

HITACHI

LX120

Super



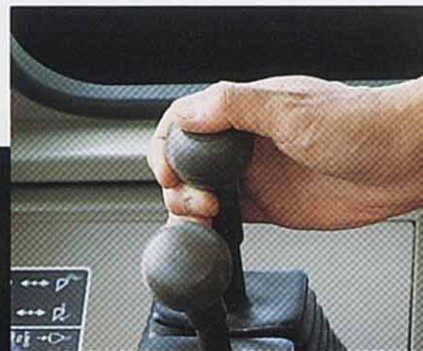
Bucket : 2.0–2.5 m³ (2.63–3.25 yd³)

Engine : 108 kW (145 HP)

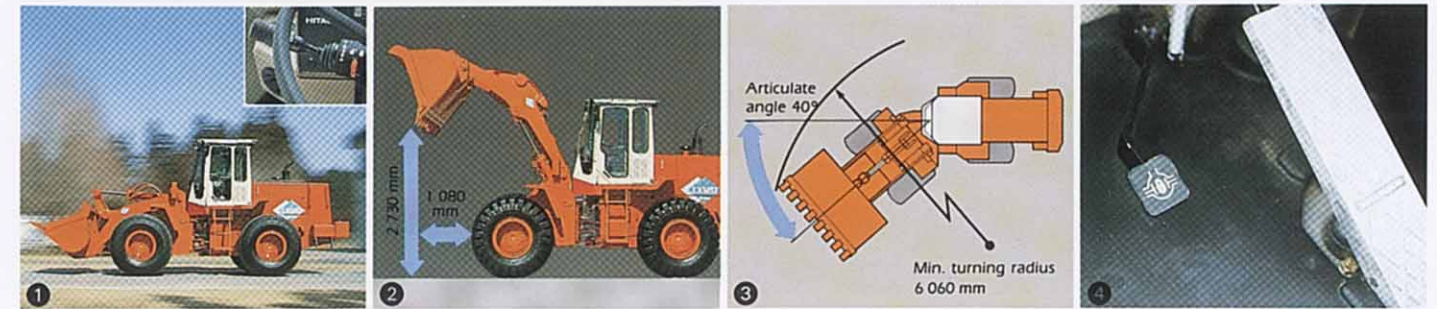
Weight : 12 565 kg (27 705 lb)

A DYNAMIC BLEND OF POWER AND EFFICIENCY

The Hitachi LX120 combines brute power with operating efficiency to boost overall productivity. At the heart is the dependable total performance that has made Hitachi a favorite among loading professionals. Add to this the features of the advanced Micro-Computer controlled Transmission that give instant command to the operator and it is easy to see the productivity-enhancing potential of this dynamic blend.



● **Micro-Computer Controlled Transmission:** Here advanced Hitachi technology enhances operating ease with features like the 2-Way Shift Switch: This button on the top of the grip for the lift arm control lever allows for quick shifting between 3rd and 2nd, and 2nd and 1st gears. Push the button and the transmission goes down a gear into 2nd or 1st gear respectively, push it again, or shift to in reverse, restores the selected gear. No other shift lever operation is necessary.



① **Automatic Shifting:** Just put the shift lever in the 4th gear and accelerate. Transmission starts out in 2nd gear, then shifts to 3rd and 4th gear as speed increases. This works well in transport or load and carry applications.

② **Versatile Work Range:** The LX120 boasts a dumping height of 2 730 mm and a dumping reach of 1 080 mm. Yet it can articulate 40° in either direction, giving it a minimum turning radius of 6 060 mm. Answers both needs—excellent cramped-area performance with the extended operating range to load large trucks.

③ **Dynamic-Signal Power Steering:** Hitachi's original power steering mechanism with its high-response priority valve and orbit-roll gives responsive steering on rough terrain and in tight operating areas, even during cold weather.

④ **Clutch Cut-Off Switch (Standard):** Simply press the clutch cut-off button and the operator can use the left-side brake pedal as a service brake or an inching brake for easy restarting on gradients and efficient scooping up.

- High Grade Stability-Enhancing Tires are standard.
- Optional Differential Lock improves 4-wheel traction.
- Optional Ride Control improves ride in road and carry applications or while on the road.
- Powerful and heavy-duty John Deere engine results in great productivity.
- Large Departure Angle provides ample rear-bottom clearance.



