



WHEEL LOADER 921E-921EXR



Engine Horsepower
Operating weight (max.)
Bucket capacity

921E
221 kW/297 hp
22962 kg
4.00 - 4.60 m³

921EXR
221 kW/297 hp
24062 kg
3.82 - 4.60 m³

ERGONOMIC OPERATOR STATION

Longer and wider isolation-mounted E series cab has full height glass for maximum visibility around the machine. The cab door and right hand window can be opened 180° for cross ventilation and numerous air diffusers provide heating and ventilation all around the cab. Fully adjustable seat and steering column and standard single lever loader control ensure optimum comfort for all operators. Ergonomically designed switchgear and central console provide clear information and ease of use.

Operator comfort. Maximise productivity.

ECONOMICAL POWERHOUSE

The 921E is powered by an electronically-controlled, Euro III compliant 11 litre engine offering multiple power curves to boost productivity and ensure optimum economy. Max, standard, economy and auto working modes fine tune the machine to the task, providing power for loading and digging with low fuel consumption for lighter stockpiling duties. Auto mode automatically adjusts engine power to move the maximum amount of material per litre of fuel.

Power to perform. Low emissions and consumption.

EXCELLENT SERVICE ACCESS

All daily checks can be performed from ground level, with fluid sight gauges on all reservoirs. Electrically raised single piece canopy provides unrivalled access for service and maintenance. Revised cooling pack has separate access panel and swing-out air conditioning condenser for easy cleaning. Extended service intervals and ease of maintenance result in lower ownership costs and improved productivity.

Reduced downtime.

Cost effective operation.



ENHANCED VISIBILITY

Redesigned front wheel arches, increased glass area in the cab and a contoured single-piece engine cover provide excellent levels of visibility all around the working area, improving safety on site. Engine air pre-cleaner now placed in line with exhaust stack for maximum rear visibility. Full height glazing to the front and sides ensures a good view to the wheels and bucket corners.

Safe operation. Increased production.

ESSENTIAL CONTROL

Ride Control reduces shock loading in the loader arm and bounce in the cab when travelling. Increases operating speed and reduces cycle times for load and carry operations. Auto mode automatically engages Ride Control at speeds over 5 km/h to maintain maximum load retention.

Faster operation. Total performance.

EXTRA BREAKOUT

Robust Z-bar loader linkage design and pressure-compensating hydraulics deliver superior breakout forces and lift capacity, boosting productivity and reducing cycle times. Single loader control lever incorporates forward/reverse and transmission downshift buttons, putting the controls at the operator's fingertips at all times.

Optimum output. Complete control.



AWARDED

- Potencia 2007 award, in the wheeled construction equipment category
- Diesel Progress magazine, in cooperation with ZF, honored Case with the First Excellence in Equipment Engineering award, in the wheel loader category for the 921E

ENGINE



The 921E is powered by a Tier III compliant 11 litre Cummins engine, offering a maximum output of 297 hp (221 kW) at 1800 rpm. Multiple power curves controlled by a working mode system offer a standard net power rating of 274 hp (204 kW) and an economy mode output of 229 hp (171 kW) at only 1400 rpm. Auto mode automatically adjusts the engine output to meet the needs of the machine in varied operating conditions. Electronic fuel injection with high injection pressures allows cleaner, more efficient burning, for increased output and reduced emissions and fuel consumption.

FRONT VISIBILITY



The 921E has an ergonomically designed cab that is far larger than on its predecessor. Pillarless top to bottom glazing to the front and both sides of the cab offers an excellent view of the bucket corners or attachment.

Redesigned front fenders ensure that the operator has a clear view of the front wheels, aiding manoeuvrability and making the machine easier to place accurately, boosting productivity. Powerful windscreen wipers keep the main window clear in all weathers and the new fenders prevent muck from the wheels being thrown onto the windows.

The 921E has a central control console that is easy to read and its compact dimensions ensure a clear view to the lift arms and bucket link, leading to safe operation in all site conditions.

REAR VISIBILITY



At the rear of the engine air pre-cleaner and exhaust stack are positioned in line in the centre of the engine canopy to increase visibility over the back of the machine. The 921E has a contoured one-piece engine cover that drops away from the line of sight to give an excellent view behind the operator. Slim cab pillars provide high levels of visibility to the rear three-quarters of the 921E. This is essential for a wheeled loader operator in a stocking and loading operation, promoting safety in all operating conditions.

