

#### **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)
23.5-25 20PR L3	-472 (-1041)	-345 (-760)	-305 (-672)
26.5-25 28PR L3	-4 (-9)	-3 (-7)	-3 (-6)
26.5-25 32PR L3	+164 (+362)	+120 (+265)	+106 (+234)
<b>26.5 R25 XHA*</b> +108 (+238)		+80 (+176)	+70 (+154)
26.5-25 20PR L5	+768 (+1,693)	+560 (+1,235)	+496 (+1,093)

#### Standard Equipment

Electrical system Alternator, 70A Alarms, audible and visual · air filter clogging · transmission erro alternator voltage brake oil pressure engine oil pressure parking brake fuel level · hydraulic oil temperature · coolant temperature service brake oil pressure Batteries, 1000 CCA, 12V, (2) Gaudes · engine coolant temperature · fuel level · hydraulic oil temperature . speedometer · transmission oil temperature · voltmeter Horn, electric Indicator lights · clutch cut-off · high beam turn signal · work light LCD Display · clock and fault code · operating hour counter engine rpm

· transmission gear range indicator job time and distance coat hook temperature(coolant, hydraulic oil, t/m oil) Lighting system 2 dome lights · 2 stop and tail lights · 4 turn signals · brake lights(counterweight) · license plate light head light seat belt 2 on front tower working lights 2 on front roof 2 on grill Switches · clutch cut-off · hazard · Ignition key, start/stop switch · main light(illumination and Pedals head light) parking rear wiper & washer work light Wrist rest master switch Engine full automatic transmission Antifreeze Starter, electric Starting and charging system(24-volt) Cab, ROPS/FOPS (sound suppressed and pressurized) with : 2 Operating mode (Power & Econo)

· cigar lighter & ashtray Fan guard front/rear window defroster Fuel warmer intermittent wiper and washer, front and rear exhaust stack personal storage space console box Radiator cool & hot box holder, can and cup rear view mirrors (2 inside) Power Train rear view mirrors (2 outside) seat, adjustable suspensior Parking brake with armrests Torque converter steering column, tilt and telescopic steering wheel with knob sunvisor(front window) tinted safety glass two door cab, fixed glass Hydraulics Magazine box · one accelerator pedal one brake pedal Rubber floor mat Hvdraulic system, for boom and bucket actuation Engine, Cummins QSL Steering, load-sensing Low Emission Diesel, Tier3 Remote cooling fan, Engine enclosure, lockable hydraulically-driven, Engine fuel priming pump(Electric) temperature sensing type

Others Fuel/water separator Muffler, under hood with large Counterweight Precleaner, engine air intake Starting aid (air intake heater) Water sensor on fuel filter - handrails Brakes : Service, enclosed wet-disc - ladders Differentials, limited slip(front/rear) - platforms steps Fenders(front) Transmission, computer-controlled, electronic soft shift, auto-shift and kick-shift features included Transmission oil cooler Boom lock safety valve Boom kickout, automatic Bucket positioner, automatic Diagnostic pressure taps Hvdraulic oil cooler · 2 spool, single lever, pilot control

Articulation locking bar Coolant level sight gauge 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 Guard, bucket cylinder rod Hvdraulic oil level sight gauge License plate bracket Lift and tie-down hooks Loader linkage, sealed Z-Bar design Steering stops, cushioned Tires(26.5-25, 20PR,L3) Transmission oil level dipstick gauge Vandalism protection caplocks HYUNDA

HYUNDAI WHEEL LOADER Applied Tier 3 Engine

HL770-7A

#### **Optional Equipment**

Cab

Fenders(rear-mudguard)

High lift arrangement with

additional counterweight,

Hydraulic control, 2 lever

Hydraulic control, 3 lever

Fire extinguisher

· crankcase

· transmission

505kg(1110 lb)

FNR switch

Guards

24-volt to 12-volt DC converter 3 spool Air condition air conditioner · air conditioner with heater heater Alarm, back-up Beacon light, rotating CD player Cutting edge, bolt-on type Dual brake pedal Emergency steering system

on joystick control lever Lighting, auxilary, 4 on roof Mud guard Open Canopy (None-ROPS) Operator suit Pallet forks Quick attachment coupler Radio cassette player Ride control system Reversible cooling fan system Hydraulic arrangement 3-valve Rear view mirrors heated (2 outside)

26.5 - 25, 20PR, L5 26.5 R25 XHA ★ Tool kit Wheel chock

Tooth, 1 piece, bolt-on type Tooth, 2 pieces, bolt-on type Window, sliding (left and right side)

Standard and optional equipment may vary. Consult your Hyundai dealer for more information. The machine shown may vary according to territorial specification.



