



## ENGINE

Make	FPT
Model	F4HFE613R
Emissions Certification	Tier 4 Final
Emissions Technology	SCR/DOC
Type	4-stroke, turbocharged and air-to-air cooled
Cylinders	6-cylinder in-line
Bore/Stroke	4.09 x 5.20 in (104 x 132 mm)
Displacement	411 in <sup>3</sup> (6.7 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
Fuel pump	Bosch CP 3.3
Gradeability:	
Side-to-side	35°
Fore and aft	35°
Air filter	Dry type elements w/ warning restriction indicator
Mid-mount cooling module:	Mid-mount air/water
Fan – hydraulic driven:	
Style	8 blade puller
Diameter	32 in (813 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 @ 1600 RPM	255 hp (190 kW)
Net rated @ 2000 RPM	225 hp (168 kW)
Peak net @ 1600 RPM	242 hp (180 kW)
Standard Power Mode:	
Peak gross @ 1600 RPM	226 hp (169 kW)
Net rated @ 2000 RPM	185 hp (138 kW)
Peak net @ 1600 RPM	213 hp (159 kW)

Economy Power Mode:	
Peak gross @ 1400 RPM	215 hp (160 kW)
Net rated @ 1800 RPM	173 hp (129 kW)
Peak net @ 1400 RPM	206 hp (154 kW)

Torque – peak:	
Maximum Power Mode:	
Gross @ 1300 RPM	959 lb-ft (1 300 N-m)
Net @ 1300 RPM	930 lb-ft (1 261 N-m)
Standard Power Mode:	
Gross @ 1300 RPM	828 lb-ft (1 123 N-m)
Net @ 1300 RPM	800 lb-ft (1 084 N-m)
Economy Power Mode:	
Gross @ 1300 RPM	828 lb-ft (1 123 N-m)
Net @ 1300 RPM	800 lb-ft (1 084 N-m)

Torque rise:	
Maximum power range	49%

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	4.152/3.937
2nd	2.184/2.071
3rd	1.072/1.017
4th	0.636/ –
Gear ratios – 5-speed	Forward/Reverse
1st	3.921/3.718
2nd	2.255/2.138
3rd	1.466/0.894
4th	0.942/ –
5th	0.613/ –
Torque converter:	
Stall ratio – 4-speed	2.28:1
Stall ratio – 5-speed	2.35:1

Differential:	
Open differentials on front and rear axles	
Rear axle oscillation	24° total

Front and rear axles:	
Differential ratio	4.11
Planetary ratio	6.00
Final axle ratio	24.67

Heavy-duty axles – optional:	
Front axle equipped w/ locking differential	
Rear axle equipped w/ open differential	

Planetaries	Outboard
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Service brakes:	
Hydraulically actuated, maintenance-free, multiple wet disc w/ accumulator to all four wheels	
Brake surface area:	
Front hub	841 in <sup>2</sup> (0.542 m <sup>2</sup> )
Rear hub	721 in <sup>2</sup> (0.465 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	4.0 (6.4)	4.2 (6.8)
2nd	7.4 (12.0)	7.8 (12.6)
3rd	14.3 (23.1)	15.0 (24.2)
4th	22.4 (36.0)	–

Travel speeds – 5-speed transmission:		
	Forward	Reverse
	mph (kph)	mph (kph)
1st	4.0 (6.4)	4.2 (6.8)
2nd	6.9 (11.1)	7.3 (11.7)
3rd	10.6 (17.0)	17.2 (27.7)
4th	16.3 (26.3)	–
5th	25.0 (40.0)	–

NOTE: Travel speeds at full engine throttle w/ 23.5-R25 L3 Radial Tires.

## ELECTRICAL

Voltage	24 Volts, negative ground
Alternator	120 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 in (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; Hydraulic oil temperature; Engine coolant temperature; Fuel level; DEF level.

LCD screen:	
Hour meter; Engine speed; Travel speed; Time; Automatic transmission indication; Current gear selection; FNR indication; DeClutch indication; Engine mode indication; Trip computer A/B; Fuel consumption; Multiple languages, Metric/English; Engine diagnostics; Transmission diagnostics; Warning prompts; Error reporting; Diff. Lock*; DEF gauge.	

