



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

**State of West Virginia  
 Request for Quotation  
 13 - Equipment**

Proc Folder: 575001

Doc Description: ADDENDUM 1 4WD RUBBER TIRED WHEEL LOADER W/BUCKET (7019EC15)

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2019-07-12	2019-07-25 13:30:00	CRFQ 0803 DOT1900000125	2

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number:

STATE EQUIPMENT, INC.  
 560 NEW GOFF MOUNTAIN ROAD  
 CROSS LANES, WV 25313  
 (304)776-4405

RECEIVED

2019 JUL 25 AM 10:42

WV PURCHASING  
 DIVISION

**FOR INFORMATION CONTACT THE BUYER**

Crystal G Hustead  
 (304) 558-2402  
 crystal.g.hustead@wv.gov

Signature X

FEIN # 550658298

DATE 7/24/19

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION:

THE STATE OF WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, WEST VIRGINIA DIVISION OF HIGHWAYS, IS SOLICITING BIDS TO ESTABLISH AN OPEN-END CONTRACT FOR A FOUR-WHEEL DRIVE RUBBER-TIRED WHEEL LOADER WITH BUCKET PER THE ATTACHED DOCUMENTS.

INVOICE TO		SHIP TO	
DIVISION OF HIGHWAYS EQUIPMENT DIVISION RT 33 83 BRUSHY ROAD CROSSING, PO BOX 610 BUCKHANNON WV26201 US		DIVISION OF HIGHWAYS EQUIPMENT DIVISION 83 BRUSHY FORK RD CROSSING BUCKHANNON WV 26201 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	4WD RUBBER TIRED WHEEL LOADER W/BUCKET	50.00000	EA	\$133,871.00	\$6,693.550.00

Comm Code	Manufacturer	Specification	Model #
22101501	CASE	4WD RUBBER TIRED WHEEL LOADER	521G

Extended Description :  
4WD RUBBER TIRED WHEEL LOADER WITH BUCKET

INVOICE TO		SHIP TO	
DIVISION OF HIGHWAYS EQUIPMENT DIVISION RT 33 83 BRUSHY ROAD CROSSING, PO BOX 610 BUCKHANNON WV26201 US		DIVISION OF HIGHWAYS EQUIPMENT DIVISION 83 BRUSHY FORK RD CROSSING BUCKHANNON WV 26201 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	OPTIONAL: LAND CLEARING RAKE	50.00000	EA	\$10,765.00	\$538,250.00

Comm Code	Manufacturer	Specification	Model #
22101501	CRAIG	LAND CLEARING RAKE	CLR-CL

Extended Description :  
OPTIONAL: LAND CLEARING RAKE

INVOICE TO		SHIP TO	
DIVISION OF HIGHWAYS EQUIPMENT DIVISION RT 33 83 BRUSHY ROAD CROSSING, PO BOX 610 BUCKHANNON WV26201 US		DIVISION OF HIGHWAYS EQUIPMENT DIVISION 83 BRUSHY FORK RD CROSSING BUCKHANNON WV 26201 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
3	OPTIONAL: LOG AND LUMBER FORKS	50.00000	EA	\$8,582.00	\$429,100.00

Comm Code	Manufacturer	Specification	Model #
22101501	CRAIG	LOG AND LUMBER FORKS	CLLF-2

**Extended Description :**  
OPTIONAL: LOG AND LUMBER FORKS

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	MANDATORY PRE-BID MEETING	2019-07-02
2	VENDOR QUESTION DEADLINE	2019-07-09

**EXHIBIT A**

**CRFQ DOT1900000125**

**4 WHEEL DRIVE RUBBER TIRED LOADER with Bucket**

Item No.	Description:	Make/Model & Year	Estimated Unit Quantity	Unit Price	Item Total Cost
1	One Complete Unit: 4 Wheel Drive Rubber Tired Wheel Loader with Bucket	CASE 521G 2020	50	\$133,871.00	\$6,693,550.00
2	Optional: Log and Lumber Forks	CRAIG CLLE-2	50	\$8,582.00	\$429,100.00
3	Optional: Land Clearing Rake	CRAIG CLR-CL	50	\$10,765.00	\$538,250.00
<b>Total Bid Amount</b>					\$ 7,660,900.00

**Vendor Information**

Company Name: STATE EQUIPMENT, INC.  
 Contact Manager: EDDIE ROWAN, JR.  
 Address: 560 NEW GOFF MOUNTAIN ROAD  
 CROSS LANES, WV 25313  
 Phone: 304-776-4405  
 Fax: 304-776-4409  
 Email: EDDIE@STATEEQUIPMENT.COM

Signature: 

DOT1900000125	<b>Document Phase</b> Final	<b>Document Description</b> ADDENDUM 1 4WD RUBBER TIRED WHEEL LOADER W/BUCKET (7019EC15)	<b>Page 4</b> <b>of 4</b>
---------------	--------------------------------	--	------------------------------

**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

**REQUEST FOR QUOTATION**  
**CRFQ DOT1900000125**  
**(Class 353) 4WD Rubber Tired Wheel Loader with Bucket (7019EC15)**

---

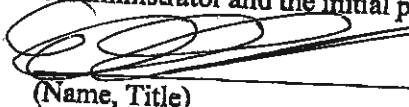
7.2.3 Any other remedies available in law or equity.

**8. MISCELLANEOUS:**

- 8.1 No Substitutions:** Vendor shall supply only Contract Items submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.
- 8.2 Reports:** Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items, and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.
- 8.3 Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

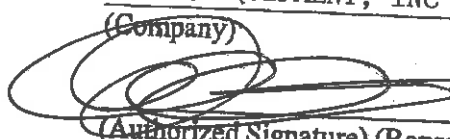
**Contract Manager:** EDDIE ROWAN, JR  
**Telephone Number:** (304)776-4405  
**Fax Number:** (304)776-4409  
**Email Address:** EDDIE@STATEEQUIPMENT.COM

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

  
\_\_\_\_\_  
(Name, Title) GENERAL MANAGER  
EDDIE ROWAN, JR GENERAL MANAGER  
\_\_\_\_\_  
(Printed Name and Title)  
560 NEW GOFF MOUNTAIN ROAD CROSS LANES, WV 25313  
\_\_\_\_\_  
(Address)  
(304)776-4405 / (304)776-4409  
\_\_\_\_\_  
(Phone Number) / (Fax Number)  
EDDIE@STATEEQUIPMENT.COM  
\_\_\_\_\_  
(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

STATE EQUIPMENT, INC  
\_\_\_\_\_  
(Company)

  
\_\_\_\_\_  
(Authorized Signature) (Representative Name, Title) GENERAL MANAGER

EDDIE ROWAN, JR GENERAL MANAGER  
\_\_\_\_\_  
(Printed Name and Title of Authorized Representative)

7/24/19  
\_\_\_\_\_  
(Date)

(304)776-4405 / (304)776-4409  
\_\_\_\_\_  
(Phone Number) (Fax Number)

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: DOT1900000125**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

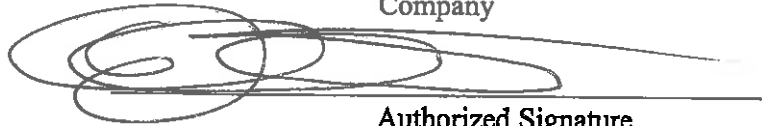
(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2            | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3            | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

STATE EQUIPMENT, INC.

Company

  
Authorized Signature

7/24/19

Date

**NOTE:** This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012



West Virginia Ethics Commission  
Disclosure of Interested Parties to Contracts  
(Required by W. Va. Code § 6D-1-2)

Name of Contracting Business Entity: STATE EQUIPMENT, INC Address: 560 NEW GOFF MOUNTAIN ROAD  
CROSS LANES, WV 25313

Name of Authorized Agent: EDDIE ROWAN, JR Address: \_\_\_\_\_

Contract Number: DOT1900000125 Contract Description: 4WD WHEEL LOADER

Governmental agency awarding contract: \_\_\_\_\_

Check here if this is a Supplemental Disclosure

List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below (attach additional pages if necessary):

1. Subcontractors or other entities performing work or service under the Contract

Check here if none, otherwise list entity/individual names below.

2. Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)

Check here if none, otherwise list entity/individual names below.

TERRY LAMM-100%

3. Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)

Check here if none, otherwise list entity/individual names below.

Signature: \_\_\_\_\_

Date Signed: 7/24/19

**Notary Verification**

State of WEST VIRGINIA County of KANAWHA

I, EDDIE ROWAN, JR, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledge that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this 24<sup>th</sup> day of July

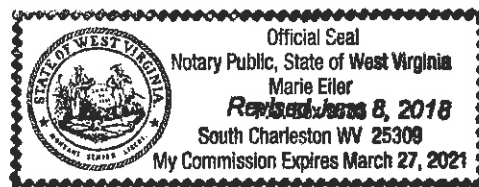
Marie Eiler  
Notary Public's Signature

**To be completed by State Agency:**

Date Received by State Agency: \_\_\_\_\_

Date submitted to Ethics Commission: \_\_\_\_\_

Governmental agency submitting Disclosure: \_\_\_\_\_



STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

**CONSTRUCTION CONTRACTS:** Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

**ALL CONTRACTS:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: STATE EQUIPMENT, INC.

Authorized Signature: [Signature] Date: 7/24/19

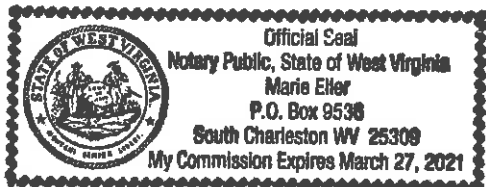
State of WEST VIRGINIA

County of KANAWHA to-wit:

Taken, subscribed, and sworn to before me this 24<sup>th</sup> day of July, 2019

My Commission expires March 27, 2021.