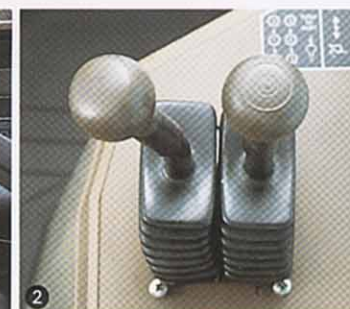
PRODUCTIVITY-BOOSTING COMFORT

Hitachi knows that a comfortable operator is the key to productivity. Strategically positioned, easy-to-operate control levers, tilt-type steering column, fully adjustable suspension seat, and enhanced all-around visibility join together to ensure operator comfort and boost productivity.



① Shift-Lever Transmission Control:

Transmission control lever operates electrically, so direction and speed change can be done with finger tip-control. Shift modulation is smooth, for operator comfort and material retention.



② Pilot Control Loader Control Levers: The loader front control is also light and pleasant through the use of the hydraulic pilot control loader front lever.

● Fully Adjustable Suspension Seat:

The suspension seat can be tailored to the operator's proportions. It can be fully adjusted for maximum operator comfort-forward and backward, up and down and to the weight of the operator, a total of eight kinds of adjustments. Armrests, backrests and a reclining seat back add to the comfort. A seat belt is standard equipment.



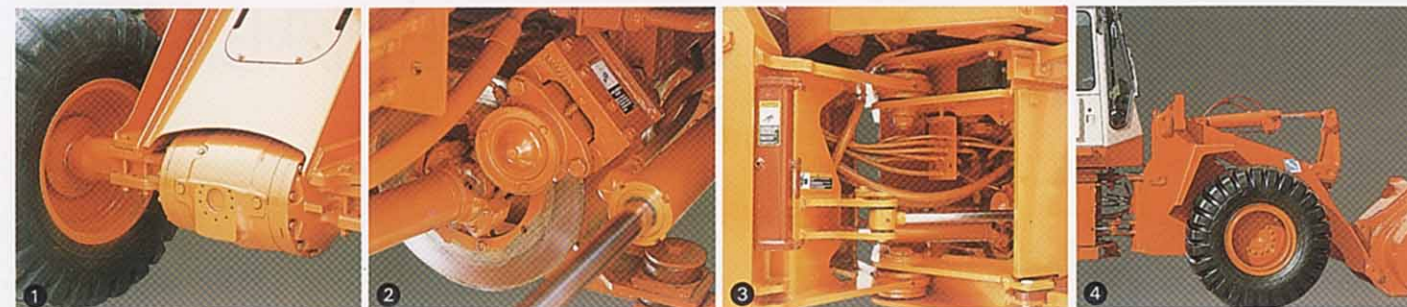
③ Adjustable Steering Column: The steering column can be adjusted easily by using the convenient foot pedal control. This adjustment enhances the responsiveness of the power steering and improves operator comfort.

④ ROPS Cab, Air Conditioner (Factory Option): ROPS canopy is provided as standard to protect the operator if the machine should turn over. The ROPS cab is also optionally available. The cab is pressurized to seal out dust and keep the inside at a comfortable temperature is maintained by a large-capacity air conditioner. Rubber cushion mounts and sound-absorbing materials assist in reducing noise and vibration. Large glass windows provide superior visibility all around.



EASY MAINTENANCE BOOSTS RELIABILITY

Part of the secret of Hitachi's reputation for reliability lies in easy maintenance. Making periodical inspections and maintenance easy to do helps to ensure that they are done. This helps keep small problems from becoming bigger. Access is made as easy as possible and low-service components are used extensively, all to keep the Hitachi out of the repair shop and on the job.



● **Monitor:** Gives at-a-glance monitoring of key operating areas. Two modes of warning are provided: a service-required indicator and a stop-engine indicator with audible signal show the level of attention required. In addition, a fuel level indicator will blink when approximately one hour or less of fuel remains.