Audible/Visual alarms:	
Warning lights:	Four-way flashers and turn signals; Brake pressure; Lamp/high beam indication; Grid heater*.

**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/ 23.5-R25 L3 Radial tires; ROPS cab w/ heater and AC; Heavy-duty counterweight – 6,435 lb (2 919 kg); Heavy-duty batteries; Front and rear fenders; Lights; Full fuel; Full urea; 165 lb (75 kg) operator; 4.75 yd<sup>3</sup> (3.6 m<sup>3</sup>) GP pin on w/ bolt on edge:  
45,070 lb (20 443 kg)

**XR**

Unit equipped w/ 23.5-R25 L3 Radial tires; ROPS cab w/ heater and AC; Heavy-duty counterweight – 6,435 lb (2 919 kg); Heavy-duty batteries; Front and rear fenders; Lights; Full fuel; Full urea; 165 lb (75 kg) operator; 4.75 yd<sup>3</sup> (3.6 m<sup>3</sup>) GP pin on w/ bolt on edge:  
45,651 lb (20 707 kg)

**HYDRAULICS**

Main pump – steering/implement:  
Closed center pressure/flow compensated

Tandem variable displacement – load-sensing:  
Max. rated flow P1: 42.6 gpm @ 2000 RPM (162 L/min @ 2000 RPM)  
Max. rated flow P2: 31.6 gpm @ 2000 RPM (120 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:  
Implement 3,625 psi (25 000 kPa)  
Steering 3,500 psi (24 132 kPa)

Filtration:  
Filtered vent w/ relief on hydraulic reservoir, maintains 3-5 psi on reservoir, 10-micron, return filter furnishes only clean oil to all components of the system

**SERVICE CAPACITIES**

Fuel tank 76 gal (288.0 L)

DEF tank – Diesel Exhaust Fluid:  
Usable 9.8 gal (37.1 L)  
Total 15.6 gal (58.9 L)

Hydraulic system:  
Reservoir 29.0 gal (110.0 L)  
Total 53.0 gal (200.0 L)

Transmission:  
Service w/ filter 9.0 gal (34.1 L)

Front and rear axle:  
Front axle 44.4 qt (42.0 L)  
Rear axle 42.3 qt (40.0 L)

Engine oil w/ filter 16.0 qt (15.1 L)

Cooling system 32 qt (30.0 L)

**OTHER SPECIFICATIONS**

Lift cylinder:  
Bore diameter 6.0 in (152 mm)  
Rod diameter 3.5 in (89 mm)  
Stroke 33.3 in (846 mm)

Dump cylinder:  
Bore diameter 7.0 in (178 mm)  
Rod diameter 4.0 in (102 mm)  
Stroke 23.6 in (600 mm)