AFFIX SEAL HERE



NOTARY PUBLIC

Marie Eiler

Purchasing Affidavit (Revised 01/19/2018)



Case 521G

Make	FPT
Model	F4HFE413NB
Emissions Certification	Tier 4 Final
Emissions Technology	SCR/DOC
Type	4-stroke, turbocharged
Cylinders	4-cylinder in-line
Bore/Stroke	4.09 x 5.20 in (104 x 132 mm)
Displacement	275 in <sup>3</sup> (4.5 L)
Fuel	#2 Diesel, #1 and #2 mixture permitted for cold temperatures
Fuel injection	Direct injection – electronic
Fuel filter	Replaceable, full flow spin-on cartridge
Air filter	2-element dry type w/ warning restriction indicator
Mid-mount cooling module:	Mid-mount air/water
Fan – hydraulic driven:	
Style	8 blade puller
Diameter	28 in (711 mm)
Water pump	Integral
Engine oil pump operating angle ratings:	
Side-to-side	35°
Fore and aft	35°
Oil filtration	Replaceable, full flow spin-on cartridge
Engine speeds	RPM
Rated – full load	2000
Horsepower:	
Maximum Power Mode:	
Peak gross @ 1800 RPM	142 hp (106 kW)
Net rated @ 2000 RPM	129 hp (96 kW)
Peak net @ 1800 RPM	131 hp (98 kW)
Standard Power Mode:	
Peak gross @ 1800 RPM	133 hp (99 kW)
Net rated @ 2000 RPM	106 hp (79 kW)
Peak net @ 1800 RPM	123 hp (91 kW)
Economy Power Mode:	
Peak gross @ 1700 RPM	110 hp (82 kW)
Net rated @ 2000 RPM	76 hp (57 kW)
Peak net @ 1700 RPM	101 hp (75 kW)

Torque – peak:

Maximum Power Mode:	
Gross @ 1600 RPM	448 lb-ft (608 N-m)
Net @ 1600 RPM	424 lb-ft (575 N-m)
Standard Power Mode:	
Gross @ 1300 RPM	407 lb-ft (552 N-m)
Net @ 1300 RPM	391 lb-ft (530 N-m)
Economy Power Mode:	
Gross @ 1200 RPM	403 lb-ft (547 N-m)
Net @ 1200 RPM	389 lb-ft (528 N-m)

Torque rise:

Maximum power range	21%
---------------------	-----

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

### DRIVETRAIN

Transmission:  
4F/3R Proportional w/ Electronic Control  
Module torque sensing autoshift/manual shift and modulation

Gears	Helical cut
Gear ratios – 4-speed	Forward/Reverse
1st	4.012/3.804
2nd	2.174/2.061
3rd	1.088/1.031
4th	0.619/ –

Torque converter:

Stall ratio – 4-speed	2.30:1
-----------------------	--------

Differential:  
Limited slip w/ 34% transfer on front and rear axles

Rear axle oscillation	24° total
-----------------------	-----------

Front and rear axles:

Differential ratio	3.364
Planetary ratio	6.4
Final axle ratio	21.53

Planetaries	Outboard
-------------	----------

Service brakes:  
Hydraulically actuated, maintenance-free, multiple wet disc w/ accumulator to all four wheels

Brake surface area:

Front hub – each	480 in <sup>2</sup> (0.31 m <sup>2</sup> )
Rear hub – each	480 in <sup>2</sup> (0.31 m <sup>2</sup> )

Parking brakes:  
Spring-applied hydraulic release disc on transmission output shaft neutralizes power flow to wheels when engaged

Travel speeds – 4-speed transmission:

	Forward	Reverse
	mph (kph)	mph (kph)
1st	3.8 (6.1)	4.0 (6.4)
2nd	6.9 (11.1)	7.3 (11.7)
3rd	13.4 (21.6)	14.1 (22.8)
4th	22.3 (35.9)	–

NOTE: Travel speeds at full engine throttle w/ 17.5 x 25 L2/L3 tires.

### ELECTRICAL

Voltage	24 Volts, negative ground
Alternator	70 amp
Batteries (2)	12-volt

### OPERATOR ENVIRONMENT

ROPS cab AC w/ heat; Key start; Articulated power steering w/ tilt column; Fully adjustable, suspension seat; Foot throttle; Single lever loader control w/ fully adjustable wrist rest, 2 cup holders; 2 interior rear view mirrors; 2-inch (51 mm) retractable seat belt; Multiple storage trays; Single brake pedal; F/N/R shuttle switch; External rearview mirrors; Pressurized air filtering; Anti-glare window strip; Front and Rear Defroster; Side window, partial/fully open; 2 Dome lights; Wipers, rear and intermittent front; Windshield washers, front and rear; Rubber floor mat; Horn.

Displays/Gauges:

Digital:  
Transmission oil temperature; Engine coolant temperature; Fuel level; DEF level.

LCD screen:  
Hour meter; Time; FNR indicator; Trip computer A/B; Differential lock; Engine speed; Automatic transmission indicator; DeClutch indicator; Fuel consumption; Engine diagnostics; Error reporting; Travel speed; Gear selection; Engine mode indicator; Transmission diagnostics; DEF – Diesel Exhaust Fluid gauge.

Audible/Visual alarms:

Warning lights:  
Parking brake; Coolant temperature; Hydraulic oil temperature; Transmission oil temperature; Air filter; Transmission filter; Alternator; Low fuel; Grid heater; Brake pressure; Engine oil pressure; Steering pressure.

Caution warnings:  
Parking brake; Coolant temperature; Hydraulic oil temperature; Transmission oil temperature; Air filter; Transmission filter; Hydraulic filter; Alternator; Low fuel.

Critical warnings:  
Engine oil pressure; Brake pressure; Steering pressure – w/ aux. steering; Coolant temperature; Hydraulic oil temperature; Transmission oil temperature.

Backup alarm

Maintenance reminders:  
Cab air filter; Engine oil filter; Fuel pre-filter; DEF tank vent filter; SCR supply filter; Hydraulic oil and filter; Engine air filter; Engine coolant drive belt; Cab recirculation filter; Engine breather filter; Transmission breather; Front and rear axle fluid; SCR supply module filter.

NOTE: \*If equipped w/ option.

### OPERATING WEIGHT

Z-Bar  
Unit equipped w/ ROPS cab w/ heater and A/C;  
Standard counterweight; 17.5-R25 L3 Radial tires;  
2.3 yd<sup>3</sup> (1.8 m<sup>3</sup>) pin-on w/ bolt on edge; Full fuel;  
165 lb (75 kg) operator:

24,290 lb (11 018 kg)

XT  
Unit equipped w/ ROPS cab w/ heater and A/C;  
Full counterweight; 17.5-R25 L3 Radial tires;  
2.1 yd<sup>3</sup> (1.6 m<sup>3</sup>) ACS loader bucket w/ bolt on  
edge; Standard batteries; Full fuel; 165 lb  
(75 kg) operator:

25,834 lb (11 718 kg)

XR  
Unit equipped w/ ROPS cab w/ heater and A/C;  
Full counterweight; 17.5-R25 L3 Radial tires;  
Front and rear fenders; 2.3 yd<sup>3</sup> (1.8 m<sup>3</sup>) general  
purpose loader bucket w/ edge; Full fuel; 165 lb  
(75 kg) operator:

24,572 lb (11 146 kg)

### HYDRAULICS

Pump – steering/implement:

Closed center pressure/flow compensated

Variable displacement – load-sensing:

35.4 gpm @ 2000 RPM  
(134 L/min @ 2000 RPM)

Loader control valve:

Closed-center, sectional 2, 3 or 4-function  
w/ control for lift, tilt and auxiliary hydraulics

Loader auxiliary steering:

Hydraulic orbital center-pivot articulating  
w/ on-demand oil flow

High pressure standby 3,625 psi (24 993 kPa)

Filtration:

Filtered vent w/ relief on hydraulic reservoir,  
maintains 2-3 psi on reservoir, 10-micron, return  
filter furnishes only clean oil to all components  
of the system

### SERVICE CAPACITIES

Fuel tank 50.0 gal (189.0 L)

DEF tank – Diesel Exhaust Fluid:

Usable capacity 7.1 gal (26.7 L)

Total 11.7 gal (44.2 L)

Hydraulic system:

Reservoir 15.0 gal (56.8 L)

Total 23.8 gal (90.1 L)

Transmission:

Service w/ filter 6.87 gal (26 L)

Front and rear axle:

Front axle 23.2 qt (22.0 L)

Rear axle 23.2 qt (22.0 L)

Engine oil w/ filter 12.5 qt (11.8 L)

Cooling system 23.2 qt (22.0 L)

### OTHER SPECIFICATIONS

Lift cylinder:

Bore diameter 4.00 in (101.6 mm)

Rod diameter 2.25 in (57.2 mm)

Stroke 30.82 in (783.0 mm)

Dump cylinder – Z-Bar and XR:

Bore diameter 4.50 in (114.3 mm)

Rod diameter 2.50 in (63.5 mm)

Stroke 20.84 in (529.3 mm)

Dump cylinders – XT:

Bore diameter 4.00 in (101.6 mm)

Rod diameter 2.25 in (57.2 mm)

Stroke 29.85 in (758.2 mm)

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.