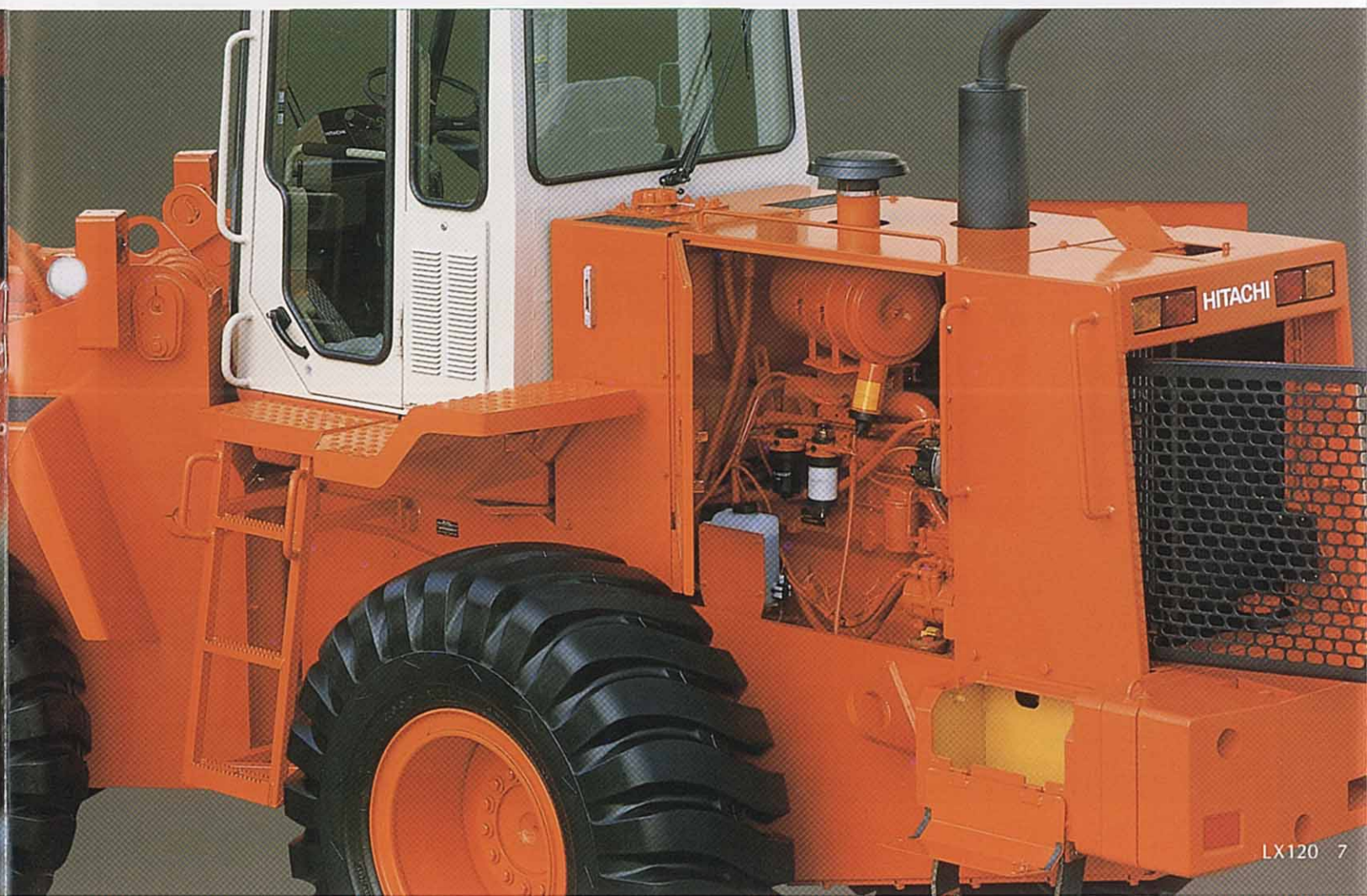
① **Service Brakes:** The long-life hydraulically operated wet-disk brakes are self-adjusting and self-equalizing. The result is dependable stopping power, even in water, from brakes that require virtually no periodic maintenance.

② **Parking Brake:** The spring-applied and hydraulically released caliper type parking brake is mounted on the transmission output shaft. For safety and convenience, the parking brake comes on automatically when the engine is shut off. It also prevents from dragging.