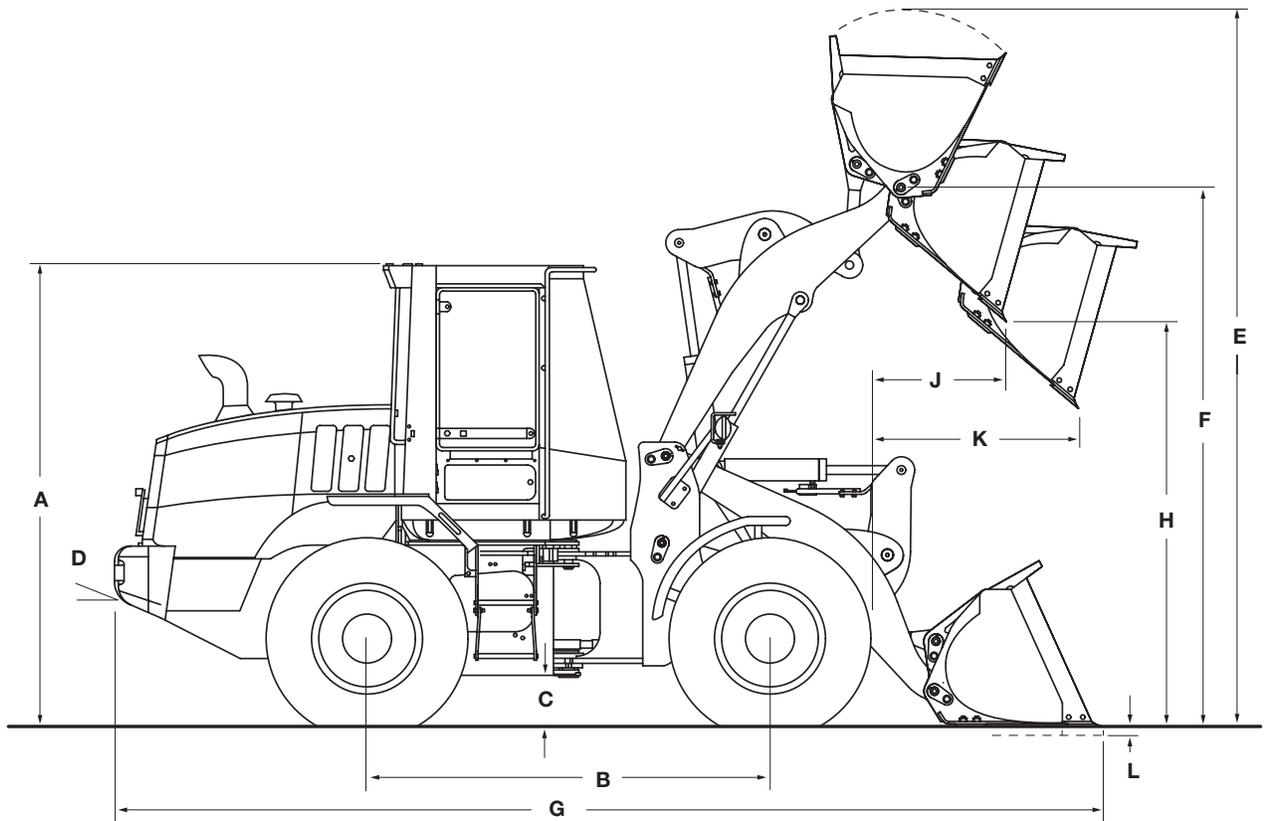
Loader:  
Z-Bar loader linkage; Single control for lift and tilt; Positive hold float; Automatic return-to-dig; Automatic height control; Automatic return-to-travel; Brake pedal transmission disconnect; Bucket position indicator on bucket.

Cycle time:  
Raise w/ rated bucket load 6.3 sec  
Dump w/ rated bucket load 1.5 sec  
Float down 3.6 sec

Sound level in Cab (LpA) 69 dB(A)

Exterior sound level (LwA) 104 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

<b>A.</b> Height to top of ROPS cab	136.4 in (3 464 mm)
Height to drawbar	42.7 in (1 085 mm)
<b>B.</b> Wheelbase	131.5 in (3 340 mm)
<b>C.</b> Ground clearance	17.1 in (435 mm)
<b>D.</b> Angle of departure	29°
Width:	
Overall* without bucket	111.4 in (2 829 mm)
Centerline tread	87.8 in (2 230 mm)
Turning radius* – outside	236.3 in (6 003 mm)
Turning angle:	
From center	40°
Total angle	80°
Rear axle oscillation – total	24°

NOTE: \*Dimensions taken with 23.5-R25 L3 Radial Tires. Additional dimensions on pages 4 through 6.

## WEIGHT ADJUSTMENTS

Select Options	Weight Adjustment	Tipping Load Adjustment Straight: Deflected*	Tipping Load Adjustment 40° Turn: Deflected*
23.5-R25 L2 Radial tires	-28 lb (-13 kg)	-102 lb (-46 kg)	-117 lb (-53 kg)
23.5-R25 L3 Bias tires	-504 lb (-229 kg)	-459 lb (-208 kg)	-1,048 lb (-475 kg)
Light counterweight	-1,364 lb (-619 kg)	-2,895 lb (-1 313 kg)	-2,283 lb (-1 035 kg)

NOTE: Unit equipped with Z-Bar loader arms, 4.75 yd<sup>3</sup> (3.6 m<sup>3</sup>) pin on bucket with bolt-on edge, 23.5-R25 L3 Radial Tires, ROPS cab with heater and air conditioner, heavy counterweight, heavy-duty batteries, front and rear fenders, full fuel and 165 lb (75 kg) operator. Adjust select options from rated weight.

\*Tipping loads: ISO 14397-1 Deflected Tires.