Cycle time:

Raise w/ rated bucket load 5.4 sec

Dump w/ rated bucket load:

Z-Bar/XR 1.2 sec

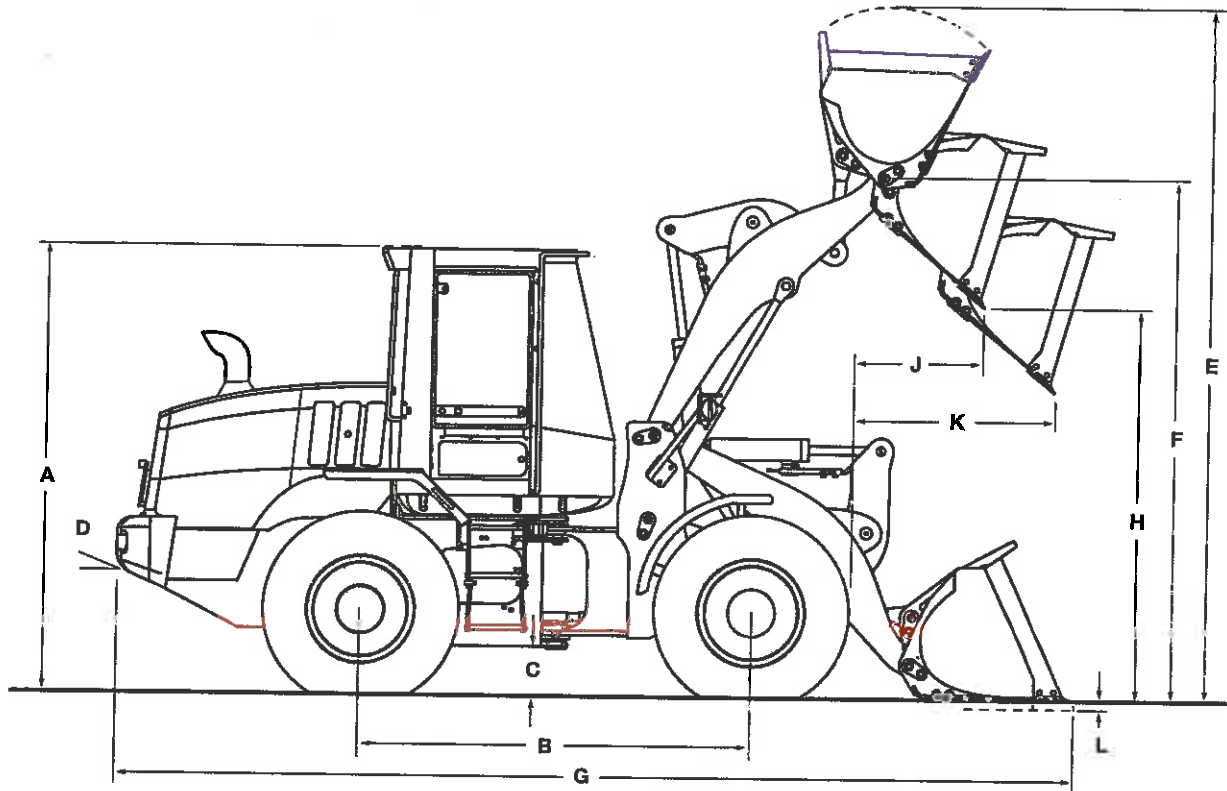
XT 2.4 sec

Float down 3.9 sec

Sound level in Cab (LpA) 68 dB(A)

Exterior sound level (LwA) 102 dB(A)

NOTE: Sound level data tested in accordance  
with ISO6395, 6396, 3744.



Line drawings are for illustrative purpose only and may not be exact representation of unit.

#### DIMENSIONS

A. Height to top of ROPS cab	128.9 in (3 275 mm)
Height to drawbar	37.5 in (952 mm)
B. Wheelbase	108.3 in (2 750 mm)
C. Ground clearance	13.4 in (341 mm)
D. Angle of departure	30°
Width:	
Overall* without bucket	96.4 in (2 448 mm)
Centerline tread	78.7 in (2 000 mm)
Turning radius* – outside	196.9 in (5 002 mm)
Turning angle:	
From center	
Total angle	40°
Rear axle oscillation – total	80°
	24°

NOTE: \*Dimensions taken with 17.5x25 L2 Radial tires. Additional dimensions on pages 4 through 7.

#### WEIGHT ADJUSTMENTS

Select Options	Weight Adjustment	Tipping Load Adjustment	
		Straight: Deflected	40° Turn: Deflected
17.5 x 25 L2 Bias tires	-632 lb (-287 kg)	-588 lb (-267 kg)	-834 lb (-378 kg)
17.5 x 25 L3 Bias tires	-344 lb (-156 kg)	-318 lb (-144 kg)	-527 lb (-239 kg)
17.5-R25 XHA TL (L2 Radial) tires	-168 lb (-76 kg)	-188 lb (-85 kg)	-179 lb (-81 kg)
20.5-R25 L2 Bias tires	+220 lb (+100 kg)	+142 lb (+64 kg)	-72 lb (-33 kg)
20.5-R25 L2 Radial tires	+556 lb (+252 kg)	+366 lb (+166 kg)	+290 lb (+132 kg)
20.5-R25 L3 Radial tires	+812 lb (+368 kg)	+609 lb (+276 kg)	+517 lb (+234 kg)
20.5-R25 Snow Radial tires	+680 lb (+308 kg)	+447 lb (+203 kg)	+362 lb (+164 kg)
Light counterweight	-1,069 lb (-485 kg)	-2,196 lb (-996 kg)	-1,781 lb (-808 kg)

NOTE: Tires inflated to 50 psi (345 kPa) in the front and 40 psi (275 kPa) in the rear.

\*\*Unit equipped with Z-Bar loader arms, 2.1 yd<sup>3</sup> (1.61 m<sup>3</sup>) general purpose pin on bucket with bolt-on edge, 17.5x25 L3 Radial tires, ROPS cab with heater and air conditioner, heavy counterweight, standard batteries, front and rear fenders, full fuel and 165 lb (75 kg) operator. Adjust select options from rated weight.



PERFORMANCE SPECS

<b>521G Z-Bar*</b>		<b>2.1 yd<sup>3</sup> (1.61 m<sup>3</sup>) Bucket with Bolt-On Edge - Pin On</b>	<b>2.0 yd<sup>3</sup> (1.53 m<sup>3</sup>) Bucket with Teeth - Pin On</b>	<b>2.3 yd<sup>3</sup> (1.76 m<sup>3</sup>) Bucket with Bolt-On Edge - Pin On</b>
Operating weight		24,203 lb (10 978 kg)	24,128 lb (10 944 kg)	24,290 lb (11 018 kg)
E. Operating height – fully raised with spillguard		181.6 in (4 613 mm)	181.6 in (4 614 mm)	184.3 in (4 682 mm)
F. Hinge pin height – fully raised		142.0 in (3 606 mm)	142.0 in (3 606 mm)	142.0 in (3 606 mm)
G. Overall length – bucket level on ground		260.3 in (6 612 mm)	266.0 in (6 755 mm)	263.3 in (6 687 mm)
Dump angle – fully raised		55°	55°	55°
H. Dump height – fully raised, 45° dump		108.7 in (2 760 mm)	105.0 in (2 668 mm)	106.7 in (2 711 mm)
J. Bucket reach – fully raised, 45° dump		37.9 in (962 mm)	42.0 in (1 067 mm)	39.8 in (1 012 mm)
K. Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump		55.8 in (1 418 mm)	58.0 in (1 474 mm)	56.8 in (1 443 mm)
L. Dig depth		2.7 in (67 mm)	2.8 in (71 mm)	2.9 in (73 mm)
Operating load – ISO Rigid Tires		8,960 lb (4 064 kg)	9,083 lb (4 120 kg)	8,842 lb (4 011 kg)
Operating load – ISO Deflected Tires		8,131 lb (3 688 kg)	8,243 lb (3 739 kg)	8,015 lb (3 636 kg)
Maximum material density – ISO Rigid Tires		4,267 lb/yd <sup>3</sup> (2 532 kg/m <sup>3</sup> )	4,542 lb/yd <sup>3</sup> (2 695 kg/m <sup>3</sup> )	3,844 lb/yd <sup>3</sup> (2 281 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires		3,872 lb/yd <sup>3</sup> (2 297 kg/m <sup>3</sup> )	4,121 lb/yd <sup>3</sup> (2 446 kg/m <sup>3</sup> )	3,485 lb/yd <sup>3</sup> (2 068 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:	Straight	20,357 lb (9 234 kg)	20,623 lb (9 355 kg)	20,102 lb (9 118 kg)
	40° turn	17,920 lb (8 128 kg)	18,166 lb (8 240 kg)	17,684 lb (8 021 kg)
Tipping load – ISO Deflected Tires:	Straight	18,911 lb (8 578 kg)	19,157 lb (8 690 kg)	18,661 lb (8 464 kg)
	40° turn	16,262 lb (7 376 kg)	16,486 lb (7 478 kg)	16,030 lb (7 271 kg)
Lift capacity:	Full height	12,249 lb (5 556 kg)	12,326 lb (5 591 kg)	12,161 lb (5 516 kg)
	Ground	23,635 lb (10 721 kg)	24,540 lb (11 131 kg)	22,083 lb (10 017 kg)
Breakout force with tilt cylinder		20,934 lb (9 495 kg)	22,593 lb (10 248 kg)	19,370 lb (8 786 kg)
Loader clearance circle with bucket		431.7 in (10 966 mm)	435.4 in (11 059 mm)	433.4 in (11 008 mm)