③ **Serviceability:** The articulation area gives improved service intervals. For example, 500 hours for front drive shaft; 1 000 hours for articulation joint. The U-joint for the front driveline shaft is lubed for life. Fuel filters and a water separator are standard.

④ **Greasing Point:** All service points of the loader linkage can also be lubricated from ground level.

● **Wide-open engine compartment.** Routine check points are grouped on the left side for efficient inspection and servicing.



Always set park brake before leaving seat.
After start up cycle park brake switch ON/OFF to release park brake.

Low coolant will result in engine or radiator damage.

LX120 FIELD-PROVEN RELIABILITY



Specifications



ENGINE

Model..... John Deere 6068T
Type..... 4-cycle water-cooled, direct injection
Aspiration..... Turbocharged
No. of cylinders..... 6
Rated flywheel horsepower
DIN 6 271, net..... 108 kW (147 PS) at 2 200 min⁻¹ (2 200 rpm)
SAE J1349, net..... 108 kW (145 HP) at 2 200 min⁻¹ (2 200 rpm)
Maximum torque..... 570 N·m (58.1 kgf·m, 420 lbf·ft)
at 1 300 min⁻¹ (1 300 rpm)
Bore and stroke..... 106.5 mm x 127 mm (4.2" x 5")
Piston displacement..... 6.79 L (414 in³)
Electrical system..... 12 volt with 95-amp alternator
Starting system..... 12 V x 4.5 kW electric motor starting
Battery..... 1 x 12 V
25 amps at 80°F (27°C)..... reserve capacity
160 min BCI group 27 cold cranking capacity
at 0°F (-18°C)..... 625 amps
Air cleaner..... Dual stage dry type with restriction indicator



TRANSMISSION

Torque converter..... Type: 3-element, single-stage, single phase
Transmission..... Type: Full power shift, countershaft type transmission

Travel speed with 20.5-25-16PR (L-3) tires			km/h (mph)
	Forward	Reverse	
1st	7.3 (4.5)	7.3 (4.5)	
2nd	11.6 (7.2)	11.6 (7.2)	
3rd	24.5 (15.2)	24.5 (15.2)	
4th	37.3 (23.0)		



AXLE AND FINAL DRIVE

Drive system..... 4-Wheel drive
Front axle..... Fixed, semi-floating type
Rear axle..... Center-pin-supported, semi-floating
26° total oscillation
Reduction gear..... Spiral bevel gear
Differential..... Conventional differential
Final reduction gear..... Single-reduction planetary gear



BRAKES

Service brakes..... Hydraulically actuated, inboard-mounted, wet disc brakes actuate all 4 wheels. 2 pedals are provided: the right for service braking and the left for braking and neutralizing.
Parking brake..... Spring-applied, hydraulically released dry disc brake mounted on the transmission front output shaft.



STEERING SYSTEM

Type..... Center-pivot frame articulation.
Full-hydraulic power steering.
Articulation angle..... 40° each side
Minimum turning radius at the centerline of outside tire..... 5.14 m (16'10")



HYDRAULIC SYSTEM

Pump For Loader And Steering
Pump..... 1 gear pump
Max. oil flow..... 231 L/min (61.0 US gpm, 50.8 Imp gpm)
Relief Valve Setting
Loader operations..... 19.3 MPa (197 kgf/cm², 2 800 psi)
Steering..... 18.3 MPa (186 kgf/cm², 2 650 psi)
Hydraulic Cylinders
Type..... Double-acting, piston type
No. x Bore x Stroke..... Lift arm: 2 x 140 mm x 735 mm (5.5" x 28.9")
Bucket: 1 x 160 mm x 603 mm (6.3" x 23.7")
Steering: 2 x 80 mm x 491 mm (3.1" x 19.3")

Cycle Time with Rated Load in Bucket
Raise..... 5.8 sec
Dump..... 1.7 sec
Lower..... 3.5 sec (float)/3.5 sec (power)



TIRES

20.5-25-12PR(L2) tubeless tires
20.5-25-12PR(L3) tubeless tires
20.5-25-16PR(L2) tubeless tires
20.5-25-16PR(L3) tubeless tires
20.5-25, Radial, One Star L2 equivalent
20.5-25, Radial, One Star L3 equivalent