A rear windscreen wiper is standard, ensuring that the view to the rear of the machine stays clear whatever the weather.

OPERATOR'S CAB

The Case 921E uses the latest E series cab, which is longer and wider than on previous machines. This provides an exceptional working space, with a flat floor for ease of cleaning. Adjustable steering and a fully adjustable driver's seat ensure that every operator can stay comfortable throughout the working shift.

The cab is among the quietest in the industry and features floor to roof glazing, for maximum visibility all around the machine. Easy to read analogue gauges combined with a digital display to provide all necessary information in a clear dash console. A contoured console to the operator's right houses all switches and the heating and ventilation controls.



RIDE CONTROL



The ergonomically designed Case wheel loader can be specified with Ride Control, a system that allows the lift arms to float when the machine is moving. This reduces shock loadings on the operator and the machine, reducing fatigue and prolonging component life. Ride Control allows the operator to drive at higher speeds during load and carry operations, offering excellent load retention of material, for maximum productivity. The system has three operating modes, fully on, off, to allow full hydraulic power during loading and digging operations, and an automatic setting, that engages Ride Control when the machine accelerates above 5 km/h.

DRIVETRAIN



The 921E uses a torque sensing autoshift transmission, offering manual or fully automatic control. Both axles incorporate limited slip differentials for maximum traction when digging and loading. Axles feature optional oil coolers with continuous flow and filtration. Disc brakes are oil cooled for maximum retardation and reduced heat build-up, prolonging brake component life and reducing operating costs. The machine's low effort servo lever incorporates a quick shuttle switch for rapid directional changes while working.

SERVICE AND MAINTENANCE



A large, single-piece electric engine canopy offers unparalleled service access to the engine and cooling pack. All daily checks can be carried out from ground level, thanks to sight gauges on all fluid reservoirs.

A hydraulically driven fan, with swing out fan guard, offers a reversing function to blow dust and debris from the cooling pack. Thanks to a swing out air conditioning condenser all coolers can be easily accessed for cleaning and visual checks. Centrally located greasing points provide easy access and bucket pin seals prevent debris infiltration, prolonging component life. The Case 921E is fully compatible with the Case EST electronic service tool, providing rapid diagnostics and fault checking to minimise downtime. All electronics are centrally located within the cab to ensure that they remain clean and out of harm's way.







SPECIFICATIONS

ENGINE

Model Case _____ Cummins QSM 11, Tier III certified
 Type _____ 6 cyl, turbocharged and air-to-air cooled
 Bore/Stroke _____ 125 X 147 mm
 Displacement _____ 10.8 l
 Fuel injection _____ Electronic
 Fuel filter _____ Replaceable, full flow spin-on cartridge
 Fuel cooler _____
 Air filter _____ Dry type element w/warning restriction indicator
 Pump operating angle ratings _____
 Side-to-side _____ Rated 45°
 Fore and aft _____ Rated 45°
 Oil filtration _____ Replaceable, full flow spin-on cartridge
 Engine speeds - Rated speed, full load _____ 2100 rpm
 Horsepower - Peak _____
 Max Power _____
 Gross _____ 320 hp (239 kW) @ 1800 rpm
 Net _____ 297 hp (221 kW) @ 1800 rpm
 Standard Power _____
 Gross _____ 297 hp (221 kW) @ 1800 rpm
 Net _____ 274 hp (204 kW) @ 1800 rpm
 Economy Power _____
 Gross _____ 241 hp (179 kW) @ 1400 rpm
 Net _____ 229 hp (171 kW) @ 1400 rpm

NOTE: Gross horsepower and torque per SAE J1995.
 Net horsepower and torque per SAE J1349.