**PERFORMANCE SPECS**

<b>921G Z-Bar*</b>	<b>4.0 yd<sup>3</sup> (3.1 m<sup>3</sup>) Bucket with Bolt-on Edge - Pin On</b>	<b>3.8 yd<sup>3</sup> (2.9 m<sup>3</sup>) Bucket with Teeth - Pin On</b>	<b>4.75 yd<sup>3</sup> (3.6 m<sup>3</sup>) Bucket with Bolt-on Edge - Pin On</b>
Operating weight	44,778 lb (20 311 kg)	44,636 lb (20 247 kg)	45,070 lb (20 443 kg)
<b>E.</b> Operating height – fully raised with spillguard	222.1 in (5 642 mm)	214.4 in (5 445 mm)	220.1 in (5 589 mm)
<b>F.</b> Hinge pin height – fully raised	162.4 in (4 124 mm)	162.4 in (4 124 mm)	162.3 in (4 124 mm)
<b>G.</b> Overall length – bucket level on ground	317.1 in (8 055 mm)	323.0 in (8 203 mm)	322.7 in (8 198 mm)
Dump angle – fully raised	55°	55°	55°
<b>H.</b> Dump height – fully raised, 45° dump	118.3 in (3 004 mm)	114.5 in (2 908 mm)	114.6 in (2 912 mm)
<b>J.</b> Bucket reach – fully raised, 45° dump	42.5 in (1 079 mm)	46.9 in (1 192 mm)	46.8 in (1 189 mm)
<b>K.</b> Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	66.3 in (1 684 mm)	69.0 in (1 751 mm)	68.9 in (1 750 mm)
<b>L.</b> Dig depth – edge below ground	2.9 in (73 mm)	2.9 in (74 mm)	2.9 in (74 mm)
Operating load – ISO Rigid Tires	16,809 lb (7 624 kg)	17,060 lb (7 738 kg)	16,515 lb (7 491 kg)
Operating load – ISO Deflected Tires	14,576 lb (6 612 kg)	14,798 lb (6 712 kg)	14,264 lb (6 470 kg)
Maximum material density – ISO Rigid Tires	4,202 lb/yd <sup>3</sup> (2 493 kg/m <sup>3</sup> )	4,490 lb/yd <sup>3</sup> (2 664 kg/m <sup>3</sup> )	3,477 lb/yd <sup>3</sup> (2 063 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires	3,644 lb/yd <sup>3</sup> (2 162 kg/m <sup>3</sup> )	3,894 lb/yd <sup>3</sup> (2 311 kg/m <sup>3</sup> )	3,003 lb/yd <sup>3</sup> (1 782 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:			
Straight	38,941 lb (17 664 kg)	39,494 lb (17 914 kg)	38,311 lb (17 377 kg)
40° turn	33,617 lb (15 249 kg)	34,121 lb (15 477 kg)	33,029 lb (14 982 kg)
Tipping load – ISO Deflected Tires:			
Straight	36,345 lb (16 486 kg)	36,858 lb (16 719 kg)	35,693 lb (16 190 kg)
40° turn	29,152 lb (13 223 kg)	29,595 lb (13 424 kg)	28,529 lb (12 940 kg)
Lift capacity:			
Full height	27,024 lb (12 258 kg)	27,185 lb (12 331 kg)	26,721 lb (12 121 kg)
Ground	48,948 lb (22 202 kg)	49,322 lb (22 372 kg)	45,618 lb (20 692 kg)
Breakout force with tilt cylinder	42,254 lb (19 166 kg)	45,459 lb (20 620 kg)	37,688 lb (17 095 kg)
Loader clearance circle with bucket	522.6 in (13 275 mm)	525.8 in (13 357 mm)	525.8 in (13 356 mm)