<b>521G XR</b>		<b>2.1 yd<sup>3</sup> (1.61 m<sup>3</sup>) Bucket with Bolt-On Edge - Pin On</b>	<b>2.0 yd<sup>3</sup> (1.53 m<sup>3</sup>) Bucket with Teeth - Pin On</b>	<b>2.3 yd<sup>3</sup> (1.76 m<sup>3</sup>) Bucket with Bolt-On Edge - Pin On</b>
Operating weight		24,485 lb (11 106 kg)	24,409 lb (11 072 kg)	24,572 lb (11 146 kg)
E. Operating height – fully raised with spillguard		196.6 in (4 993 mm)	196.6 in (4 993 mm)	199.3 in (5 061 mm)
F. Hinge pin height – fully raised		156.9 in (3 985 mm)	156.9 in (3 986 mm)	156.9 in (3 985 mm)
G. Overall length – bucket level on ground		273.9 in (6 958 mm)	279.6 in (7 101 mm)	276.9 in (7 033 mm)
Dump angle – fully raised		51°	51°	51°
H. Dump height – fully raised, 45° dump		123.6 in (3 140 mm)	120.0 in (3 047 mm)	121.7 in (3 091 mm)
J. Bucket reach – fully raised, 45° dump		36.9 in (937 mm)	41.0 in (1 042 mm)	38.8 in (987 mm)
K. Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump		67.5 in (1 714 mm)	69.9 in (1 775 mm)	68.6 in (1 741 mm)
L. Dig depth		4.0 in (102 mm)	4.2 in (106 mm)	4.3 in (108 mm)
Operating load – ISO Rigid Tires		7,621 lb (3 457 kg)	7,724 lb (3 504 kg)	7,521 lb (3 411 kg)
Operating load – ISO Deflected Tires		6,972 lb (3 163 kg)	7,068 lb (3 206 kg)	6,872 lb (3 117 kg)
Maximum material density – ISO Rigid Tires		3,629 lb/yd <sup>3</sup> (2 153 kg/m <sup>3</sup> )	3,862 lb/yd <sup>3</sup> (2 292 kg/m <sup>3</sup> )	3,270 lb/yd <sup>3</sup> (1 940 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires		3,320 lb/yd <sup>3</sup> (1 970 kg/m <sup>3</sup> )	3,534 lb/yd <sup>3</sup> (2 097 kg/m <sup>3</sup> )	2,988 lb/yd <sup>3</sup> (1 773 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:	Straight	17,381 lb (7 884 kg)	17,603 lb (7 984 kg)	17,166 lb (7 787 kg)
	40° turn	15,242 lb (6 914 kg)	15,448 lb (7 007 kg)	15,042 lb (6 823 kg)
Tipping load – ISO Deflected Tires:	Straight	16,268 lb (7 379 kg)	16,475 lb (7 473 kg)	16,053 lb (7 282 kg)
	40° turn	13,944 lb (6 325 kg)	14,135 lb (6 412 kg)	13,745 lb (6 235 kg)
Lift capacity:	Full height	11,128 lb (5 047 kg)	11,203 lb (5 082 kg)	11,041 lb (5 008 kg)
	Ground	20,122 lb (9 127 kg)	20,291 lb (9 204 kg)	19,915 lb (9 033 kg)
Breakout force with tilt cylinder		21,010 lb (9 530 kg)	22,672 lb (10 284 kg)	19,438 lb (8 817 kg)
Loader clearance circle with bucket		444.2 in (11 282 mm)	448.2 in (11 385 mm)	446.1 in (11 330 mm)

<b>521G</b>		<b>Z-Bar/XR</b>	<b>Z-Bar/XR</b>	<b>Z-Bar/XR</b>
Maximum rollback:	Ground	40°/39°	40°/39°	40°/39°
	Carry position	44°/46°	44°/46°	44°/46°
	⊙ Full height	54°/55°	54°/55°	54°/55°
Maximum grading angle with bucket – back dragging		60°/60°	60°/60°	60°/60°
SAE bucket capacity – struck	Heaped	1.77 yd <sup>3</sup> (1.35 m <sup>3</sup> )	1.67 yd <sup>3</sup> (1.28 m <sup>3</sup> )	2.00 yd <sup>3</sup> (1.53 m <sup>3</sup> )
		2.10 yd <sup>3</sup> (1.61 m <sup>3</sup> )	2.00 yd <sup>3</sup> (1.53 m <sup>3</sup> )	2.30 yd <sup>3</sup> (1.76 m <sup>3</sup> )
Bucket width – outside		100.4 in (2 550 mm)	100.9 in (2 563 mm)	100.4 in (2 550 mm)
Bucket weight		1,603 lb (727 kg)	1,527 lb (693 kg)	1,690 lb (766 kg)

**PERFORMANCE SPECS**

<b>521G Z-Bar*</b>	<b>2.20 yd<sup>3</sup> (1.68 m<sup>3</sup>) Bucket with Teeth - Pin On</b>	<b>2.60 yd<sup>3</sup> (1.99 m<sup>3</sup>) Bucket with Bolt-On Edge - Pin On</b>	<b>2.10 yd<sup>3</sup> (1.61 m<sup>3</sup>) Bucket with Bolt-On Edge - ACS Coupler</b>
Operating weight	24,214 lb (10 983 kg)	24,222 lb (10 987 kg)	25,117 lb (11 393 kg)
E. Operating height – fully raised with spillguard	184.3 in (4 682 mm)	186.7 in (4 743 mm)	184.7 in (4 692 mm)
F. Hinge pin height – fully raised	142.0 in (3 606 mm)	142.0 in (3 606 mm)	141.9 in (3 604 mm)
G. Overall length – bucket level on ground	269.0 in (6 832 mm)	266.0 in (6 757 mm)	265.3 in (6 739 mm)
Dump angle – fully raised	55°	55°	55°
H. Dump height – fully raised, 45° dump	103.0 in (2 617 mm)	104.9 in (2 664 mm)	105.4 in (2 678 mm)
J. Bucket reach – fully raised, 45° dump	44.0 in (1 118 mm)	41.5 in (1 055 mm)	41.7 in (1 058 mm)
K. Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	58.9 in (1 495 mm)	57.5 in (1 460 mm)	57.9 in (1 471 mm)
L. Dig depth	3.0 in (77 mm)	3.2 in (81 mm)	2.7 in (69 mm)
Operating load – ISO Rigid Tires	8,963 lb (4 065 kg)	8,793 lb (3 988 kg)	8,199 lb (3 719 kg)
Operating load – ISO Deflected Tires	8,125 lb (3 685 kg)	7,968 lb (3 614 kg)	7,404 lb (3 359 kg)
Maximum material density – ISO Rigid Tires	4,074 lb/yd <sup>3</sup> (2 417 kg/m <sup>3</sup> )	3,382 lb/yd <sup>3</sup> (2 007 kg/m <sup>3</sup> )	3,904 lb/yd <sup>3</sup> (2 317 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires	3,693 lb/yd <sup>3</sup> (2 191 kg/m <sup>3</sup> )	3,065 lb/yd <sup>3</sup> (1 818 kg/m <sup>3</sup> )	3,526 lb/yd <sup>3</sup> (2 092 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:			
Straight	20,363 lb (9 236 kg)	19,983 lb (9 064 kg)	18,740 lb (8 500 kg)
40° turn	17,925 lb (8 131 kg)	17,585 lb (7 977 kg)	16,398 lb (7 438 kg)
Tipping load – ISO Deflected Tires:			
Straight	18,901 lb (8 573 kg)	18,546 lb (8 412 kg)	17,358 lb (7 873 kg)
40° turn	16,249 lb (7 371 kg)	15,936 lb (7 228 kg)	14,809 lb (6 717 kg)
Lift capacity:			
Full height	12,238 lb (5 551 kg)	12,228 lb (5 547 kg)	11,330 lb (5 139 kg)
Ground	23,379 lb (10 605 kg)	20,727 lb (9 401 kg)	18,132 lb (8 224 kg)
Breakout force with tilt cylinder	20,775 lb (9 423 kg)	18,181 lb (8 247 kg)	18,096 lb (8 208 kg)
Loader clearance circle with bucket	437.2 in (11 104 mm)	435.0 in (11 049 mm)	434.5 in (11 037 mm)

<b>521G XR</b>	<b>2.20 yd<sup>3</sup> (1.68 m<sup>3</sup>) Bucket with Teeth - Pin On</b>	<b>2.60 yd<sup>3</sup> (1.99 m<sup>3</sup>) Bucket with Bolt-On Edge - Pin On</b>	<b>2.10 yd<sup>3</sup> (1.61 m<sup>3</sup>) Bucket with Bolt-On Edge - ACS Coupler</b>
Operating weight	24,496 lb (11 111 kg)	24,504 lb (11 115 kg)	25,399 lb (11 521 kg)
E. Operating height – fully raised with spillguard	199.3 in (5 061 mm)	201.7 in (5 123 mm)	199.7 in (5 071 mm)
F. Hinge pin height – fully raised	156.9 in (3 985 mm)	156.9 in (3 985 mm)	156.9 in (3 984 mm)
G. Overall length – bucket level on ground	282.5 in (7 177 mm)	279.6 in (7 102 mm)	278.9 in (7 085 mm)
Dump angle – fully raised	51°	51°	51°
H. Dump height – fully raised, 45° dump	118.0 in (2 997 mm)	119.8 in (3 044 mm)	120.4 in (3 058 mm)
J. Bucket reach – fully raised, 45° dump	43.0 in (1 092 mm)	40.5 in (1 030 mm)	40.7 in (1 033 mm)
K. Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	70.9 in (1 801 mm)	69.4 in (1 762 mm)	69.7 in (1 772 mm)
L. Dig depth	4.4 in (112 mm)	4.6 in (116 mm)	4.1 in (104 mm)
Operating load – ISO Rigid Tires	7,622 lb (3 457 kg)	7,491 lb (3 398 kg)	6,941 lb (3 148 kg)
Operating load – ISO Deflected Tires	6,967 lb (3 160 kg)	6,844 lb (3 104 kg)	6,315 lb (2 864 kg)
Maximum material density - ISO Rigid Tires	3,465 lb/yd <sup>3</sup> (2 056 kg/m <sup>3</sup> )	2,881 lb/yd <sup>3</sup> (1 710 kg/m <sup>3</sup> )	3,305 lb/yd <sup>3</sup> (1 961 kg/m <sup>3</sup> )
Maximum material density - ISO Deflected Tires	3,167 lb/yd <sup>3</sup> (1 879 kg/m <sup>3</sup> )	2,632 lb/yd <sup>3</sup> (1 562 kg/m <sup>3</sup> )	3,007 lb/yd <sup>3</sup> (1 784 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:			
Straight	17,383 lb (7 885 kg)	17,091 lb (7 752 kg)	15,948 lb (7 234 kg)
40° turn	15,244 lb (6 914 kg)	14,982 lb (6 796 kg)	13,882 lb (6 297 kg)
Tipping load – ISO Deflected Tires:			
Straight	16,259 lb (7 375 kg)	15,980 lb (7 248 kg)	14,875 lb (6 747 kg)
40° turn	13,934 lb (6 320 kg)	13,687 lb (6 208 kg)	12,630 lb (5 729 kg)
Lift capacity:			
Full height	11,116 lb (5 042 kg)	11,110 lb (5 039 kg)	10,215 lb (4 633 kg)
Ground	20,081 lb (9 109 kg)	19,856 lb (9 006 kg)	18,802 lb (8 528 kg)
Breakout force with tilt cylinder	20,846 lb (9 456 kg)	18,242 lb (8 274 kg)	18,162 lb (8 238 kg)
Loader clearance circle with bucket	450.2 in (11 435 mm)	447.8 in (11 375 mm)	447.3 in (11 362 mm)

