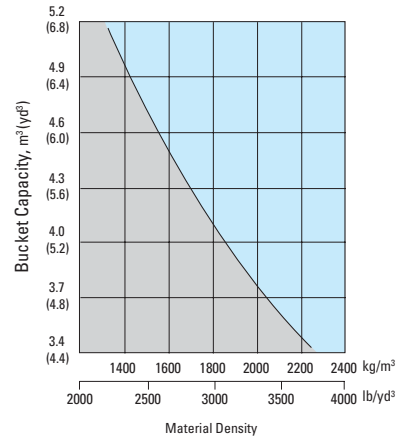


Bucket Selection Guide



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) |
|-----------------|-----------------------------------|---|---|
| 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) |
| 26.5 R25 XHA* | +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 error
 - 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)
- 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
 - work light
- LCD Display
- clock and fault code
 - operating hour counter
 - engine rpm
- transmission gear range indicator
 - job time and distance
 - 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
 - 2 on front tower
 - working lights
 - 2 on front roof
 - 2 on grill
- Switches**
- buzzer stop
 - clutch cut-off
 - hazard
 - Ignition key, start/stop switch
 - main light(illumination and head light)
- parking
 - rear wiper & washer
 - work light
 - full automatic transmission
- Starter, electric
Starting and charging system(24-volt)
- Cab**
Cab, ROPS/FOPS (sound suppressed and pressurized) with :

- cigar lighter & ashtray
 - coat hook
 - front/rear window defroster
 - intermittent wiper and washer, front and rear
 - personal storage space:
 - consol box
 - cool & hot box
 - holder, can and cup
 - rear view mirrors (2 inside)
 - rear view mirrors (2 outside)
 - seat belt
 - seat, adjustable suspension with armrests
 - steering column, tilt and telescopic
 - steering wheel with knob
 - sun visor(front window)
 - tinted safety glass
 - two door cab, fixed glass
- Magazine box
Pedals
- one accelerator pedal
 - one brake pedal
- Rubber floor mat
Wrist rest
- Engine**
Antifreeze
Engine, Cummins QSC8.3-C
- Low Emission Diesel, Tier-II
Engine enclosure, lockable
Engine fuel priming pump

- Others**
- 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
 - Loader linkage, sealed
 - Z-Bar design
 - Steering stops, cushioned
 - Tires(26.5-25, 20PR,L3)
 - Transmission oil level dipstick gauge
 - Vandalism protection caplocks
- Power Train**
Brakes : Service, enclosed wet-disc
Differentials, limited slip(front/rear)
Parking brake
Torque converter
Transmission, computer-controlled, electronic soft shift, auto-shift and quick-shift features included
Transmission oil cooler
- Hydraulics**
Boom lock safety valve
Boom kickout, automatic
Bucket positioner, automatic
Diagnostic pressure taps
Hydraulic oil cooler
Hydraulic system,
- 2 spool, single lever, pilot control for boom and bucket actuation
Steering, load-sensing
Remote cooling fan, hydraulically-driven, temperature sensing type

Optional Equipment

- 24-volt to 12-volt DC converter
 - Air condition :
 - air conditioner
 - air conditioner with heater
 - heater
 - Alarm, back-up
 - Beacon light, rotating
 - Cutting edge, bolt-on type
 - Emergency steering system
 - Fire extinguisher
- Fuel warmer
 - Hourmeter
 - Hydraulic control, 2 lever
 - Hydraulic control, 3 lever
 - Hydraulic arrangement 3-valve
 - Lighting, auxiliary, 4 on roof
 - Main disconnect switch
 - Mud guard
 - Open Canopy (ROPS/FOPS)
 - Operator suit
- Radio cassette player
 - Ride control system
 - Seat
 - 2" static seat belt & adjustable mechanical suspension(vinyl)
 - 3" static seat belt & adjustable mechanical suspension
 - 3" retractable seat belt &
- adjustable air suspension
 - Tires :
 - 26.5 R25 XHA ★
 - 26.5 - 25, 28PR, L3
 - 23.5 - 25, 20PR, L3
 - 26.5 - 25, 32PR, L3
 - 26.5 - 25, 20PR, L5
 - Tool kit
 - Tooth, 1 piece, bolt-on type
 - Tooth, 2 pieces, bolt-on type
- Two brake pedal
 - Guards
 - crankcase
 - transmission
 - Wheel chock
 - 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.