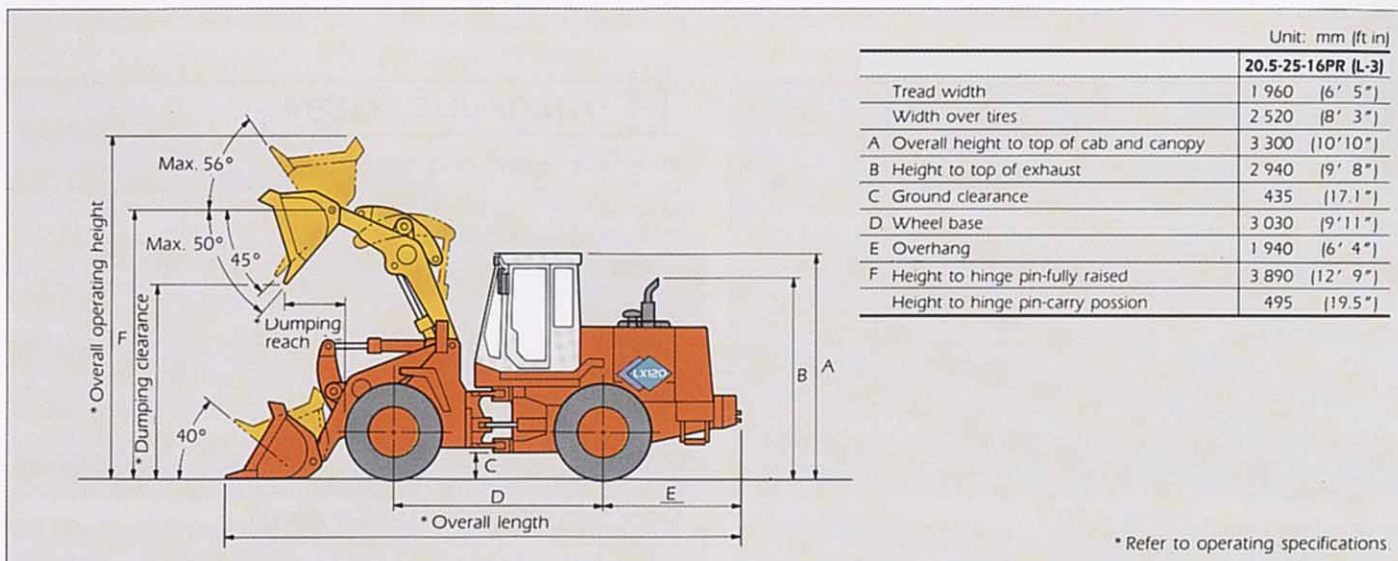
SERVICE REFILL CAPACITIES

Fuel tank..... 249 L, 65.7 US gal, 54.8 Imp gal
Engine coolant..... 25 L, 6.6 US gal, 5.5 Imp gal
Engine oil..... 17 L, 4.5 US gal, 3.7 Imp gal
Each Axle (front & rear)..... 23 L, 6.1 US gal, 5.1 Imp gal
16 L, 4.2 US gal, 3.5 Imp gal
Torque converter & Transmission..... 11 L, 2.9 US gal, 2.4 Imp gal
Hydraulic system..... 102 L, 26.9 US gal, 22.4 Imp gal