Torque - Peak _____
 Max Power _____
 Gross _____ 1478 Nm@ 1000 rpm
 Net _____ 1446 Nm@ 1000 rpm
 Standard Power _____
 Gross _____ 1373 Nm@ 900 rpm
 Net _____ 1349 Nm@ 900 rpm
 Economy Power _____
 Gross _____ 1373 Nm@ 1000 rpm
 Net _____ 1349 Nm@ 1000 rpm
 Torque rise _____
 Standard power _____ 50.1%

DRIVETRAIN

Transmission _____
 4F/3R Proportional w/Electronic Control
 Module torque sensing autoshift/manual shift and modulation
 Differential _____ Limited slip on front and rear axles
 Rear axle oscillation _____ 24° total
 Service brakes _____
 Hydraulically actuated, maintenance-free, multiple wet disc to all four wheels with accumulator for each axle.
 Parking brakes _____
 Spring-applied hydraulic release disc on transmission output shaft
 Travel speeds - km/h with 26.5R25XHA Tires _____

	Forward	Reverse
1st	8.0	8.0
2nd	13.2	14.1
3rd	25.8	25.8
4th	37.4	NA

NOTE: Travel speeds at full engine throttle.

ELECTRICAL

Voltage _____ 24 Volts, negative ground
 Alternator _____ 95 amp
 Batteries _____ (2) CCA 900 - 12V 750 Amp

HYDRAULICS

Pump (steering/implement) _____
 Closed centered pressure/flow compensated
 Variable displacement _____ 324.2 l/min @ 2000 rpm
 @ 24 821 kPa
 Implement pump Closed centered pressure/flow compensated
 Filtration _____
 10-micron, full flow replaceable cartridges on return line,
 condition indicator light for filter.

CYCLE TIME

Raise w/rated bucket load _____ 6.2 sec
 Dump w/rated bucket load _____ 3.6 sec
 Lower "empty" _____
 Power down _____ 3.0 sec
 Float down _____ 1.2 sec

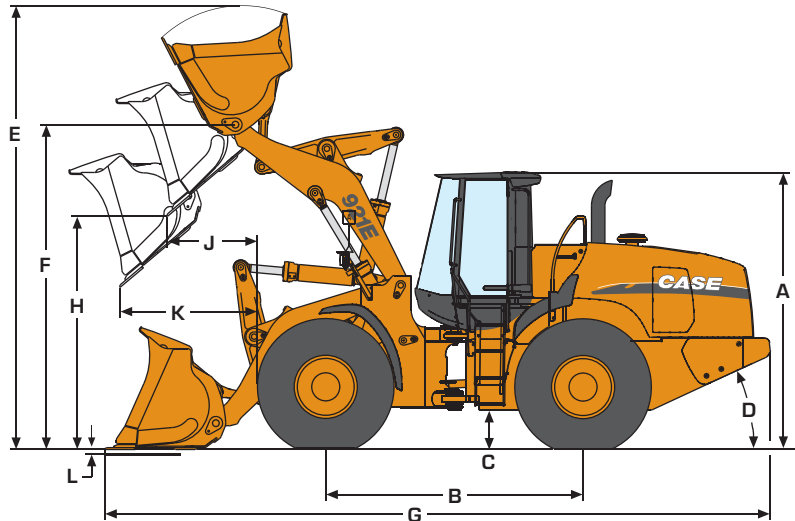
SERVICE CAPACITIES

Fuel tank _____ 394 l
 Hydraulic system _____
 Total _____ 242 l
 Reservoir _____ 130 l
 Transmission _____
 Service with filter _____ 39.7 l
 Front and rear axle _____
 Front axle _____ 47.3 l
 Rear axle _____ 47.3 l
 Engine oil with filter _____ 36.9 l
 Cooling system _____ 56.8 l

OPERATING WEIGHTS

Unit equipped with ROPS cab with heater and A/C,
 counterweight, 26.5R25XHA Tires, 4.6 m³ bucket, full fuel,
 79 kg operator _____ 23 042 kg

GENERAL DIMENSIONS 921E



DIMENSIONS

A	Height to top of ROPS cab	mm	3700
B	Wheelbase	mm	3400
C	Ground clearance	mm	489
D	Angle of departure		34°
Width			
	- overall* w/o bucket	mm	3000
	- centerline tread	mm	2225
	Turning radius* - outside	mm	6870
Turning angle			
	- from center		40°
	- total angle		80°
	Rear axle oscillation (total)		24°

NOTE: *Dimensions taken with 26.5-25XHAT tires.