HYUNDAI
HEAVY INDUSTRIES CO.,LTD.
CONSTRUCTION EQUIPMENT DIVISION

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PLEASE CONTACT

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2003. 7 rev1



HYUNDAI WHEEL LOADER

NEW 7 SERIES

HL770-7

- Cummins QSC8.3-C Engine ■ Gross Power 209 kW / 280 HP
- Flywheel Power 198 kW / 266 HP
- Max. Power 224 kW / 300HP
- Bucket Capacities 3.5 to 5.0 m³ (4.6 to 6.5 yd³)
- Operating Weight 22,800 kg (50,300 lb)

Tier II Engine

■ Photo may include optional equipment.

HYUNDAI
HEAVY INDUSTRIES CO.,LTD.

Hardworking Hyundai Loaders

You can meet the new generation wheel loader in Hyundai.

The HL770-7 will give you the satisfaction in higher power, lower fuel consumption, more comfort and, lower emission compared with before.

Come experience what Hyundai has created for you by bringing together great power and up-to-the-minute technology.



Wheel Loader HL770-7

Engine

- Electronic Engine Control System
- Applied 2 Stage Power
- Engine Protection & Selfdiagnosis System
- Max. Power 300 HP

Transmission

- 2 Stage Automatic Selection Mode
- 2 Stage Kick Down Function
- AEB Function

Axle

- Large Capacity hub and Brake disc
- Pilot type Front Axle

■ Photo may include optional equipment.



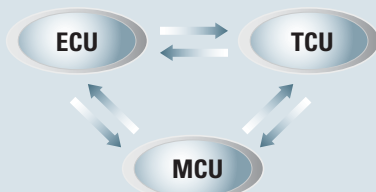
Control Center

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

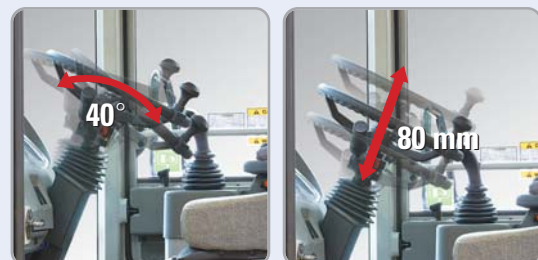


Up-to-date-technology CAN system

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



Adjustable steering column



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). This exclusive feature contributes to a step-up in productivity and reduction of operator fatigue.



The Centralized Display & Attached Instrument Panel

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



Joystick Control Lever

Two kickdown switches located on top of the loader control lever and the gear shifting lever allow the operator to change instantly to 1st stage lower gear, in order to drive at full power into the material.



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.

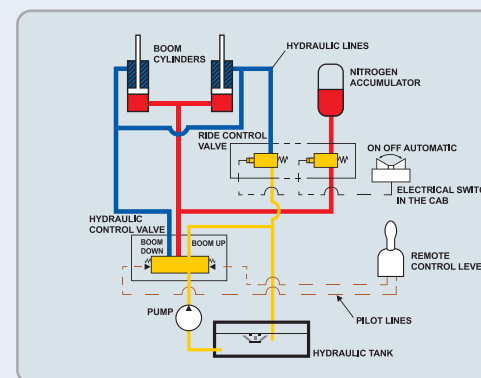


Ride control system (optional)

The ride control system is available for smooth travelling as option. It significantly reduces machine bouncing and absorbs the shocks in the machine, enhancing the productivity of the machine. This system reduces the fatigue of the driver as well as the stress on the structures and components.

The system is consisted of accumulators in the hydraulic lift circuit, hydraulic control valve and selection switch.

① OFF position : Function is cancelled
 ② On position : Function is available
 ③ Auto position : Function is available when the machine travels above 9.5km/hr(6.0mph). If the machine travels under 8 km/hr (5.0 mph), the function is cancelled automatically.