<b>921G XR</b>	<b>4.0 yd<sup>3</sup> (3.1 m<sup>3</sup>) Bucket with Bolt-on Edge - Pin On</b>	<b>3.8 yd<sup>3</sup> (2.9 m<sup>3</sup>) Bucket with Teeth - Pin On</b>	<b>4.75 yd<sup>3</sup> (3.6 m<sup>3</sup>) Bucket with Bolt-on Edge - Pin On</b>
Operating weight	45,359 lb (20 574 kg)	45,217 lb (20 510 kg)	45,651 lb (20 707 kg)
<b>E.</b> Operating height – fully raised with spillguard	239.5 in (6 084 mm)	231.7 in (5 886 mm)	237.4 in (6 031 mm)
<b>F.</b> Hinge pin height – fully raised	179.7 in (4 565 mm)	179.7 in (4 565 mm)	179.7 in (4 565 mm)
<b>G.</b> Overall length – bucket level on ground	336.3 in (8 541 mm)	342.1 in (8 690 mm)	341.9 in (8 684 mm)
Dump angle – fully raised	49°	49°	49°
<b>H.</b> Dump height – fully raised, 45° dump	135.6 in (3 445 mm)	131.9 in (3 349 mm)	132.0 in (3 353 mm)
<b>J.</b> Bucket reach – fully raised, 45° dump	46.9 in (1 192 mm)	51.4 in (1 305 mm)	51.2 in (1 302 mm)
<b>K.</b> Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	83.4 in (2 119 mm)	86.3 in (2 193 mm)	86.3 in (2 191 mm)
<b>L.</b> Dig depth – edge below ground	5.5 in (140 mm)	5.6 in (141 mm)	5.5 in (141 mm)
Operating load – ISO Rigid Tires	13,377 lb (6 068 kg)	13,574 lb (6 157 kg)	13,119 lb (5 951 kg)
Operating load – ISO Deflected Tires	11,786 lb (5 346 kg)	11,965 lb (5 427 kg)	11,520 lb (5 225 kg)
Maximum material density – ISO Rigid Tires	3,344 lb/yd <sup>3</sup> (1 984 kg/m <sup>3</sup> )	3,572 lb/yd <sup>3</sup> (2 120 kg/m <sup>3</sup> )	2,762 lb/yd <sup>3</sup> (1 639 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires	2,946 lb/yd <sup>3</sup> (1 748 kg/m <sup>3</sup> )	3,149 lb/yd <sup>3</sup> (1 868 kg/m <sup>3</sup> )	2,425 lb/yd <sup>3</sup> (1 439 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:			
Straight	31,222 lb (14 162 kg)	31,652 lb (14 357 kg)	30,675 lb (13 914 kg)
40° turn	26,753 lb (12 135 kg)	27,147 lb (12 314 kg)	26,239 lb (11 902 kg)
Tipping load – ISO Deflected Tires:			
Straight	29,458 lb (13 362 kg)	29,864 lb (13 546 kg)	28,900 lb (13 109 kg)
40° turn	23,572 lb (10 692 kg)	23,929 lb (10 854 kg)	23,040 lb (10 451 kg)
Lift capacity:			
Full height	24,908 lb (11 298 kg)	25,067 lb (11 370 kg)	24,608 lb (11 162 kg)
Ground	37,534 lb (17 025 kg)	37,890 lb (17 187 kg)	36,861 lb (16 720 kg)
Breakout force with tilt cylinder	42,961 lb (19 487 kg)	46,216 lb (20 963 kg)	38,323 lb (17 383 kg)
Loader clearance circle with bucket	541.7 in (13 760 mm)	545.6 in (13 859 mm)	545.6 in (13 858 mm)

<b>921G</b>		<b>Z-Bar/XR</b>	<b>Z-Bar/XR</b>	<b>Z-Bar/XR</b>
Maximum rollback:	Ground	41°/37°	41°/37°	41°/37°
	Carry position	45°/43°	45°/43°	45°/43°
	@ Full height	59°/60°	59°/60°	59°/60°
Maximum grading angle with bucket – back dragging		60°/63°	61°/64°	61°/63°
SAE bucket capacity – struck		3.41 yd <sup>3</sup> (2.61 m <sup>3</sup> )	3.25 yd <sup>3</sup> (2.48 m <sup>3</sup> )	4.08 yd <sup>3</sup> (3.12 m <sup>3</sup> )
Heaped		4.00 yd <sup>3</sup> (3.06 m <sup>3</sup> )	3.80 yd <sup>3</sup> (2.91 m <sup>3</sup> )	4.75 yd <sup>3</sup> (3.63 m <sup>3</sup> )
Bucket width – outside		119.3 in (3 030 mm)	119.2 in (3 027 mm)	119.3 in (3 030 mm)
Bucket weight		3,382 lb (1 534 kg)	3,240 lb (1 470 kg)	3,674 lb (1 666 kg)