PERFORMANCE DATA

921E Z-Bar*

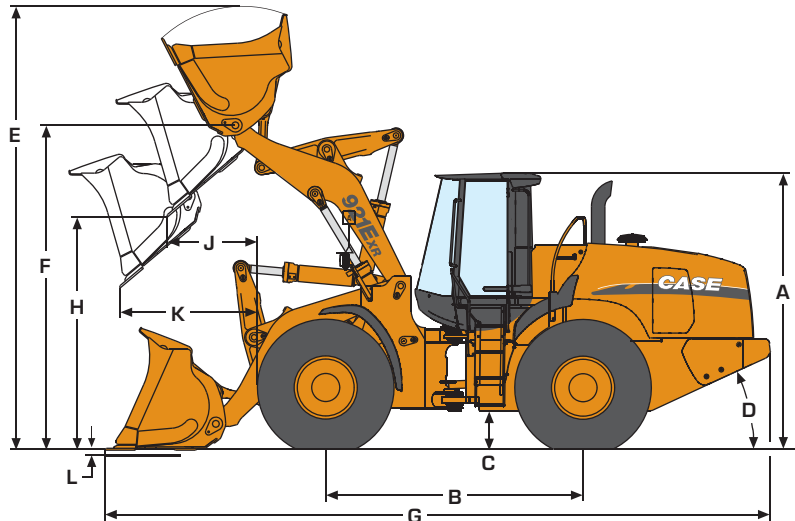
		4.0 m ³ Bucket w/Bolt-on Edge	4.0 m ³ Bucket w/Teeth & segments	4.60 m ³ Bucket w/Bolt-on Edge	4.60 m ³ Bucket w/Teeth & segments
SAE bucket capacity - heaped	m ³	4.06	3.97	4.62	4.51
Bucket width - outside	mm	3021	3047	3071	2198
Bucket weight	kg	2146	2270	2270	2399
E Operating height - fully raised w/spillguard	mm	5833	5833	5893	5893
F Hinge pin height - fully raised	mm	4278	4278	4278	4278
G Overall length - bucket level on ground	mm	8756	8896	8815	8955
Dump angle - fully raised		55°	55°	55°	55°
H Dump height - fully raised, 45° dump	mm	3110	3012	3067	2969
J Bucket reach - fully raised, 45° dump	mm	1264	1341	1286	1363
K Bucket reach - 2.13m height, 45° dump	mm	1900	1935	1904	1937
Operating load - SAE	kg	8436	8379	8325	8261
Maximum material density - SAE	t/m ³	2.08	2.11	1.80	1.83
Tipping load - SAE					
- straight	kg	19604	19500	19368	19249
- 40° turn	kg	16871	16758	16649	16522
Breakout force w/ tilt cylinder	kg	20773	18819	19910	18075
Maximum rollback					
- Ground		41°	41°	41°	41°
- Carry position		43°	43°	43°	43°
- @ Maximum reach		67°	67°	67°	67°
- @ full height		63°	63°	63°	63°
L Dig depth	mm	102	127	121	146
Maximum grading angle w/ bucket - back dragging		62°	62°	62°	62°
Loader clearance circle (to front corner of bucket)	mm	13570	13682	13653	13857
Unit Operating mass	kg	22918	23042	23042	23171

NOTE: Performance data unit equipped with 26.5 - 25XHAT tires, ROPS cab w/ heater and A/C, standard counterweight, standard batteries, wide front and rear fenders, full fuel and 79 kg operator. Specifications per SAE J732, J1234, J695, J742, and J818.





GENERAL DIMENSIONS 921EXR



DIMENSIONS

A	Height to top of ROPS cab	mm	3700
B	Wheelbase	mm	3400
C	Ground clearance	mm	489
D	Angle of departure		34°
Width			
	- overall* w/o bucket	mm	3000
	- centerline tread	mm	2225
	Turning radius* - outside	mm	6870
Turning angle			
	- from center		40°
	- total angle		80°
	Rear axle oscillation (total)		24°

NOTE: *Dimensions taken with 26.5-25XHAT tires.