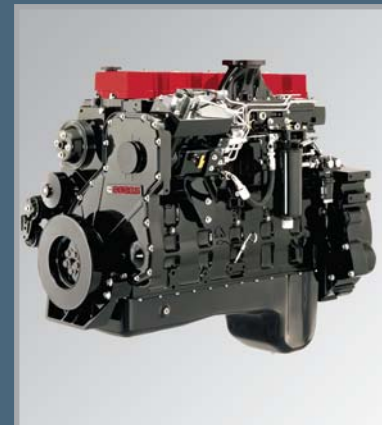


A Well Rounded System



Up-to-date hydraulic remote cooling fan

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



Engine
The CUMMINS QSC8.3-C 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 QSC8.3-C used advanced electronics

controls to meet the thoughts emission standards (EPA TierII, EU StageII)



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 a very precise control of the clutches. For each gearchange, the control unit performs a monitoring function to ensure the specified shift curve is adhered to, and readjusts the shift pressure applied to the clutches accordingly. This results in smooth gearshifts-even under load-with no traction interrupt. 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.

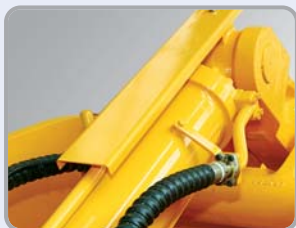


Axle

Large capacity of wheel hub and increased number of brake disc. Increased mounting strength by applying the fixed front axle pilot.



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 excess wear 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.



Battery master switch

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



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.



Drive Shaft

Permanent lubricating drive shaft. There is no need to add grease periodically.

Accessible and Serviceable



Easy Access to All Engine Accessory

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.



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.



Fuse Box

A concentrated fuse box for easy inspection.



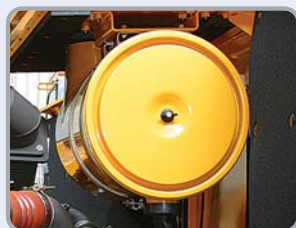
Coolant Sight Gauge

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



Accessible grease fittings

Grease fittings are highlighted and available around the machine for 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 counter-clockwise.



Central electric controllers

Electric controllers for this Hyundai loader are centralized to improve service access.



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 piping.



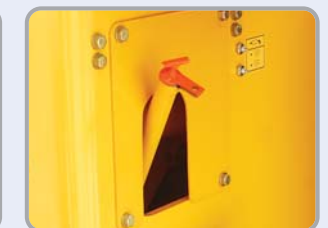
Open pin access

You can more readily remove or tighten your front attachment pin with these open connectors surrounding the pin.



Oil sight gauge

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



Transmission oil port

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



Specification & Dimensions



Engine

| | |
|--------------------------|---|
| Maker/Model | CUMMINS QSC8.3-C |
| Type | 4-cycle, turbocharged, charge aircooled direct injection, electronic controlled diesel engine |
| Gross power | 280HP(209 kW) / 2,200rpm |
| Net power | 266HP(198 kW) / 2,200rpm |
| Maximum power | 300HP(224 kW) / 2,000rpm |
| Maximum torque | 138kg·m(1,000 lb-ft) / 1,400rpm |
| No. of cylinders | 6 |
| Bore x Stroke | 114 mm (4.5") x 135 mm (5.3") |
| Displacement | 8.3 ℓ (507 cu in) |
| Compression ratio | 17.1 : 1 |
| Air cleaner | Dry, dual elements |
| Alternator | 24V, 70 Amp |
| Battery | 2 x 12V, 200 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 3048m (10000ft). This engine meets the EPA(Tier II) / EU(Stage II) Emission regulation.



Transmission

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

| | | |
|--------------------------------|---------------------------------------|------------|
| Torque converter type | 3-elements, single-stage single-phase | |
| Stall torque ratio | 2.985 : 1 | |
| Travel speed km/h (mph) | 26.5-25, L3 | |
| Forward | 1st | 7.4(4.6) |
| | 2nd | 12.3(7.6) |
| | 3rd | 26.3(16.3) |
| | 4th | 38.0(23.6) |
| Reverse | 1st | 7.4(4.6) |
| | 2nd | 12.3(7.6) |
| | 3rd | 26.3(16.3) |