<b>521G</b>	<b>Z-Bar/XR</b>	<b>Z-Bar/XR</b>	<b>Z-Bar/XR</b>
Maximum rollback:	Ground	40°/39°	40°/39°
	Carry position	44°/46°	44°/46°
	@ Full height	54°/55°	54°/55°
Maximum grading angle with bucket – back dragging	61°/61°	60°/60°	60°/60°
SAE bucket capacity – struck	1.90 yd <sup>3</sup> (1.45 m <sup>3</sup> )	2.21 yd <sup>3</sup> (1.69 m <sup>3</sup> )	1.77 yd <sup>3</sup> (1.35 m <sup>3</sup> )
	Heaped	2.20 yd <sup>3</sup> (1.68 m <sup>3</sup> )	2.60 yd <sup>3</sup> (1.99 m <sup>3</sup> )
Bucket width – outside	100.9 in (2 563 mm)	100.4 in (2 550 mm)	100.4 in (2 550 mm)
Bucket weight	1,614 lb (732 kg)	1,622 lb (736 kg)	2,517 lb (1 141 kg)

PERFORMANCE SPECS

<b>521G Z-Bar*</b>		<b>2.00 yd<sup>3</sup> (1.53 m<sup>3</sup>) Bucket with Teeth - ACS Coupler</b>	<b>2.10 yd<sup>3</sup> (1.61 m<sup>3</sup>) Bucket with Bolt-On Edge - JRB Coupler</b>	<b>2.00 yd<sup>3</sup> (1.53 m<sup>3</sup>) Bucket with Teeth - JRB Coupler</b>
Operating weight		25,041 lb (11 359 kg)	25,006 lb (11 343 kg)	24,931 lb (11 308 kg)
E. Operating height – fully raised with spillguard		184.7 in (4 692 mm)	186.0 in (4 724 mm)	186.0 in (4 724 mm)
F. Hinge pin height – fully raised		141.9 in (3 605 mm)	141.9 in (3 605 mm)	141.9 in (3 605 mm)
G. Overall length – bucket level on ground		270.9 in (6 882 mm)	269.1 in (6 834 mm)	266.6 in (6 773 mm)
Dump angle – fully raised		55°	55°	55°
H. Dump height – fully raised, 45° dump		101.8 in (2 586 mm)	102.8 in (2 612 mm)	104.4 in (2 651 mm)
J. Bucket reach – fully raised, 45° dump		45.8 in (1 163 mm)	43.2 in (1 098 mm)	41.2 in (1 046 mm)
K. Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump		59.9 in (1 521 mm)	58.0 in (1 472 mm)	56.8 in (1 443 mm)
L. Dig depth		2.9 in (72 mm)	3.7 in (94 mm)	3.8 in (98 mm)
Operating load – ISO Rigid Tires		8,275 lb (3 753 kg)	7,960 lb (3 611 kg)	8,048 lb (3 650 kg)
Operating load – ISO Deflected Tires		7,478 lb (3 392 kg)	7,202 lb (3 267 kg)	7,267 lb (3 296 kg)
Maximum material density – ISO Rigid Tires		4,137 lb/yd <sup>3</sup> (2 455 kg/m <sup>3</sup> )	3,791 lb/yd <sup>3</sup> (2 249 kg/m <sup>3</sup> )	4,024 lb/yd <sup>3</sup> (2 388 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires		3,739 lb/yd <sup>3</sup> (2 219 kg/m <sup>3</sup> )	3,429 lb/yd <sup>3</sup> (2 035 kg/m <sup>3</sup> )	3,634 lb/yd <sup>3</sup> (2 156 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:	Straight	18,899 lb (8 573 kg)	18,188 lb (8 250 kg)	18,393 lb (8 343 kg)
	40° turn	16,549 lb (7 507 kg)	15,920 lb (7 221 kg)	16,095 lb (7 301 kg)
Tipping load – ISO Deflected Tires:	Straight	17,514 lb (7 944 kg)	16,873 lb (7 654 kg)	17,040 lb (7 729 kg)
	40° turn	14,956 lb (6 784 kg)	14,403 lb (6 533 kg)	14,535 lb (6 593 kg)
Lift capacity:	Full height	11,407 lb (5 174 kg)	11,435 lb (5 187 kg)	11,513 lb (5 222 kg)
	Ground	18,780 lb (8 519 kg)	15,664 lb (7 105 kg)	15,898 lb (7 211 kg)
Breakout force with tilt cylinder		19,364 lb (8 783 kg)	16,839 lb (7 638 kg)	21,530 lb (9 766 kg)
Loader clearance circle with bucket		438.3 in (11 133 mm)	436.8 in (11 094 mm)	435.8 in (11 070 mm)

<b>521G XR</b>		<b>2.00 yd<sup>3</sup> (1.53 m<sup>3</sup>) Bucket with Teeth - ACS Coupler</b>	<b>2.10 yd<sup>3</sup> (1.61 m<sup>3</sup>) Bucket with Bolt-On Edge - JRB Coupler</b>	<b>2.00 yd<sup>3</sup> (1.53 m<sup>3</sup>) Bucket with Teeth - JRB Coupler</b>
Operating weight		25,323 lb (11 486 kg)	25,288 lb (11 470 kg)	25,212 lb (11 436 kg)
E. Operating height – fully raised with spillguard		199.7 in (5 071 mm)	200.9 in (5 104 mm)	201.0 in (5 104 mm)
F. Hinge pin height – fully raised		156.9 in (3 984 mm)	156.9 in (3 984 mm)	156.9 in (3 984 mm)
G. Overall length – bucket level on ground		284.6 in (7 228 mm)	282.6 in (7 177 mm)	280.1 in (7 115 mm)
Dump angle – fully raised		51°	51°	51°
H. Dump height – fully raised, 45° dump		116.7 in (2 965 mm)	117.8 in (2 992 mm)	119.3 in (3 031 mm)
J. Bucket reach – fully raised, 45° dump		44.8 in (1 138 mm)	42.2 in (1 073 mm)	40.2 in (1 020 mm)
K. Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump		72.0 in (1 829 mm)	70.0 in (1 778 mm)	68.7 in (1 746 mm)
L. Dig depth		4.2 in (108 mm)	5.1 in (129 mm)	5.2 in (133 mm)
Operating load – ISO Rigid Tires		7,009 lb (3 179 kg)	6,771 lb (3 071 kg)	6,839 lb (3 102 kg)
Operating load – ISO Deflected Tires		6,381 lb (2 894 kg)	6,168 lb (2 798 kg)	6,220 lb (2 821 kg)
Maximum material density – ISO Rigid Tires		3,504 lb/yd <sup>3</sup> (2 079 kg/m <sup>3</sup> )	3,224 lb/yd <sup>3</sup> (1 913 kg/m <sup>3</sup> )	3,419 lb/yd <sup>3</sup> (2 029 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires		3,191 lb/yd <sup>3</sup> (1 893 kg/m <sup>3</sup> )	2,937 lb/yd <sup>3</sup> (1 743 kg/m <sup>3</sup> )	3,110 lb/yd <sup>3</sup> (1 845 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:	Straight	16,089 lb (7 298 kg)	15,550 lb (7 053 kg)	15,708 lb (7 125 kg)
	40° turn	14,017 lb (6 358 kg)	13,542 lb (6 143 kg)	13,677 lb (6 204 kg)
Tipping load – ISO Deflected Tires:	Straight	15,014 lb (6 810 kg)	14,520 lb (6 586 kg)	14,651 lb (6 645 kg)
	40° turn	12,762 lb (5 789 kg)	12,337 lb (5 596 kg)	12,440 lb (5 643 kg)
Lift capacity:	Full height	10,290 lb (4 668 kg)	10,327 lb (4 684 kg)	10,403 lb (4 719 kg)
	Ground	18,937 lb (8 590 kg)	17,021 lb (7 720 kg)	17,288 lb (7 842 kg)
Breakout force with tilt cylinder		19,433 lb (8 815 kg)	16,893 lb (7 662 kg)	21,599 lb (9 797 kg)
Loader clearance circle with bucket		451.4 in (11 467 mm)	449.8 in (11 426 mm)	448.7 in (11 398 mm)

<b>521G</b>		<b>Z-Bar/XR</b>	<b>Z-Bar/XR</b>	<b>Z-Bar/XR</b>
Maximum rollback:	Ground	40°/39°	41°/40°	41°/40°
	Carry position	44°/46°	44°/46°	44°/46°
	@ Full height	54°/55°	54°/55°	54°/55°
Maximum grading angle with bucket – back dragging		62°/61°	61°/61°	61°/60°
SAE bucket capacity – struck		1.67 yd <sup>3</sup> (1.28 m <sup>3</sup> )	1.77 yd <sup>3</sup> (1.35 m <sup>3</sup> )	1.67 yd <sup>3</sup> (1.28 m <sup>3</sup> )
	Heaped	2.00 yd <sup>3</sup> (1.53 m <sup>3</sup> )	2.10 yd <sup>3</sup> (1.61 m <sup>3</sup> )	2.00 yd <sup>3</sup> (1.53 m <sup>3</sup> )
Bucket width – outside		100.9 in (2 563 mm)	100.4 in (2 550 mm)	100.9 in (2 563 mm)
Bucket weight		2,441 lb (1 107 kg)	2,406 lb (1 091 kg)	2,330 lb (1 057 kg)