PERFORMANCE DATA

921E/XR

		Pin on	
		4.0 m ³ Bucket w/Bolt-on Edge	4.0 m ³ Bucket w/Teeth
SAE bucket capacity - heaped	m ³	4.04	4.04
Bucket width - outside	mm	3020	3057
Bucket weight	kg	2147	2262
E Operating height - overall	mm	6424	6424
F Hinge pin height - fully raised	mm	4871	4870
G Overall length - bucket level on ground	mm	9242	9467
Dump angle - full height		49°	49°
H Dump height - full height, 45° dump	mm	3703	3552
J Bucket reach - full height, 45° dump	mm	1237	1394
K Bucket reach - 2.13 m height, 45° dump	mm	2334	2435
Operating load - ISO	kg	6615	6539
Maximum material density - ISO	kg/m ³	1638	1619
Tipping load - ISO			
- straight	kg	15574	15422
- 40° turn	kg	13230	13078
Breakout force w/ tilt cylinder	kg	20814	17745
Maximum rollback			
- Ground		40°	41°
- Carry position		45°	45°
- @ Maximum reach		65°	65°
- @ full height		66°	66°
L Dig depth	mm	103	117
Maximum grading angle w/ bucket - back dragging		62°	62°
Loader clearance circle (to front corner of bucket)	mm	14103	14294
Unit Operating mass	kg	23810	23926

		GP Pin on	
		3.82 m ³ Bucket w/Bolt-on Edge	3.82 m ³ Bucket w/Teeth
PERFORMANCE DATA			
921E/XR			
SAE bucket capacity - heaped	m ³	4.01	3.82
Bucket width - outside	mm	3048	3106
Bucket weight	kg	1965	1966
E Operating height - overall	mm	6444	6444
F Hinge pin height - fully raised	mm	4871	4871
G Overall length - bucket level on ground	mm	9248	9398
Dump angle - full height		49°	49°
H Dump height - full height, 45° dump	mm	3712	3612
J Bucket reach - full height, 45° dump	mm	1280	1386
K Bucket reach - 2.13 m height, 45° dump	mm	2380	2450
Operating load - ISO	kg	6688	6705
Maximum material density - ISO	kg/m ³	1666	1754
Tipping load - ISO			
- straight	kg	15715	15748
- 40° turn	kg	13376	13409
Breakout force w/ tilt cylinder	kg	20537	22302
Maximum rollback			
- Ground		40°	40°
- Carry position		45°	45°
- @ Maximum reach		65°	65°
- @ full height		66°	66°
L Dig depth	mm	68	76
Maximum grading angle w/ bucket - back dragging		62°	62°
Loader clearance circle (to front corner of bucket)	mm	14123	14278
Unit Operating mass	kg	23628	23629

		4.6 m ³	
		Bucket w/Bolt-on Edge	Bucket w/Teeth
PERFORMANCE DATA			
921E/XR			
SAE bucket capacity - heaped	m ³	4.62	4.51
Bucket width - outside	mm	3071	3198
Bucket weight	kg	2270	2399
E Operating height - overall	mm	6485	6485
F Hinge pin height - fully raised	mm	4870	4870
G Overall length - bucket level on ground	mm	9299	9436
Dump angle - full height		49°	49°
H Dump height - full height, 45° dump	mm	3659	3561
J Bucket reach - full height, 45° dump	mm	1260	1336
K Bucket reach - 2.13 m height, 45° dump	mm	2341	2380
Operating load - ISO	kg	6496	6429
Maximum material density - ISO	kg/m ³	1406	1426
Tipping load - ISO			
- straight	kg	15316	15189
- 40° turn	kg	12992	12858
Breakout force w/ tilt cylinder	kg	19997	18169
Maximum rollback			
- Ground		41°	41°
- Carry position		45°	45°
- @ Maximum reach		65°	65°
- @ full height		66°	66°
L Dig depth	mm	122	148
Maximum grading angle w/ bucket - back dragging		62°	62°
Loader clearance circle (to front corner of bucket)	mm	14191	14403
Unit Operating mass	kg	23934	24062

