

CASE
CONSTRUCTION

F SERIES WHEEL LOADERS

521F

TIER 2



FASTER, FUEL EFFICIENT

A SAFE INVESTMENT FOR THE TOUGHEST JOBS

For the toughest jobs, reliability comes with a perfect control of the oil temperature in the axles.

- **For soft soil** where higher grip control and higher resistance are needed:
 - **Effective grip control** with the differential lock on the front axle. It can be activated automatically or manually controlled with the left foot.
 - **No overheating** because the differential lock does not slip
 - **Higher resistance** with heavy duty front and rear axles.
- **For a limited investment**, standard axles with limited slip differential are also available and proven to be reliable.
- **For even more reliability**, we have invented the COOLING BOX that keeps constant the cooling fluids temperature.



EASIER MAINTENANCE, LOWER COSTS

- A single piece electronically-operated engine hood lifts clear of the engine for service and maintenance
- There are remote fluids drain taps for the engine oil, coolant and hydraulic oil.

PREMIUM ENGINE TECHNOLOGY

This electronically-controlled 4.7 liter engines offers the operator a choice of four power and torque ratings, MAX, STANDARD, ECONOMY or AUTOMATIC mode. This boosts productivity and reduce fuel consumption.



MORE COMFORT FOR MORE PRODUCTIVITY



Access fit for a King

Getting in the cab is easy; the wide steps and the handle make you feel safe, while the wide door provides unobstructed access.

Outstanding visibility

You'll feel more confident and work faster with the great all round visibility.

The curved rear hood shape is very low, reducing the risk of accidents and improving safety on side.

All controls at your fingertips

Greater focus on the job and less stress with fewer arm moves thanks to the ergonomic positioning of the control panel under your right hand.

Feel confident with ROPS

All our wheel loaders' cab are reinforced and guarantee the operator protection against roll over (ROPS certified).

Great storage space

The overhead radio placement and the storage make the Case cab even more convenient for you



THE DNA OF YOUR 521F

Productivity (50 meter distance cycle)

Considering density at 1,8 t/m³ and 100% fill factor
52 cycles/hour including 5 minute break _____ 52 loading cycles/h
with 2.1 m³ bucket _____ 110 m³/h or 198 t/h of material

Engine

Make _____ FPT engine F4HFE314A compliant with
EPA Tier2 or EU Stage II regulations
Number of cylinders _____ 4 cylinders - 4,7 liters - common rail
Max power SAE J1995 _____ 106kW / 142 hp @1800 rpm
Maximum torque SAE J995 _____ 608 Nm @1600 rpm

Transmission

All-wheel drive with planetary axles
Kick-down function
4-speed torque converter
4-speed auto Powershift ZF type 4WG130, switchable to manual
shifting
forward speeds: 6-11-22-36 Km/h
reverse speeds: 6.4-12-23 Km/h
Adjustable transmission declutch

Axles and differential

- for outstanding traction with 50% longer maintenance
intervals and 30% less tire wear:

100% auto-lock differential on front axle and open rear axles
Front and rear ZF heavy duty axles with open differential
type MT-L3065-II

- for limited investment and good traction:

29% Limited slip differential on front and rear axles
front and rear axle ZF type MT-L3065-II

Tires

Tires _____ 17,5R25

Brakes

Service brake _____ Maintenance free, self-adjusting wet 4-wheel
disc brakes

Area _____ 0,31 m²/hub

Parking brake _____ Disc brake on transmission activated from the
cab cluster

Area _____ 58 cm²

Hydraulics

Valves _____ Rexroth Closed-center, Load sensing hydraulic system.
Main valve with 3 sections

Steering _____ The steering orbitrol hydraulically is actuated with
priority valve

Type of pump _____ Variable displacement pump (134 l/min @250 bar)
Automatic hydraulic functions

- Bucket Return-to-dig

- Boom Return-to-travel

- Autolift (adjustable height)

Control type _____ Pilot control with single joystick or two levers

Capacities

Fuel tank _____ 189 usable liters

Cooling system _____ 22 liters

Engine oil _____ 12 liters

Hydraulic oil _____ Tank: 57 liters, total system: 114 liters

Transmission oil _____ 19 liters

Cab

Cab complies to:

protection against falling objects (FOPS) _____ ISO EN3449

protection against roll over (ROPS) _____ ISO EN13510

Air flow _____ 8.5 m³ / min spread through 17 air vents

Noise and vibration

Interior noise _____ 72 dB(A) according to ISO6595/6396/3744

Exterior noise _____ 72 dB(A) at 15 meters as per SAE J88 SEP80

103 dB(A) according to ISO6595/6396/3744

Reverse gear alarm

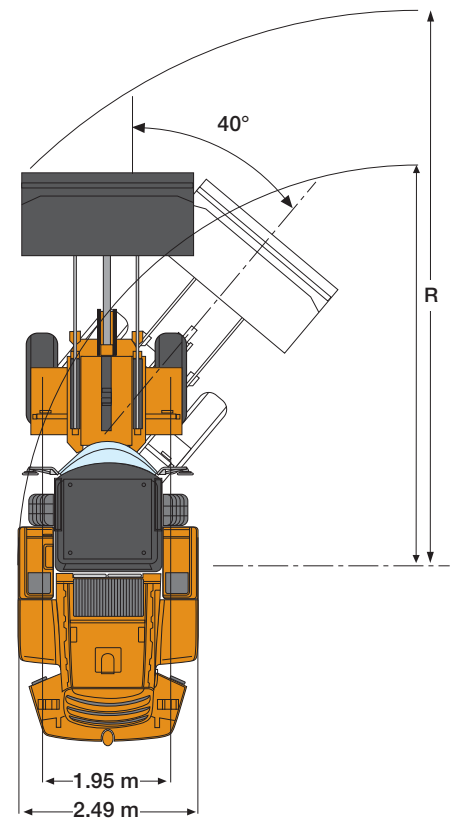
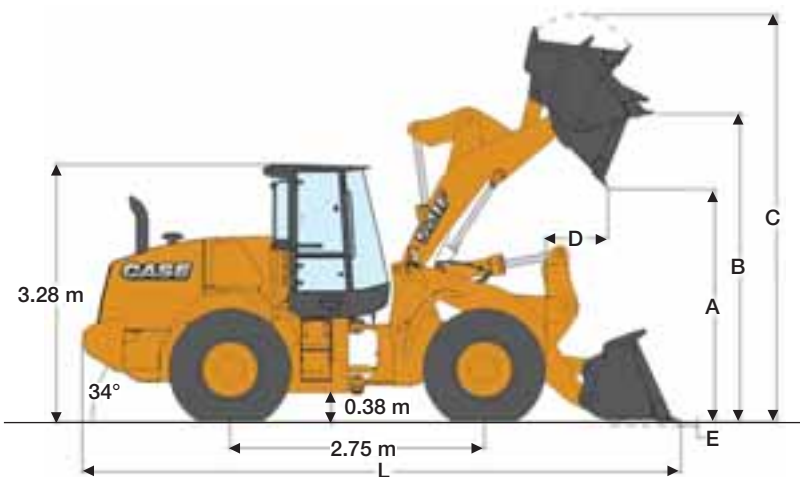
Vibrations _____ air-cushioned seat MSG 95A/732

Electrical

24 V. Batteries 2 x 12V.

Alternator _____ 70 A

521F Specifications



LOADER SPEED:

Raising time (loaded)	5.4 sec
Dump time (loaded)	1.2 sec
Lowering time (empty, power down)	3.9 sec
Lowering time (empty, float down)	3.9 sec

521F	Bucket with bolt on :	Z-bar				Long Reach				TC	
		2.1 m ³ bucket		1.7 m ³ bucket with quick coupler		1.9 m ³ bucket		1.7 m ³ bucket with quick coupler		1.7 m ³ bucket with quick coupler	
		edge	teeth + segment	edge	teeth	edge	teeth	edge	teeth	edge	teeth
Bucket volume (heaped)	m ³	2.07	2.07	1.70	1.70	1.88	1.84	1.70	1.70	1.70	1.70
Bucket Payload	kg	3478	3475	3535	3584	2977	2975	2947	2994	3249	3296
Maximum material density	ton/m ³	1.7	1.7	2.1	2.1	1.6	1.6	1.7	1.8	1.9	1.9
Bucket outside width	m	2.49	2.54	2.44	2.44	2.49	2.54	2.44	2.44	2.44	2.44
Bucket weight	kg	857	877	1137	1065	821	842	1137	1065	1117	1045
Tipping load - straight	kg	8150	8145	8317	8415	7011	7010	6985	7080	7634	7728
Tipping load - Articulated at 40°	kg	6957	6949	7069	7167	5955	5950	5894	5989	6497	6591
Breakout force	kg	7591	7781	7104	6959	8094	8366	7077	6933	8288	8124
Lift capacity from ground	kg	8889	8979	10620	10700	8830	8827	8689	8773	10236	10365
A - Dump height at 45° at full height	m	2.62	2.55	2.58	2.56	3.04	2.97	2.96	2.94	2.5	2.49
B - Hinge pin height	m	3.61	3.61	3.61	3.61	3.99	3.99	3.99	3.99	3.75	3.75
C - Overall height	m	4.75	4.75	4.77	4.77	5.06	5.06	5.14	5.14	4.94	4.94
D - Bucket reach at full height	m	1.12	1.19	1.18	1.22	1.05	1.12	1.16	1.19	1.23	1.27
E - Dig depth	cm	8	8	7	5	11	11	10	9	19	18
L - Overall length with bucket on the ground	m	6.83	6.94	6.90	6.92	7.11	7.21	7.24	7.27	7.05	7.07
R - Turning radius to front corner of the bucket	m	5.5	5.6	5.5	5.5	5.7	5.7	5.6	5.7	5.5	5.6
Bucket rollback in carry position		43°	43°	48°	48°	44°	44°	50°	50°	52°	52°
Dump angle at full height		55°	55°	50°	50°	51°	51°	46°	46°	62°	62°
Machine operating weight	kg	10448	10468	10728	10656	10582	10602	10897	10825	11189	11117

Note: bucket specification can slightly differ according to plant source. More bucket choice is available, please contact your local dealer.



You can count on Case

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It all adds up. You can count on Case.



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 2006/42/EC **CE**

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