PERFORMANCE SPECS

521G XT	2.1 yd <sup>3</sup> (1.61 m <sup>3</sup> ) Bucket with Bolt-On Edge - ACS Coupler**	2.0 yd <sup>3</sup> (1.53 m <sup>3</sup> ) Bucket with Teeth ACS Coupler**	2.1 yd <sup>3</sup> (1.61 m <sup>3</sup> ) Bucket with Bolt-On Edge - JRB Coupler***	2.0 yd <sup>3</sup> (1.53 m <sup>3</sup> ) Bucket with Teeth JRB Coupler***
Operating weight	25,834 lb (11 718 kg)	25,765 lb (11 687 kg)	25,404 lb (11 523 kg)	25,328 lb (11 489 kg)
E. Operating height – fully raised with spillguard	196.2 in (4 984 mm)	193.8 in (4 923 mm)	188.4 in (4 786 mm)	188.4 in (4 786 mm)
F. Hinge pin height – fully raised	147.3 in (3 742 mm)	147.3 in (3 742 mm)	147.3 in (3 743 mm)	147.4 in (3 743 mm)
G. Overall length – bucket level on ground	269.6 in (6 848 mm)	275.2 in (6 991 mm)	274.0 in (6 960 mm)	279.7 in (7 103 mm)
Dump angle – fully raised	57°	57°	57°	57°
H. Dump height – fully raised, 45° dump	106.1 in (2 695 mm)	102.5 in (2 603 mm)	102.0 in (2 590 mm)	98.3 in (2 497 mm)
J. Bucket reach – fully raised, 45° dump	46.1 in (1 171 mm)	50.3 in (1 277 mm)	40.6 in (1 031 mm)	44.7 in (1 136 mm)
K. Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	62.9 in (1 598 mm)	64.9 in (1 650 mm)	55.0 in (1 396 mm)	56.7 in (1 440 mm)
L. Dig depth	3.3 in (84 mm)	3.4 in (87 mm)	10.0 in (254 mm)	10.2 in (258 mm)
Operating load – ISO Rigid Tires	7,652 lb (3 471 kg)	7,719 lb (3 501 kg)	7,389 lb (3 351 kg)	7,488 lb (3 396 kg)
Operating load – ISO Deflected Tires	6,858 lb (3 111 kg)	6,924 lb (3 141 kg)	6,692 lb (3 035 kg)	6,784 lb (3 077 kg)
Maximum material density – ISO Rigid Tires	3,644 lb/yd <sup>3</sup> (2 162 kg/m <sup>3</sup> )	3,860 lb/yd <sup>3</sup> (2 290 kg/m <sup>3</sup> )	3,518 lb/yd <sup>3</sup> (2 088 kg/m <sup>3</sup> )	3,744 lb/yd <sup>3</sup> (2 222 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires	3,266 lb/yd <sup>3</sup> (1 938 kg/m <sup>3</sup> )	3,462 lb/yd <sup>3</sup> (2 054 kg/m <sup>3</sup> )	3,187 lb/yd <sup>3</sup> (1 891 kg/m <sup>3</sup> )	3,392 lb/yd <sup>3</sup> (2 013 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:				
Straight	17,509 lb (7 942 kg)	17,650 lb (8 006 kg)	16,870 lb (7 652 kg)	17,083 lb (7 749 kg)
40° turn	15,304 lb (6 942 kg)	15,439 lb (7 003 kg)	14,777 lb (6 703 kg)	14,976 lb (6 793 kg)
Tipping load – ISO Deflected Tires:				
Straight	16,130 lb (7 317 kg)	16,269 lb (7 380 kg)	15,671 lb (7 108 kg)	15,871 lb (7 199 kg)
40° turn	13,716 lb (6 221 kg)	13,848 lb (6 281 kg)	13,383 lb (6 071 kg)	13,568 lb (6 154 kg)
Lift capacity:				
Full height	10,560 lb (4 790 kg)	10,653 lb (4 832 kg)	10,433 lb (4 732 kg)	10,565 lb (4 792 kg)
Ground	24,924 lb (11 305 kg)	24,908 lb (11 298 kg)	22,734 lb (10 312 kg)	22,724 lb (10 307 kg)
Breakout force – dump cylinder	20,302 lb (9 209 kg)	21,531 lb (9 766 kg)	21,227 lb (9 629 kg)	22,556 lb (10 231 kg)
Loader clearance circle with bucket	428.4 in (10 880 mm)	431.5 in (10 960 mm)	432.2 in (10 977 mm)	435.0 in (11 049 mm)

521G

Maximum rollback:				
Ground	57°	57°	57°	57°
Carry position	59°	59°	59°	59°
@ Full height	64°	64°	64°	64°
Maximum grading angle with bucket – back dragging	61°	62°	61°	63°
SAE bucket capacity – struck				
Heaped	1.77 yd <sup>3</sup> (1.35 m <sup>3</sup> )	1.67 yd <sup>3</sup> (1.28 m <sup>3</sup> )	1.77 yd <sup>3</sup> (1.35 m <sup>3</sup> )	1.67 yd <sup>3</sup> (1.28 m <sup>3</sup> )
Heaped	2.10 yd <sup>3</sup> (1.61 m <sup>3</sup> )	2.00 yd <sup>3</sup> (1.53 m <sup>3</sup> )	2.10 yd <sup>3</sup> (1.61 m <sup>3</sup> )	2.00 yd <sup>3</sup> (1.53 m <sup>3</sup> )
Bucket width – outside	100.4 in (2 550 mm)	101.4 in (2 575 mm)	100.4 in (2 550 mm)	100.9 in (2 563 mm)
Bucket weight	2,655 lb (1 204 kg)	2,586 lb (1 173 kg)	2,225 lb (1 009 kg)	2,149 lb (975 kg)

NOTE: \*Z-Bar performance data shown with full counterweight

\*\*XT lift arm with buckets for ACS Pro Series 2000® size 30 HD coupler.

\*\*\*XT lift arm with bucket for Case coupler

Performance data unit equipped with 17.5x25 L2 Radial tires, ROPS cab with heater and air conditioner, full counterweight, standard batteries, front and rear fenders, full fuel and 165 lb (75 kg) operator. Specifications per SAE J732, J1234, J695, J742 and J818.

## STANDARD EQUIPMENT

### OPERATOR ENVIRONMENT

See page 1

### ENGINE

Case/FPT F4HFE413NB  
Tier 4 Final Certified  
Selective Catalytic Reduction (SCR) with  
Diesel Oxidation Catalyst  
Selectable work modes:  
Maximum power  
Auto power  
Standard power  
Economy power  
Turbocharger  
Charge air cooling  
Automatic fan belt tensioner  
Integral engine oil cooling  
Fuel filter with water trap  
Dual-element dry-type air cleaner  
Hydraulic-driven cooling fan  
Air-cooled radiator  
Mid-mounted cooling module  
Common rail electronic fuel injection

### LOADER

See page 2 – Operating weight,  
Other specifications

### DRIVETRAIN

4-wheel drive  
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

### HYDRAULICS

Electro-hydraulic (EH) joystick loader control  
Low-effort steering  
Hydraulic driven fan  
8 Diagnostic quick couplers  
Split flange hydraulic connections –  
1 in or greater  
Hydraulic oil cooler

### ELECTRICAL

70 amp alternator and voltage regulator  
Battery isolator/electrical disconnect  
(2) 700 CCA 12-volt batteries  
Lights:  
2 Front driving headlights – high/low beam  
2 Front flood  
2 LED stop and tail lights  
2 Rear flood  
Front and rear turn signal/flash  
Centrally located fuse box  
with all electrical circuits protected  
Backup alarm  
Remote jump posts

### OTHER

Front and rear fenders, partial coverage  
Heavy counterweight  
Drawbar hitch  
Articulation locking bar  
Lift arm locking bar  
Lift and tie-down points – front/rear  
Grouped remote-mounted ecology drains:  
Engine oil  
Engine coolant  
Hydraulic oil

### TELEMATICS

CASE SiteWatch™ Telematics – includes  
hardware and a 3-yr Advanced  
data subscription

## OPTIONAL EQUIPMENT

### OPERATOR ENVIRONMENT

Cloth-covered heated air-suspension seat  
Leather trimmed heated air seat with active suspension  
3 in (76 mm) retractable seat belt  
Sound Shield noise suppression package  
Bluetooth radio, 12V AM/FM with auxiliary input  
Radio-ready – 12- or 24-volt with auxiliary power – 12-volt  
Cab convenience package:  
Rear sun shade, interior mirror, under the seat drawer, coat hook, 12V accessory port, and an ash tray  
In cab powered cooler box  
In cab accessory mount  
RH steps and platform  
LED rotating beacon  
Joystick steering  
Rear view camera  
External rear view mirrors  
External heated rear view mirrors  
Front LED driving/headlights  
LED front and rear work lights  
Extra front-facing LED work lights

### DRIVETRAIN

Heavy-duty axles with locking front differential and open rear differential  
Cold weather package:  
Heavy-duty batteries (2x 950 CCA)  
Fuel heater  
Hydraulic oil cooler bypass  
Low temperature hydraulic oil  
Grid heater

### HYDRAULICS

Auxiliary hydraulics  
Ride Control™  
Secondary steering  
3- or 4-spool loader valves with 2- or 3-lever loader control

### LOADER

Hydraulic attachment coupler systems  
Buckets – see pages 4 through 7  
Parallel lift XT  
Extended reach XR

### TIRES

17.5 x 25 radial  
20.5 R25 radial  
20.5 R25 bias

### ADVANCED ENGINE AIR FILTRATION

Variable speed hydraulic reversing fan

### OTHER

Special paint  
Full coverage fenders  
Tool box  
Fire extinguisher  
Side guards for rear frame  
License plate brackets, front and rear  
12 mph (20 kph) maximum speed control  
Skid Plate/Transmission guard  
Standard fenders with right and left hand steps  
Wide full coverage fenders with right and left hand steps

CaseCE.com

©2017 CNH Industrial America LLC. All rights reserved. CASE is a trademark registered in the United States and many other countries, owned by or licensed to CNH Industrial N.V., its subsidiaries or affiliates. CNH Industrial Capital is a trademark in the United States and many other countries, owned by or licensed to CNH Industrial N.V., its subsidiaries or affiliates. Printed in U.S.A. Contains 10% post-consumer fiber.