DIMENSIONS



Bucket type			Stockpiling		Stockpiling/Excavating	
			With teeth	With Bolt-on cutting edges	With teeth	With Bolt-on cutting edges
Bucket capacity	SAE heaped	m ³ (yd ³)	2.3 (3.00)	2.5 (3.25)	2.0 (2.63)	2.1 (2.75)
	SAE struck	m ³ (yd ³)	2.01 (2.63)	2.10 (2.75)	1.72 (2.25)	1.82 (2.38)
Dumping clearance at max. height and 45° dump angle		mm (ft in)	2 730 (8' 11")	2 785 (9' 2")	2 800 (9' 2")	2 855 (9' 4")
Reach at 2 130 mm (7' 0") height and 45° dump angle		mm (ft in)	1 635 (5' 4")	1 535 (5' 0")	1 600 (5' 3")	1 505 (4' 11")
Reach at max. height and 45° dump angle		mm (ft in)	1 080 (3' 7")	1 025 (3' 4")	1 010 (3' 4")	955 (3' 2")
Reach with arm horizontal and bucket level		mm (ft in)	2 470 (8' 1")	2 395 (7' 10")	2 370 (7' 9")	2 295 (7' 6")
Digging depth	Bucket horizontal	mm (ft in)	95 (3.7")	85 (3.3")	85 (3.3")	75 (3.0")
	10° digging angle	mm (ft in)	340 (13.4")	320 (12.5")	315 (12.4")	295 (11.6")
Overall operating height		mm (ft in)	5 295 (17' 4")	5 295 (17' 4")	5 060 (16' 7")	5 060 (16' 7")
Overall length	Bucket on ground	mm (ft in)	7 610 (25' 0")	7 520 (24' 8")	7 500 (24' 7")	7 420 (24' 4")
	Bucket in carry position	mm (ft in)	7 540 (24' 9")	7 480 (24' 6")	7 470 (24' 6")	7 410 (24' 4")
Turning radius (outside corner of bucket carry position)		mm (ft in)	6 060 (19' 11")	6 015 (19' 9")	6 025 (19' 9")	5 985 (19' 8")
Static tipping load*	Straight	kg (lb)	9 595 (21 155)	9 405 (20 740)	9 730 (21 455)	9 530 (21 015)
	Full 40° turn	kg (lb)	8 130 (17 925)	7 960 (17 550)	8 250 (18 190)	8 070 (17 795)
Breakout force		kN (kgf, lbf)	130.8 (13 335, 29 405)	118.8 (12 115, 26 715)	143.2 (14 600, 32 195)	129.2 (13 175, 29 050)
Operating weight		kg (lb)	12 710 (28 025)	12 790 (28 200)	12 665 (27 925)	12 750 (28 115)

Notes: 1. All dimensions, weight and performance data based on SAE J732 FEB80 and J742 FEB85 Standard.
2. Static tipping load and operating weight market with* include 20.5-25-16PR (L-3) tires (no ballast) with lubricants, coolant, full fuel tank, ROPS cab and operator.
Machine stability and operating weight depend on counterweight, tire size and other attachments. Compensate operating weight and static tipping load with weight changes Listed below.



ADJUSTMENTS TO OPERATING WEIGHTS AND TIPPING LOAD FOR 2.0 m³ (2.63 yd³) BUCKET

Tires and options	Operating weight	Tipping load	
		Straight	Full 40° turn
20.5-25-12PR (L-2) tubeless tires	-160 (-355)	-115 (-255)	-100 (-220)
20.5-25-12PR (L-3) tubeless tires	-30 (-65)	-20 (-45)	-15 (-35)
20.5-25-16PR (L-2) tubeless tires	-155 (-340)	-110 (-245)	-95 (-210)
20.5-25, Radial, One Start L2 equivalent	+50 (+110)	+35 (+75)	+30 (+65)
Rear tire ballast (20.5-25 tires)	+825 (+1 820)	+1 165 (+2 570)	+1 005 (+2 215)
ROPS canopy (in lieu of ROPS cab)	-145 (-320)	-135 (-300)	-110 (-245)
2nd counterweight*	+530 (+1 170)	+1 215 (+2 680)	+995 (+2 195)
Bucket teeth (removed)	-110 (-245)	+135 (+300)	+130 (+285)

* Not to be used with CaCl₂



STANDARD EQUIPMENT

Standard equipment may vary by country, so please consult your Hitachi dealer for details.

ENGINE

- Air cleaner, dry type with dust valve
- Alternator, 95 amp
- Antifreeze, with level sensor in radiator
- Fan guard
- Blower-type cooling fan
- Fuel filter and water separator
- Muffler

POWER TRAIN

- Power shift-torque convertor-type transmission
- Single lever electric shift
- Automatic shift in 4th speed range
- 2-way shift (upshift/downshift button)
- Transmission oil cooler
- Transmission clutch disconnect
- Axles with conventional differentials
- Front and rear brakes hydraulically actuated, wet disk, inboard mounted
- Conforms to SAE J1473 OCT90, ISO3450
- Parking brake, spring-applied, hydraulically-released, disc and

caliper

Conforms to J1473 OCT90, ISO3450

HYDRAULICS

- Hydraulic oil cooler
- Two spool hydraulic control valve with single lever control
- Return to dig control for bucket
- Automatic boom height control
- Power steering (two cylinders) and 40 degrees articulation each side