**PERFORMANCE SPECS**

<b>921G Z-Bar*</b>		<b>4.6 yd<sup>3</sup> (3.5 m<sup>3</sup>) Bucket with Teeth - Pin On</b>	<b>4.0 yd<sup>3</sup> (3.1 m<sup>3</sup>) Bucket with Bolt-on Edge - ACS Coupler</b>	<b>3.8 yd<sup>3</sup> (2.9 m<sup>3</sup>) Bucket with Teeth - ACS Coupler</b>
Operating weight		44,929 lb (20 379 kg)	46,220 lb (20 965 kg)	46,078 lb (20 901 kg)
<b>E.</b> Operating height – fully raised with spillguard		220.1 in (5 589 mm)	219.0 in (5 562 mm)	219.0 in (5 563 mm)
<b>F.</b> Hinge pin height – fully raised		162.4 in (4 124 mm)	162.3 in (4 122 mm)	162.3 in (4 123 mm)
<b>G.</b> Overall length – bucket level on ground		328.6 in (8 347 mm)	324.0 in (8 230 mm)	329.9 in (8 379 mm)
Dump angle – fully raised		55°	55°	55°
<b>H.</b> Dump height – fully raised, 45° dump		110.9 in (2 816 mm)	113.8 in (2 890 mm)	110.0 in (2 794 mm)
<b>J.</b> Bucket reach – fully raised, 45° dump		51.2 in (1 302 mm)	47.8 in (1 213 mm)	52.2 in (1 326 mm)
<b>K.</b> Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump		71.4 in (1 813 mm)	69.4 in (1 764 mm)	71.9 in (1 826 mm)
<b>L.</b> Dig depth – edge below ground		2.9 in (75 mm)	2.9 in (75 mm)	3.0 in (76 mm)
Operating load – ISO Rigid Tires		16,757 lb (7 601 kg)	15,380 lb (6 976 kg)	17,302 lb (7 848 kg)
Operating load – ISO Deflected Tires		14,479 lb (6 567 kg)	13,249 lb (6 010 kg)	14,649 lb (6 645 kg)
Maximum material density – ISO Rigid Tires		3,643 lb/yd <sup>3</sup> (2 162 kg/m <sup>3</sup> )	3,845 lb/yd <sup>3</sup> (2 282 kg/m <sup>3</sup> )	4,553 lb/yd <sup>3</sup> (2 702 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires		3,148 lb/yd <sup>3</sup> (1 868 kg/m <sup>3</sup> )	3,312 lb/yd <sup>3</sup> (1 965 kg/m <sup>3</sup> )	3,855 lb/yd <sup>3</sup> (2 287 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:	Straight	38,842 lb (17 619 kg)	35,842 lb (16 258 kg)	40,288 lb (18 274 kg)
	40° turn	33,514 lb (15 202 kg)	30,760 lb (13 953 kg)	34,605 lb (15 696 kg)
Tipping load – ISO Deflected Tires:	Straight	36,187 lb (16 414 kg)	33,380 lb (15 141 kg)	37,122 lb (16 838 kg)
	40° turn	28,958 lb (13 135 kg)	26,498 lb (12 019 kg)	29,298 lb (13 289 kg)
Lift capacity:	Full height	26,882 lb (12 193 kg)	25,510 lb (11 571 kg)	25,864 lb (11 732 kg)
	Ground	47,935 lb (21 743 kg)	38,169 lb (17 313 kg)	48,195 lb (21 861 kg)
Breakout force with tilt cylinder		40,265 lb (18 264 kg)	36,514 lb (16 562 kg)	38,959 lb (17 671 kg)
Loader clearance circle with bucket		529.1 in (13 440 mm)	526.5 in (13 374 mm)	529.9 in (13 459 mm)