**HYUNDA HEAVY INDUSTRIES CO., LTD.** 

Seat

Tires :

· 2" static seat belt &

suspension(vinvl)

23.5 - 25, 20PR, L3

26.5 - 25, 28PR, L3

26.5 - 25, 32PR, L3

adjustable mechanical

3" retractable seat belt

3" retractable seat belt &

adjustable air suspension

2008. 12 Rev 3



# ٧e build Q better future

# Hardworking Hyundai Loaders

Meet the new generation wheel loader in Hyundai.

The HL770-7A 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.





**\*\*** 

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

#### **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



**Dual Service Brake Pedals** 

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## New Generation, Innovative Solution in Construction **HL770-7A**





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

system.(Option)

#### 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  $\leftrightarrow$  4th, 2nd  $\leftrightarrow$  4th). These exclusive features contribute to

a step-up in productivity and reduction of operator's fatigue.



# **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.

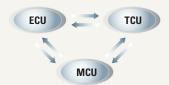
#### The Air Conditioning and Heating System



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.



#### 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(Optional)

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.



New Generation, Innovative Solution in Construction **HL770-7A** 





The CUMMINS QSL electronic control engine combines full-authority 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 the QSL uses advanced electronics controls to meet the emission standards (EPA Tier3, EU StageⅢ-A)

# **A Well Rounded System**

Maximize the productivity of your business with HL770-7A. 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 quard** This guard helps to prevent possible damage from load material.



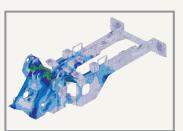
Master switch A master switch disconnects the battery power to protect the electrical system.

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

#### **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 allows 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.



#### **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.



#### 2 Operating mode Econo Mode Maximum fuel efficiency for general loading

Power Mode Maximum power output for hard digging or climb hill



## Frame lock

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

#### Axle

- Improved Axle
- · Limited slip differential in standard equipment allows easy driving on variable ground condition.
- Self adjusting brake which regulate the disk clearance automatically can maintain optimum brake performance.
- Due to improved internal oil circuit, durabiliy of axle is increased.



## **Accessible and Serviceable**

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

New Generation, Innovative Solution in Construction **HL770-7A** 



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 oil with the remote drain port. cycle became longer.



**Remote type drain port** It is now easier to change your engine oil, coolant and hydraulic



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

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Central electric controllers & Fuse Box Cabin Air Fresh Filter Electric controllers for Hyundai loader are centralized to improve serviceability. A concentrated fuse box for easy inspection.

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

#### **Easy Access to All Engine Accessaries**

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





Oil sight gauge

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



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





#### **Coolant Sight Gauge** The coolant sight gauge is installed on the top

of radiator for conve-nient checks of coolant level.





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

#### O Engine

CUMMINS QSL
Water cooled, 4 cycle Diesel,6-Cylinders in line,
direct injection, turbocharged, charge aircooled low emission
280HP(209 kW) / 2,000rpm
266HP(198 kW) / 2,000rpm
310HP(231 kW) / 1,700rpm
148kg·m(1,070 lb·ft) / 1,400rpm
6

Bore x Stroke	114 mm (4.5″) x 145 mm (5.7″)
Displacement	8.9 ℓ (543 cu in)
Compression ratio	17.8 : 1
Air cleaner	Dry, dual elements
Alternator	24V, 70 Amp
Battery	2 x 12V, 160 Ah.
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 1,829m (6,000ft). This engine meets the EPA(Tier 3-A) / EU(Stage III-A) Emission regulation.