ELECTRICAL SYSTEM

- Lights: Driving with guards, Flashing and turn signals, Stop and tail
- Conforms to SAE J99
- Front and rear work
- Conforms to SAE J1029
- Horn: Conforms to SAE J994, J1446
- Reverse warning alarm: Conforms to SAE J994, J1146
- Battery terminal covers
- Bypass start cover at starter
- OPERATOR'S STATION
- Canopy, ROPS/FOPS, isolation mount

Conforms to SAE J1040 APR88, SAE J231 JAN81, ISO3471 and ISO3449

- Tilt type steering wheel
- Adjustable deluxe suspension vinyl seat with armrests
- Two-inch (51 mm) seat belt with retractors
- Conforms to SAE J386
- Ashtray
- Storage compartment
- Floor mat
- Key switch, start and shutoff
- Mirrors, rearview, two inside, two outside
- Conforms to SAE J985

MULTIFUNCTION MONITOR

- Instruments: Engine coolant temp, Fuel gauge, Transmission oil temp
- Digital display (selectable): Engine rpm, Speedometer, Hourmeter, Alternator voltage
- Warning lights: Low radiator coolant level, Air restriction indicator, Low alternator voltage

- Low transmission oil press
- Hydraulic oil filter restriction
- Low brake pressure
- Park brake on
- Secondary steering activated (if equipped)
- Fasten seat belt
- Indicator: Turn signals and flashers
- Built-in diagnostics: Fault code retrieval, Onboard diagnostics for all monitor, wiring, gauges, sensors, etc.

OTHER

- Fenders, front and rear
- Lift/tie-down hooks
- License plate bracket
- Transmission side frame guards
- Articulation locking bar
- Conforms to SAE J276
- Rubber steering stops
- Drawbar
- Lockable engine side shields and rear grille
- Loader boom lock
- Rear bottom guard
- Service steps and hand-rails
- Conforms to SAE J185



OPTIONAL EQUIPMENT

Optional equipment may vary by country, so please consult your Hitachi dealer for details.

BUCKETS

- Auxiliary spill guard
- Bolt-on cutting edges
- Bucket teeth

AXLES

- Front axle disconnect
- Front hydraulic differential lock

ENGINE

- Additional battery
- Battery disconnect

HYDRAULICS

- Two spool valve with two lever control
- Three spool valve, single lever main control with second

- control lever for auxiliary function
- Three spool valve, two lever main control with third control lever for auxiliary function

ELECTRICAL SYSTEM

- Alternator 135 amp

OPERATOR'S STATION

- Cab, ROPS/FOPS
- Conforms to SAE J1040 APR88, SAE J231 JAN81, ISO3471 and ISO3449
- Heater, defroster, pressurizer
- Conforms to SAE J1503

- Dome light/map light
- Front and rear windshield wiper and washer

- Cab, ROPS/FOPS
- Conforms to SAE J1040 APR88, SAE J231 JAN81, ISO3471 and ISO3449
- Air conditioner, heater, defroster, pressurizer
- Conforms to SAE J1503
- Dome light/map light
- Front and rear windshield wiper and washer
- Three in. (76 mm) seat belt with retractors
- Conforms to SAE J386

- Adjustable deluxe suspension cloth seats with armrests
- Secondary steering
- Conforms to SAE J53
- Windows - cab rear opening
- Seat back rest extension

OVERALL VEHICLE

- Auxiliary bottom guards, transmission and front frame
- 2nd (Not applicable with ballasted tires) counterweights
- Ride control system
- Steps, frame mounted with access platform
- Conforms to SAE J185



WORKING EQUIPMENT

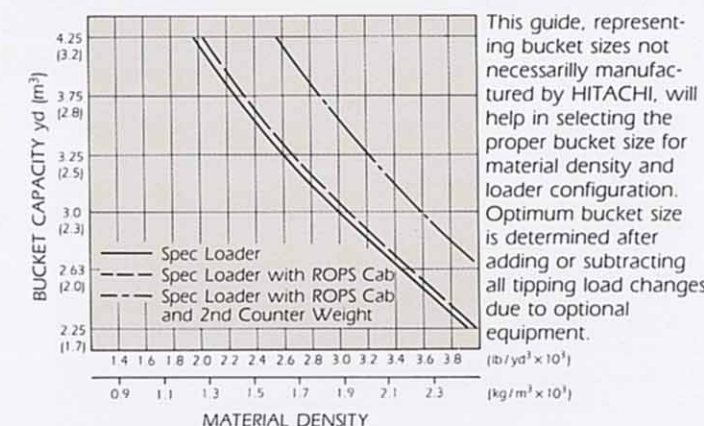
Bucket (with skid shoes)