<b>921G XR</b>		<b>4.6 yd<sup>3</sup> (3.5 m<sup>3</sup>) Bucket with Teeth - Pin On</b>	<b>4.0 yd<sup>3</sup> (3.1 m<sup>3</sup>) Bucket with Bolt-on Edge - ACS Coupler</b>	<b>3.8 yd<sup>3</sup> (2.9 m<sup>3</sup>) Bucket with Teeth - ACS Coupler</b>
Operating weight		45,510 lb (20 643 kg)	46,801 lb (21 228 kg)	46,659 lb (21 164 kg)
<b>E.</b> Operating height – fully raised with spillguard		237.4 in (6 031 mm)	236.4 in (6 004 mm)	236.4 in (6 004 mm)
<b>F.</b> Hinge pin height – fully raised		179.7 in (4 565 mm)	179.7 in (4 564 mm)	179.7 in (4 564 mm)
<b>G.</b> Overall length – bucket level on ground		347.7 in (8 833 mm)	343.2 in (8 716 mm)	349.0 in (8 865 mm)
Dump angle – fully raised		49°	49°	49°
<b>H.</b> Dump height – fully raised, 45° dump		128.2 in (3 257 mm)	131.2 in (3 331 mm)	127.4 in (3 235 mm)
<b>J.</b> Bucket reach – fully raised, 45° dump		55.7 in (1 414 mm)	52.2 in (1 326 mm)	56.6 in (1 439 mm)
<b>K.</b> Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump		89.0 in (2 262 mm)	86.9 in (2 206 mm)	89.6 in (2 276 mm)
<b>L.</b> Dig depth – edge below ground		5.6 in (141 mm)	5.6 in (141 mm)	5.6 in (142 mm)
Operating load – ISO Rigid Tires		13,310 lb (6 037 kg)	12,177 lb (5 523 kg)	13,450 lb (6 101 kg)
Operating load – ISO Deflected Tires		11,693 lb (5 304 kg)	10,650 lb (4 831 kg)	11,631 lb (5 276 kg)
Maximum material density – ISO Rigid Tires		2,894 lb/yd <sup>3</sup> (1 717 kg/m <sup>3</sup> )	3,044 lb/yd <sup>3</sup> (1 806 kg/m <sup>3</sup> )	3,539 lb/yd <sup>3</sup> (2 100 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires		2,542 lb/yd <sup>3</sup> (1 508 kg/m <sup>3</sup> )	2,662 lb/yd <sup>3</sup> (1 580 kg/m <sup>3</sup> )	3,061 lb/yd <sup>3</sup> (1 816 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:	Straight	31,090 lb (14 102 kg)	28,646 lb (12 993 kg)	31,607 lb (14 337 kg)
	40° turn	26,621 lb (12 075 kg)	24,353 lb (11 046 kg)	26,899 lb (12 201 kg)
Tipping load - ISO Deflected Tires:	Straight	29,293 lb (13 287 kg)	26,960 lb (12 229 kg)	29,546 lb (13 402 kg)
	40° turn	23,387 lb (10 608 kg)	21,299 lb (9 661 kg)	23,262 lb (10 551 kg)
Lift capacity:	Full height	24,767 lb (11 234 kg)	23,404 lb (10 616 kg)	23,741 lb (10 769 kg)
	Ground	37,203 lb (16 875 kg)	35,045 lb (15 896 kg)	36,562 lb (16 584 kg)
Breakout force with tilt cylinder		40,940 lb (18 570 kg)	37,135 lb (16 844 kg)	39,618 lb (17 970 kg)
Loader clearance circle with bucket		549.6 in (13 959 mm)	546.4 in (13 880 mm)	550.5 in (13 982 mm)

<b>921G</b>		<b>Z-Bar/XR</b>	<b>Z-Bar/XR</b>	<b>Z-Bar/XR</b>
Maximum rollback:	Ground	41°/37°	41°/37°	41°/37°
	Carry position	45°/43°	45°/43°	45°/43°
	@ Full height	59°/60°	59°/60°	59°/60°
Maximum grading angle with bucket – back dragging		62°/65°	61°/64°	63°/65°
SAE bucket capacity – struck		3.98 yd <sup>3</sup> (3.04 m <sup>3</sup> )	3.41 yd <sup>3</sup> (2.61 m <sup>3</sup> )	3.25 yd <sup>3</sup> (2.48 m <sup>3</sup> )
	Heaped	4.60 yd <sup>3</sup> (3.52 m <sup>3</sup> )	4.00 yd <sup>3</sup> (3.06 m <sup>3</sup> )	3.80 yd <sup>3</sup> (2.91 m <sup>3</sup> )
Bucket width – outside		119.2 in (3 027 mm)	119.3 in (3 030 mm)	119.2 in (3 027 mm)
Bucket weight		3,532 lb (1 602 kg)	4,824 lb (2 188 kg)	4,682 lb (2 124 kg)