Hub reduction

**Reduction ratio** 

Differential

#### 🔞 Transmission

Torque converter type	3-elements, single-stage single-phase	Т
Stall torque ratio	2.985 :1	F
Tire	26.5-25, L3	
× Full automatic neuror shift a	ounterchaft time with asft shift in range and	

 $\ensuremath{\ensuremath{\mathbb{K}}}$  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	7.3(4.7)
	2nd	12.8(8.0)
	3rd	27.0(16.8)
	4th	39.0(24.2)
Reverse	1st	7.3(5.0)
	2nd	12.8(8.0)
	3rd	27.0(16.8)

Planetary reduction at wheel end

Limited slip differential

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## Axles

Drive system	Four-wheel drive system
Mount	Rigid front axle and oscillating rear axle
Rear axle oscillation	$\pm$ 13 $^{ m o}$ (total 26 $^{ m o}$ )

0	Hydraulic	Svstem
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Туре	Open-centered, tandem circuit system.
	Pilot-operated controls.
	Closed with pressure and vacuum relief.
Pump	Vane type, 425 liters/min
	(108.6 gal/min)@governed rpm
Control Valve	Two function valve with single or
	two lever controls :
	Optional third-function valve
	with auxiliary lever.
Relief Valve Setting	210 kg/cm² (2,990 psi)
Pilot System Type	Pilot oil pressure is generated
	by the pilot oil supply unit.
Relief Valve Setting	30 kg/cm²(427 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; Lift 2-180 mm(7.1") x 765 mm(30.1") Tilt 1-200 mm(7.9") x 570 mm(22.4")
Cycle Time	Raise : 5.5 sec (with load) Dump : 1.3 sec Lower : 2.8 sec (empty) Total : 9.6 sec

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

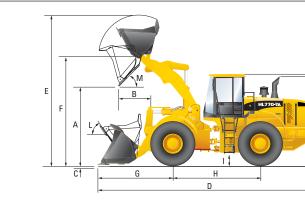
#### Service Refill Capacities

Fuel tank	430 liters (113.6 USgal)
Cooling system	56 liters (14.8 USgal)
Crankcase	23 liters (6.1 USgal)
Transmission	52 liters (13.7 USgal)

## Overview

Description		UNIT	HL770-7A	HL770XTD-7A
Operating weight		kg (lb)	23,100 (50,930)	23,850(52,580)
Bucket capacity	Heaped	m³ (yd³)	4.0 (5.2)	4.0(5.2)
	Struck	m³ (yd³)	3.45 (4.5)	3.45(4.5)
Breakout force-bucket		kg (lb)	20,760 (45,770)	20,430(45,040)
	Straight	kg (lb)	17,570 (38,730)	15,840(34,920)
	Full turn	kg (lb)	15,250 (33,620)	13,400(29,540)

#### Dimensions



Description		UNIT	HL770-7A	HL770XTD-7A
Bucket Type		General purpose bolt-on cutting edge		
A. Dumping clearance at max. height and 45° dump angle.		mm (ft-in)	3,117 (10' 3")	3,570 (11' 9")
B. 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. Digging depth		mm (in)	98 (3.9")	130 (5.1")
D. Overall length	on ground	mm (ft-in)	8,635 (28' 4")	9,100 (29' 10")
	at carry	mm (ft-in)	8,530 (28')	9,020 (29' 7")
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")

## Specification

#### Steering System

Туре	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

Front axle	51 liters (13.5 USgal)
Rear axle	43 liters (11.4 USgal)
Hydraulic tank	200 liters (52.9 USgal)
Hydraulic system (including tank)	320 liters (84.6 USgal)

## 🧿 Tires

Туре	Tubeless, loader design tires
Standard	26.5-25, 20 PR, L3
Options include	26.5 R25 XHA* 26.5-25, 28 PR, L3 26.5-25, 32 PR, L3 23.5-25, 20 PR, L3 26.5-25, 20 PR, L3 26.5-25, 20 PR, L5





Description		UNIT	HL770-7A	HL770XTD-7A
G. Front overhang		mm (ft-in)	2,940 (9' 8")	3,350 (12')
H. Wheelbase		mm (ft-in)	3,440 (11' 3")	3,440 (11' 3")
I. Ground clearance		mm (ft-in)	480 (1' 7")	480 (1' 7")
J. Height over exhaust		mm (ft-in)	3,470 (11' 5")	3,470 (11' 5")
K. Height over cab		mm (ft-in)	3,550 (11' 8")	3,550 (11' 8")
L. Roll-back angle	on ground/at carry	deg	44 / 49	44 / 50
M. Dump angle		deg	48	48
Clearance circle		mm (ft-in)	14,070 (46' 2")	14,450 (47' 5")
N. Overall width	with bucket	mm (ft-in)	3,100 (10' 2")	3,100 (10' 2")
	without bucket	mm (ft-in)	2,975(9' 9")	2,975(9' 9")