Bucket type	Capacity* m ³ (yd ³)	Width mm (in)	Weight kg (lb)
Stockpiling w/bolt-on teeth	2.3 (3.00)	2 590 (102.0)	1 110 (2 450)
Stockpiling w/bolt-on cutting edges	2.5 (3.25)	2 580 (101.6)	1 190 (2 625)
Stockpiling/Excavation w/bolt-on teeth	2.0 (2.63)	2 590 (102.0)	1 065 (2 350)
Stockpiling/Excavation w/bolt-on cutting edges	2.1 (2.75)	2 580 (101.6)	1 150 (2 535)

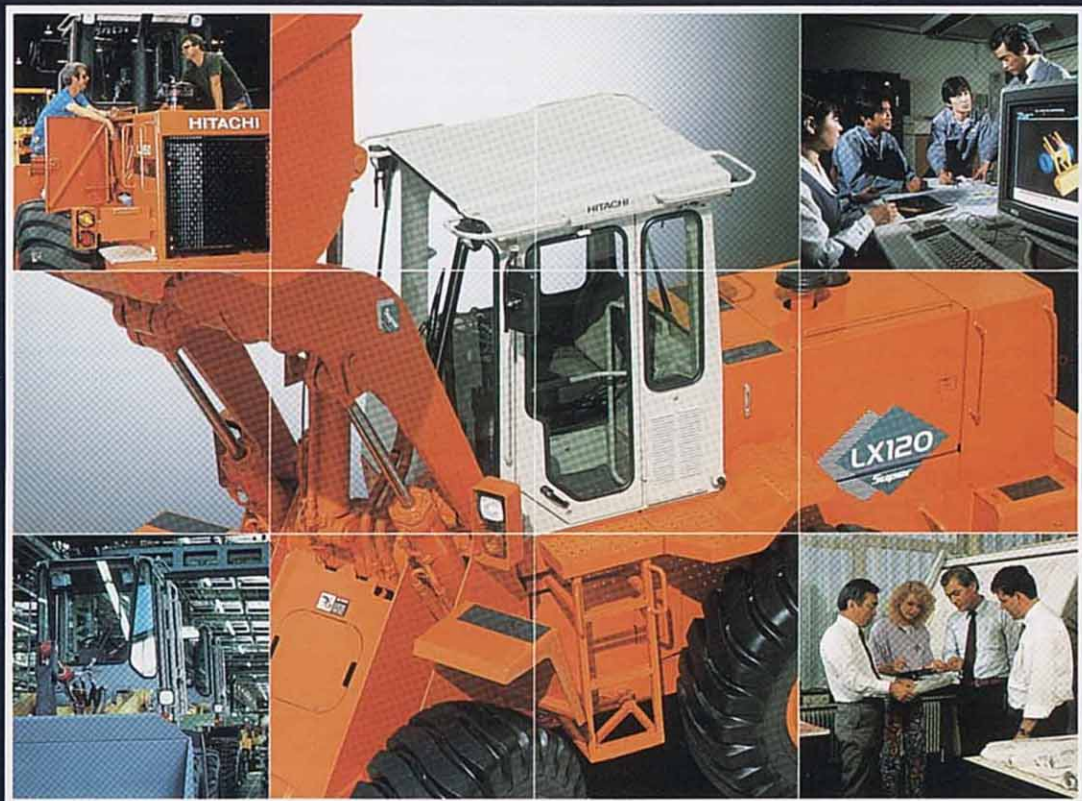
*SAE heaped



BUCKET SELECTION GUIDE



ONLY HITACHI OUTDOES HITACHI



These specifications are subject to change without notice.
Illustrations may or may not include optional equipment and accessories,
and all standard equipment.

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