**IMPORTANT:** CASE Construction Equipment Inc. reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Availability of some models and equipment builds vary according to the country in which the equipment is used. The illustrations and text may include optional equipment and accessories and may not include all standard equipment. Your CASE dealer/distributor will be able to give you details of the products and their specifications available in your area.



CASE Construction Equipment is biodiesel-friendly. NOTE: All engines meet current EPA emissions regulations. All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.



Always read the Operator's Manual before operating any equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs and use any safety features provided.

Form No. CCE201708521G  
Replaces Form No. CCE201610521G

521G

**CASE**  
CONSTRUCTION

# Wheel Loaders

G SERIES



521G

621G

721G

821G

921G

1021G

1121G

**SINCE 1842**





**521G**



**621G**



**721G**



**821G**



**921G**



**1021G**



**1121G**







## *Dig, load, transport or clear more — for less*

Introducing the all-new G Series—a full range of powerful wheel loaders engineered to get the job done and control costs throughout the lifecycle of the machine.

- + Best-in-class breakout force
- + Industry-leading visibility
- + 4 Power Modes
- + 5-Speed Transmission\*
- + Powerful, efficient, cool running Tier 4 Final Solution
- + State-of-the-art cab for operator comfort
- + Covered by the industry's most complete protection plan — ProCare

Every design element of the G Series was analyzed and engineered to work together to provide real-world benefits and business solutions that exceed industry standards for the lowest total cost of ownership. Featuring all-new innovations that are as powerful as they are practical. From a Tier 4 engine solution that provides unmatched fuel efficiency to a cab that facilitates operator comfort and productivity, the G Series is designed to satisfy the needs of owners, fleet managers and operators.



**POWER, CONTROL, AGILITY, GET IT ALL**





### **BEST-IN-CLASS BREAKOUT FORCE**

G Series wheel loaders begin and end with one word: **PRODUCTIVITY**. From 20,000 lbs. (521G) to over 56,000 lbs. (1121G), CASE G Series wheel loaders provide best-in-class breakout force among market leaders, providing the power you need whether you're moving dirt and gravel or loading a hopper or truck.



### **MULTIPLE LINKAGE OPTIONS**

The G Series includes XT, Z-bar and extended reach Z-bar models. The XT tool carrier allows better visibility down to the bucket / attachment and also provides parallel lift (which keeps material level during the loading and unloading process). The commonly chosen Z-bar linkage provides the greatest breakout force for strong, powerful digging and complete bucket fill.



### **8" LCD MULTIFUNCTION MONITOR**

The high resolution, anti-glare monitor provides greater control over insight into many loader functions.



### **AUTOMATED BUCKET CONTROLS**

Automatic bucket control features like "return-to-dig," "return-to-travel" and "height control" simplify operation while approaching trucks/hoppers and transitioning back to travel, ultimately shortening the cycle.



### **5-SPEED TRANSMISSION AND POWERINCH**

Optional 5-speed PowerShift transmission with lock-up torque converter (621G, 721G, 821G, and 921G) provides faster acceleration and roading speeds up to 25 miles per hour. PowerInch, included with 5-speed transmission, helps maintain high RPMs and maximizes hydraulic power to the loader arms and bucket cylinder. PowerInch provides incredible accuracy and control in tight loading areas, regardless of engine speed or grade.



### **MULTIPLE AXLE OPTIONS**

Standard limited slip axles (ideal for soft, slippery conditions) automatically transfer torque from slipping tire to gripping tire, ensuring proper traction regardless of working conditions. Optional heavy-duty axles with auto-locking front differential are ideal for applications on paved or hard pack surfaces.



### **RIDE CONTROL™**

Optional Ride Control provides excellent material retention and machine control over rough terrain, while reducing shock loads on the machine and operator.



## SEE A SIGNIFICANT REDUCTION IN FUEL

### SCR TECHNOLOGY AND ADVANCED COOLING

G Series wheel loaders feature patented Tier 4 Final SCR engine technology—to manage emissions while maximizing fuel efficiency and performance.

As a result, there is:

- **NO recirculation of gases (which restricts power)**
- **NO fuel wasted to burn off particulate matter**
- **NO downtime for regeneration**
- **NO extreme exhaust temperatures generated**
- **NO expensive diesel particulate filters to replace**

SCR lets the engine do what it does best – run at peak performance. This gives the faster throttle response operators want while also maintaining low exhaust temperatures and improving fuel economy by as much as 20% compared to previous CASE wheel loader versions, or those equipped with a diesel particulate filter.

### COOLER MACHINES = GREATER EFFICIENCY

To support a cool running machine, CASE features a **cooling cube module**, which positions coolers in a cube design. This ensures all coolers have access to cool, clean ambient air, limits debris buildup and provides easy access for routine cleaning. An optional variable-speed reversing fan further minimizes the risk of clogging, decreasing the need for manual cleaning.

For applications with extreme amounts of airborne debris, CASE offers a **heavy debris cooling system**.\* This includes enhanced sealing of the cooling module covers and wider cooler fin spacing to better maintain the optimum operating temperatures of mechanical and hydraulic systems.

\*Available on 6216 and 721G





CASE

621G XT

**521G-921G:  
MID-MOUNTED COOLING MODULE**

The cooling module positions all of the machine's coolers in a cube design and position them behind the cab. The mid-mounted design also allows the engine to be positioned farther to rear of the machine for added operator weight. A newer engine also allows CASE to provide a rear sloped hood for best-in-class rear visibility.



**1021G & 1121G:  
CASE COOLING CUBE**

The CASE cooling cube is located in the rear of the machine. A swing-out, hydraulically driven fan provides excellent access to all coolers. Removable side panels provide access to the engine components for ground-line serviceability and routine maintenance.





**THREE ERGONOMIC SEAT OPTIONS**

All adjustable to accommodate a wide range of operators.



**INDUSTRY-LEADING VISIBILITY**

The cab utilizes a single piece of glass, providing improved sunshade and wider wiper coverage. External mirrors are more ergonomically placed to avoid operator fatigue.



**LOAD-SENSING HYDRAULICS (4 POWER MODES)**

You can easily match engine output to the task at hand with the touch of a button:

- **ECO** for maximum fuel efficiency
- **STANDARD** for quick loading
- **MAX** for aggressive digging
- **AUTO** for engine output that responds on the fly



**INTEGRATED REARVIEW CAMERA (OPTIONAL)**

This upgrade helps improve your visibility.



**ERGONOMIC CONTROLS AND ARMREST**

The loader controls and armrest move together both with and independently of the seat.

**IMPROVED JOYSTICK STEERING**

Symmetrical to loader controls, this system gives the operator greater comfort and control.



## **AUTOMOTIVE FEEL. INDUSTRIAL PERFORMANCE**

### **INDUSTRY-LEADING VISIBILITY, ADDED COMFORT AND IMPROVED ERGONOMICS**

Comfortable and intuitive with an all-new cab, the G Series is engineered for enhanced styling, superior comfort, practical innovation and intuitive technology. The G Series features improved visibility, upgraded electronics, an 8" LCD color monitor with optional integrated rearview camera, an optional heated air-ride seat, and one of the best HVAC systems in the industry.

Add to that a new, ergonomically designed joystick steering system that provides the operator with a symmetrical operating station to control loader functions and machine steering. This helps reduce fatigue—especially during repetitive, high-production applications—by eliminating the need to overextend or overexert while operating the controls.



#### **MEMBRANE KEYPAD**

(Replaces rocker switches)  
The touch of a button controls multiple functions and allows the operator to program detents (e.g., height control, return to dig) from within the cab.



#### **BLUETOOTH SATELLITE RADIO**

This system also comes with a USB/iPod connector and phone charger.



#### **PREMIUM HEATED AIR-RIDE SEAT (OPTIONAL)**

The heated air-ride seat is available with active suspension and dynamic dampening.



#### **LIGHTING**

Each G Series offers a variety of LED work light options to provide greater visibility and safer working conditions in low-light applications.



# INDUSTRY-LEADING GROUND-LINE ACCESS

## WE MAKE MAINTENANCE SIMPLE

G Series wheel loaders feature an electric rear hood lift\* that provides easy access to the engine compartment for excellent ground-line serviceability. All major regular service points can be accessed from ground level, meaning daily maintenance can be completed in a matter of minutes.



### NO TOOLS NEEDED

The G Series continues the CASE hallmark of simple serviceability with features like tool-free access to the oil cooler, radiator, other routine maintenance points and auxiliary hydraulic Connect Under Pressure (CUP) manifolds.

### EASY ACCESS TO EVERYTHING

- 1 Engine filter
- 2 Electric rear hood lift\*
- 3 Mid-mounted cooling module
- 4 Hydraulic tank site gauge
- 5 Grouped grease points
- 6 Jump-start posts
- 7 Environmental drain ports
- 8 Fuel/DEF fill
- 9 Engine oil check and fill
- 10 HVAC fresh air filter and recirculation air filter

\*Available on 911G-1121G models





# GO BIG, WE'VE GOT YOU COVERED

Protected by  
**ProCare**  
FACTORY WARRANTY  
PLANNED MAINTENANCE  
TELEMATICS

CASE ProCare is the first all-in-one heavy machine support program that's as powerful as the equipment it protects. Best of all, ProCare comes standard on G Series wheel loaders and keeps you covered for up to three full years. It's the assurance growing businesses need to stay competitive, productive and profitable.



3-yr/3000-hr  
Full-Machine  
Factory Warranty\*  
\$7500/yr

3-yr/3000-hr  
Planned  
Maintenance  
\$750/yr

3-yr Advanced  
SiteWatch™  
Subscription  
\$1000/yr



## SUPPORT COMES STANDARD



### **STRONGER PRODUCT SUPPORT SOLUTIONS**

Your CASE dealer knows best how you can maximize your equipment investment and uptime—with genuine CASE parts, expert service and a complete range of product support solutions including CASE remanufactured and all-makes parts. CASE supports better parts **availability and faster deliveries** through **nine parts distribution centers** in North America and a forecasting system to ensure that the right parts will be there when you need them. And only CASE dealers have exclusive access to the Electronic Service Tool (EST) that **quickly** pinpoints machine issues. Just ask your dealer for details.



