vane type, 270 liters/min (65.5 gal/min)	
Relief Valve Setting	210 kg/cm²(2,990 psi)	
Cylinder	Type Bore x Stroke	Double acting 100mm(3.9") x 480mm(18.9")
Steering Angle	40°(each direction)	

Features

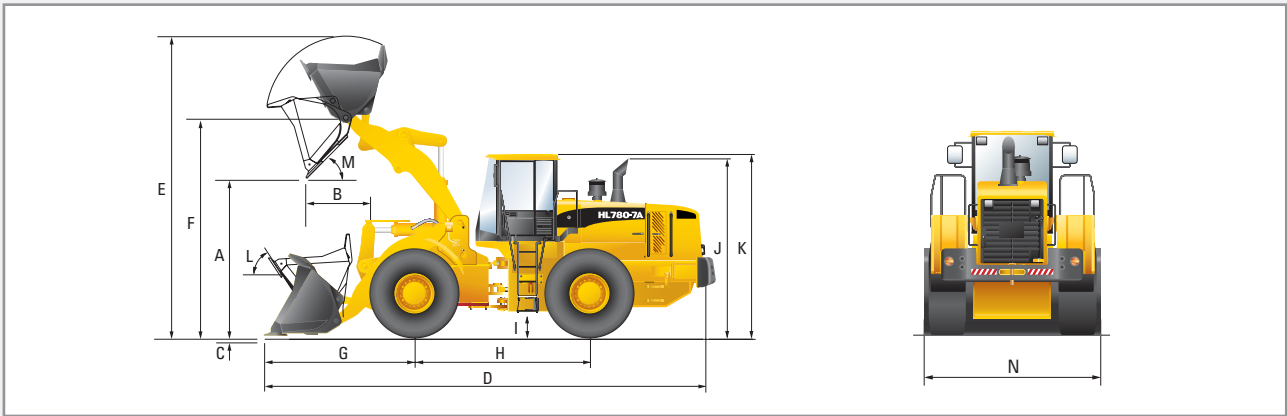
- Center-point frame articulation
- Flow-amplified, load-sensing, pressure-compensated system
- Steering-wheel operated metering pump controls flow to steering cylinders
- Tilt and telescopic steering column



Tires

Type	Tubeless, loader design tires
Standard	29.5-25, 22 PR, L3
Options include	26.5-25, 32 PR, L3 29.5-25, 28 PR, L3 29.5-25, 28 PR, L5 29.5 R25 XHA★

Dimensions



Description	UNIT	HL780-7A	HL780XTD-7A
Bucket Type	General purpose bolt-on cutting edge		
A. Dumping clearance at max. height and 45° dump angle.	mm (ft-in)	3,300(10' 10")	3,720(12' 2")
B. Reach	Full lift	mm (ft-in)	1,365(4' 6")
	7ft height	mm (ft-in)	2,070(6' 9")
C. Digging depth	mm (in)	95(3.7")	110(4.3")
D. Overall length	on ground	mm (ft-in)	9,440(32")
	at carry	mm (ft-in)	9,340(30' 8")
E. Overall height (fully raised)	mm (ft-in)	6,160(20' 3")	6,590(21' 7")
F. Bucket pivot max. height	mm (ft-in)	4,510(14' 10")	4,930(16' 2")

Description	UNIT	HL780-7A	HL780XTD-7A
G. Front overhang	mm (ft-in)	3,080(10' 1")	3,510(11' 6")
H. Wheelbase	mm (ft-in)	3,700(12' 2")	3,700(12' 2")
I. Ground clearance	mm (ft-in)	475(1' 7")	475(1' 7")
J. Height over exhaust	mm (ft-in)	3,720(12' 2")	3,720(12' 2")
K. Height over cab	mm (ft-in)	3,805(12' 6")	3,805(12' 6")
L. Roll-back angle	on ground/at carry	deg	42 / 48
M. Dump angle	deg	47	47
Clearance circle		mm (ft-in)	15,170(49' 9")
N. Overall width	with bucket	mm (ft-in)	3,450(11' 4")
	without bucket	mm (ft-in)	3,220(10' 7")