921E-EXR

STANDARD EQUIPMENT & OPTIONS

STANDARD EQUIPMENT

Operator environment

- ROPS cab w/heat
- Key start
- Articulated power steering w/tilt column
- Fully adjustable, suspension seat
- Foot throttle
- Single lever 2-spool loader control w/wrist rest
- Cup holder
- Coat hook
- (1) Interior rearview mirror
- 2 in (51 mm) retractable seat belt
- Storage tray behind seat
- Cooled lunch box
- Single brake pedal
- F/N/R shuttle switch
- External rear view mirrors
- Lock box
- Pressurized air filtering
- Anti-glare window strip
- Defroster
- Side window, partial/fully open
- Dome light
- Wipers, rear and intermittent front
- Windshield washers, front and rear
- Rubber floor mat
- Sunscreen

Engine

- Cummins QSM 11
- Tier III certified
- Selectable work modes
- Max power
- Auto power
- Standard power

- Economy power
- Turbocharger
- Charge air cooling
- Integral engine oil cooling
- Fuel filter w/water trap
- Dual element air cleaner
- 95 amp alternator
- (2) 900 CCA, 12-volt batteries
- Liquid-cooled radiator
- Non spark-arresting muffler
- Unit injector

Loader

- Z-bar loader linkage
- Single control for lift and tilt
- Positive hold float
- Automatic return-to-dig
- Automatic height control
- Automatic return-to-travel
- Brake pedal transmission disconnect
- Bucket position indicator on bucket

Drivetrain

- 4-wheel drive
- Axle coolers
- 4F/3R Selectable autoshift/manual shift transmission
- Electronic Control Module - Programmable, computer controlled proportional shifting with programmable gear selection
- Onboard diagnostics
- Single lever electronic shift control
- F/N/R switch in loader control handle
- Downshift button
- Torque converter
- Outboard planetary axles
- Limited-slip differentials
- Transmission oil cooler

- Brake pedal transmission disconnect
- Hydraulic wet disc brakes
- Spring-applied hydraulic release parking brake
- Limp-Home Mode
- Lubed-for-life drive shaft

Hydraulics

- Single lever 2-spool loader control valve
- Low-effort steering
- Hydraulic driven fan
- Diagnostic quick couplers

Other

- Electric hood lift
- Front and rear fenders
- Lights:
 - (2) Front driving headlights (high/low beam)
 - (2) Front flood
 - (2) Stop/tail lights
 - (2) Rear flood
- Front and rear turn signal/flash
- Drawbar hitch
- Articulation locking bar
- Lift arm locking bar
- Lift and tie-down points - front/rear
- Backup alarm
- RH steps and platform

Engine

- Cold weather package
- Heavy-duty batteries

Loader

- Hydraulic attachment coupler
- Attachment auxiliary hydraulics
- Buckets

Hydraulics

- Auxiliary hydraulics
- Ride Control
- Secondary steering
- 3 or 4-spool loader valves with 2 or 3-lever loader control
- Hydraulic temperature controlled reversing fan

Tires

- 26.5 x 25 L3 Bias
- 26.5 R 25 L2 Radial
- 26.5 R 25 L3 Radial

OPTIONS

Operator compartment

- Cab air-conditioning w/heater
- Radio
- Radio-ready (12 or 24-volt)
- Cab convenience package
- Rotating beacon

Standard and optional equipment shown can vary by country.

Worldwide Case Construction Equipment Contact Information

EUROPE/AFRICA/MIDDLE EAST:
Centre D'affaires EGB
5, Avenue Georges Bataille - BP 40401
60671 Le Plessis-Belleville - FRANCE

NORTH AMERICA/MEXICO:
700 State Street
Racine, WI 53404 U.S.A.

LATIN AMERICA:
Av. General David Sarnoff 2237
32210 - 900 Contagem - MG
Belo Horizonte BRAZIL

ASIA PACIFIC:
Unit 1 - 1 Foundation Place - Prospect
New South Wales - 2148 AUSTRALIA

CHINA:
No. 29, Industrial Premises, No. 376,
De Bao Road, Waigaoqiao Ftz, Pudong,
SHANGHAI, 200131, P.R.C.



The call is free from a land line. Check in advance with your Mobile Operator if you will be charged.

NOTE: Standard and optional fittings can vary according to the demands and specific regulations of each country. The illustrations may include optional rather than standard fittings - consult your Case dealer. Furthermore, CNH reserves the right to modify machine specifications without incurring any obligation relating to such changes.



Conforms to directive 98/37/CE

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