### **FLEXIBLE FINANCIAL OPTIONS**

Specialized finance programs and flexible leasing packages put you in the driver's seat of industry-leading CASE equipment while no-nonsense warranties and comprehensive protection plans ensure that your equipment is protected. As the only finance company dedicated to CASE, we offer strong products and services designed around your unique needs and are the only ones supported by the helpful service professionals at your CASE dealer.



## ATTACHED TO VERSATILITY

### INTEGRATED HYDRAULIC QUICK-COUPLER

CASE offers an integrated hydraulic quick-coupler on our wheel loaders that lets operators conveniently switch out attachments from the comfort of the cab. Its factory-built design offers improved visibility and won't alter the physics or breakout force of the machine like after-market options will.



### 140 ATTACHMENTS AND THEN SOME

G Series wheel loaders work with more than 140 CASE attachments, including buckets, forks, brooms and more. CASE also has partnerships with numerous attachment manufacturers for even greater versatility. Consult your dealer for details.



### SMARTFIT™ BUCKET TEETH

G Series buckets come standard with the innovative SmartFit bucket tooth system. These heavy-duty, self-sharpening teeth combine exceptional strength and unmatched ease of installation thanks to a hammerless fastener system with reusable locking pins. Available in a full range of styles.



# SPECIFICATIONS AND DIMENSIONS

SPECIFICATIONS	521G	621G	721G	821G	921G	1021G	1121G
<b>Engine</b>	FPT F4HFE413NB	FPT F4HFE613W	FPT F4HFE613T	FPT F4HFE613S	FPT F4HFE613R	FPT F2CFE614H	FPT F2CFE614F
<b>Emissions Certification*</b>	Tier 4 Final	Tier 4 Final	Tier 4 Final	Tier 4 Final	Tier 4 Final	Tier 4 Final	Tier 4 Final
<b>Displacement – in<sup>3</sup> (L)</b>	275 (4.5)	411 (6.7)	411 (6.7)	411 (6.7)	411 (6.7)	531 (8.7)	531 (8.7)
<b>Cylinders</b>	4-cylinder in-line	6-cylinder in-line	6-cylinder in-line	6-cylinder in-line	6-cylinder in-line	6-cylinder in-line	6-cylinder in-line
<b>Net Horsepower – hp (kW)</b>	131 (98)	162 (121)	179 (133)	211 (158)	242 (180)	296 (221)	320 (239)
<b>Net Peak Torque – lb-ft (Nm)</b>	424 (575)	510 (692)	674 (914)	845 (1 145)	930 (1 261)	1,064 (1 442)	1,154 (1 564)
<b>Operating Weight – lb (kg)</b>	24,290 (11 018)	28,159 (12 773)	32,492 (14 738)	40,057 (18 170)	45,070 (20 443)	56,365 (25 567)	61,650 (27 964)
<b>Breakout Force – lb (kg)</b>	19,370 (8 786)	25,487 (11 561)	32,158 (14 587)	35,238 (16 037)	37,688 (17 095)	45,049 (20 434)	49,934 (22 650)
<b>Full Turn Tipping Load, 45° Deflected Tires – lb (kg)</b>	16,030 (7 271)	19,158 (8 690)	20,587 (9 338)	24,514 (11 113)	28,529 (12 940)	35,723 (16 204)	38,457 (17 444)
<b>Bucket Capacity Range: Bolt-on-Edge – yd<sup>3</sup> (m<sup>3</sup>)</b>	2.1 – 2.6 (1.6 – 2.0)	2.5 – 3.0 (1.9 – 2.3)	3.0 – 3.5 (2.3 – 2.7)	3.6 – 4.5 (2.7 – 3.4)	4.0 – 4.75 (3.1 – 3.6)	4.75 – 5.5 (3.6 – 4.2)	5.25 – 6.25 (4.0 – 4.8)
<b>Transmission Gears</b>	4F/3R	4F/3R	4 or 5F/3R	4 or 5F/3R	4 or 5F/3R	4F/3R	4F/3R
<b>Bucket Size: GP with Bolt-on-Edge – yd<sup>3</sup> (m<sup>3</sup>)</b>	2.3 (1.8)	2.75 (2.1)	3.25 (2.5)	4.25 (3.2)	4.75 (3.6)	5.5 (4.2)	6.25 (4.8)
<b>Max. Material Density, ISO – lb/yd<sup>3</sup> (kg/m<sup>3</sup>)</b>	3,485 (2 068)	3,483 (2 067)	3,167 (1 879)	2,884 (1 711)	3,003 (1 782)	3,248 (1 927)	3,077 (1 826)
DIMENSIONS	521G	621G	721G	821G	921G	1021G	1121G
<b>Height to Top of ROPS Cab</b>	128.9 in (3 275 mm)	133.2 in (3 384 mm)	133.0 in (3 378 mm)	136.2 in (3 450 mm)	136.4 in (3 464 mm)	140.8 in (3 577 mm)	140.8 in (3 576 mm)
<b>Ming Pin Height</b>	142.0 in (3 608 mm)	150.9 in (3 835 mm)	153.5 in (3 895 mm)	162.2 in (4 120 mm)	162.3 in (4 124 mm)	167.1 in (4 245 mm)	175.2 in (4 449 mm)
<b>Dump Height – Fully Raised, 45° Dump</b>	106.7 in (2 711 mm)	112.2 in (2 849 mm)	115.2 in (2 926 mm)	117.3 in (2 981 mm)	114.6 in (2 912 mm)	121.1 in (3 077 mm)	126.3 in (3 209 mm)
<b>Operating Height – Fully Raised with Spillguard</b>	124.3 in (3 162 mm)	195.6 in (4 968 mm)	205.7 in (5 225 mm)	215.4 in (5 471 mm)	220.1 in (5 589 mm)	229.3 in (5 823 mm)	242.0 in (6 147 mm)
<b>Bucket Reach – Fully Raised, 45° Dump</b>	39.8 in (1 012 mm)	38.0 in (965 mm)	44.2 in (1 123 mm)	43.4 in (1 102 mm)	46.8 in (1 189 mm)	49.8 in (1 265 mm)	50.1 in (1 273 mm)
<b>Wheelbase</b>	108.3 in (2 750 mm)	114.2 in (2 900 mm)	128.1 in (3 253 mm)	131.5 in (3 340 mm)	131.5 in (3 340 mm)	139.8 in (3 550 mm)	139.8 in (3 550 mm)
<b>Overall Length – Bucket Level on Ground</b>	263.3 in (6 687 mm)	287.9 in (7 312 mm)	301.6 in (7 660 mm)	315.1 in (8 004 mm)	322.7 in (8 198 mm)	352.3 in (8 949 mm)	361.1 in (9 172 mm)
<b>Ground Clearance</b>	13.4 in (341 mm)	15.3 in (388 mm)	15.1 in (384 mm)	17.0 in (431 mm)	17.1 in (435 mm)	17.2 in (437 mm)	17.2 in (437 mm)
<b>Overall Width without Bucket</b>	96.4 in (2 448 mm)	97.6 in (2 478 mm)	100.7 in (2 568 mm)	111.4 in (2 829 mm)	111.4 in (2 829 mm)	117.2 in (2 978 mm)	117.2 in (2 978 mm)
<b>Angle of Departure</b>	30°	25°	29°	29°	29°	23°	23°

\*Note:

DOC = Diesel Oxidation Catalyst

DPF = Diesel Particulate Filter

SCR = Selective Catalytic Reduction





## BUILDING A STRONG CASE

Since 1842, we at CASE Construction Equipment have lived by an unwavering commitment to build practical, intuitive solutions that deliver both efficiency and productivity. We continually strive to make it easier for our customers to implement emerging technologies and new compliance mandates.

Today, our global scale combined with our local expertise enables us to keep customers' real-world challenges at the center of our product development. This focus has led to numerous innovations like Ride Control™, EZ-EH controls, blade shake, PowerLift™, over-center boom design and the peace of mind that only CASE ProCare provides.

Every CASE machine is backed by more than 300 North American dealer locations, thousands of OEM, remanufactured and Gold Value™ parts, and flexible financing and insurance options that provide the kind of reliable, steadfast support you expect from a professional partner.

We are passionate about improving the lives of others, whether investing in our veterans or raising awareness about local infrastructure initiatives through Dire States. Our goal is to build both stronger machines — and stronger communities.

At the end of the day, we do what's right by our customers and our communities so that they can count on CASE.

[CaseCE.com/G-Series](http://CaseCE.com/G-Series)

©2019 CNH Industrial America LLC. All rights reserved. CASE is a trademark registered in the United States and many other countries, owned by or licensed to CNH Industrial N.V., its subsidiaries or affiliates. CNH Industrial Capital is a trademark in the United States and many other countries, owned by or licensed to CNH Industrial N.V. or its subsidiaries or affiliates. Printed in U.S.A. Contains 15% post-consumer fiber.

Form No. CCE2018126WL  
Replaces Form No. CCE2017026WL

IMPORTANT: CASE Construction Equipment Inc. reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Availability of some models and equipment builds vary according to the country in which the equipment is used. The illustrations and text may include optional equipment and accessories and may not include all standard equipment. Your CASE dealer/distributor will be able to give you details of the products and their specifications available in your area.



CASE Construction Equipment is biodiesel-friendly

NOTE: All engines meet current EPA emissions regulations. All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.



Always read the Operator's Manual before operating equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs and use any safety features provided.

**CASE**  
CONSTRUCTION

**ProCare**



**WARRANTY, MAINTENANCE AND TELEMATICS.  
ALL OF IT. STANDARD. AND ONLY FROM CASE.**

CASE ProCare is the first all-in-one heavy machine support program that's as powerful as the equipment it protects. Best of all, ProCare comes standard and keeps you covered for up to three full years. It gives you the assurance your growing business needs to stay competitive, productive and profitable.