Axles

| | |
|------------------------------|--|
| Drive system | Four-wheel drive system |
| Mount | Rigid front axle and oscillating rear axle |
| Rear axle oscillation | ± 13° (total 26°) |
| Hub reduction | Planetary reduction at wheel end |
| Differential | Limited slip differential |
| Reduction ratio | 24.685 |



Hydraulic system

| | |
|------------------------|---|
| Type | Open-centered, tandem circuit system. Pilot-operated controls. Closed with pressure and vacuum relief. |
| Pump | Vane type, 411 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/cm ² (2,990 psi) |
| Pilot system | |
| Type | Pilot oil pressure is generated by the pilot oil supply unit |
| Relief valve setting | 30 kg/cm ² (427 psi) |
| Bucket controls | |
| Type | 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 : 5.7 sec (with load) Dump : 1.4 sec Lower : 2.8 sec (empty) Total : 9.9 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 front axle input shaft |
| Emergency brake | When brake oil pressure drops, indicator light alerts operator and parking brake automatically applies. |



Steering system

| | |
|-----------------------------|--|
| Type | Full hydraulic power steering |
| Pump | Vane type, 248 liters/min(65.5 gal/min) @ governed rpm |
| Relief valve setting | 210 kg/cm ² (2,990 psi) |
| Cylinder | Type Double acting Bore x stroke 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

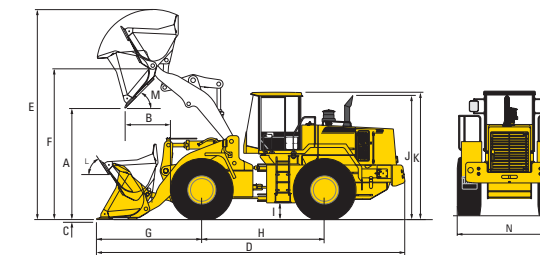


Service refill capacities

| | |
|--|--------------------------|
| Fuel tank | 430 liters (113.6 USgal) |
| Cooling system | 56 liters (14.8 USgal) |
| Crankcase | 20 liters (5.3 USgal) |
| Transmission | 52 liters (13.7 USgal) |
| Front axle | 78 liters (20.6 USgal) |
| Rear axle | 53 liters (14.0 USgal) |
| Hydraulic tank | 200 liters (52.9 USgal) |
| Hydraulic system (including tank) | 320 liters (84.6 USgal) |



Dimensions



| Description | UNIT | HL770-7 |
|---|--------------------------------------|---------------------------|
| 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") |
| B. Reach | Full lift | mm (ft-in) 1,254 (4' 1") |
| | 7ft height | mm (ft-in) 1,890 (6' 2") |
| C. Digging depth | mm (in) | 98 (3.9") |
| D. Overall length | on ground | mm (ft-in) 8,635 (28' 4") |
| | at carry | mm (ft-in) 8,530 (28') |
| E. Overall height (fully raised) | mm (ft-in) | 5,870 (19' 3") |
| F. Bucket pivot max. height | mm (ft-in) | 4,310 (14' 2") |
| G. Front overhang | mm (ft-in) | 2,940 (9' 8") |
| H. Wheelbase | mm (ft-in) | 3,440 (11' 3") |
| I. Ground clearance | mm (ft-in) | 480 (1' 7") |
| J. Height over exhaust | mm (ft-in) | 3,470 (11' 5") |
| K. Height over cab | mm (ft-in) | 3,550 (11' 8") |
| L. Roll-back angle | on ground | deg 44 |
| | at carry | deg 49 |
| M. Dump angle | deg | 48 |
| Clearance circle | mm (ft-in) | 14,070 (46' 2") |
| N. Overall width | mm (ft-in) | 3,100 (10' 2") |



Overview

| Description | UNIT | HL770-7 |
|-----------------------|-----------|--|
| Operating weight | kg (lb) | 22,800 (50,300) |
| Bucket capacity | Heaped | m ³ (yd ³) 4.0 (5.2) |
| | Struck | m ³ (yd ³) 3.45 (4.5) |
| Breakout force-bucket | kg (lb) | 20,760 (45,770) |
| Tipping load | Straight | kg (lb) 17,100 (37,700) |
| | Full turn | kg (lb) 15,000 (33,070) |



Tires

| | |
|------------------------|---|
| Type | 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, L5 |