**PERFORMANCE SPECS**

<b>921G Z-Bar*</b>	<b>4.0 yd<sup>3</sup> (3.1 m<sup>3</sup>) Bucket with Bolt-on Edge - JRB Coupler</b>	<b>3.8 yd<sup>3</sup> (2.9 m<sup>3</sup>) Bucket with Teeth - JRB Coupler</b>
Operating weight	46,166 lb (20 941 kg)	46,025 lb (20 877 kg)
<b>E.</b> Operating height – fully raised with spillguard	222.1 in (5 641 mm)	222.1 in (5 641 mm)
<b>F.</b> Hinge pin height – fully raised	162.3 in (4 123 mm)	162.3 in (4 123 mm)
<b>G.</b> Overall length – bucket level on ground	328.2 in (8 337 mm)	334.1 in (8 486 mm)
Dump angle – fully raised	55°	55°
<b>H.</b> Dump height – fully raised, 45° dump	111.1 in (2 821 mm)	107.3 in (2 725 mm)
<b>J.</b> Bucket reach – fully raised, 45° dump	51.0 in (1 295 mm)	55.4 in (1 408 mm)
<b>K.</b> Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	71.3 in (1 810 mm)	73.6 in (1 869 mm)
<b>L.</b> Dig depth – edge below ground	2.9 in (75 mm)	3.0 in (76 mm)
Operating load – ISO Rigid Tires	14,957 lb (6 785 kg)	15,179 lb (6 885 kg)
Operating load – ISO Deflected Tires	12,882 lb (5 843 kg)	13,079 lb (5 933 kg)
Maximum material density – ISO Rigid Tires	3,739 lb/yd <sup>3</sup> (2 219 kg/m <sup>3</sup> )	3,995 lb/yd <sup>3</sup> (2 370 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires	3,220 lb/yd <sup>3</sup> (1 911 kg/m <sup>3</sup> )	3,442 lb/yd <sup>3</sup> (2 042 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:		
Straight	34,858 lb (15 811 kg)	35,345 lb (16 032 kg)
40° turn	29,915 lb (13 569 kg)	30,359 lb (13 770 kg)
Tipping load – ISO Deflected Tires:		
Straight	32,471 lb (14 728 kg)	32,926 lb (14 935 kg)
40° turn	25,763 lb (11 686 kg)	26,158 lb (11 865 kg)
Lift capacity:		
Full height	25,513 lb (11 573 kg)	25,673 lb (11 645 kg)
Ground	33,475 lb (15 184 kg)	34,900 lb (15 830 kg)
Breakout force with tilt cylinder	33,854 lb (15 356 kg)	35,974 lb (16 317 kg)
Loader clearance circle with bucket	529.0 in (13 437 mm)	532.4 in (13 523 mm)

<b>921G XR</b>	<b>4.0 yd<sup>3</sup> (3.1 m<sup>3</sup>) Bucket with Bolt-on Edge - JRB Coupler</b>	<b>3.8 yd<sup>3</sup> (2.9 m<sup>3</sup>) Bucket with Teeth - JRB Coupler</b>
Operating weight	46,748 lb (21 204 kg)	46,606 lb (21 140 kg)
<b>E.</b> Operating height – fully raised with spillguard	239.5 in (6 082 mm)	239.5 in (6 082 mm)
<b>F.</b> Hinge pin height – fully raised	179.7 in (4 564 mm)	179.7 in (4 564 mm)
<b>G.</b> Overall length – bucket level on ground	347.4 in (8 823 mm)	353.2 in (8 972 mm)
Dump angle – fully raised	49°	49°
<b>H.</b> Dump height – fully raised, 45° dump	128.4 in (3 263 mm)	124.7 in (3 167 mm)
<b>J.</b> Bucket reach – fully raised, 45° dump	55.4 in (1 408 mm)	59.9 in (1 521 mm)
<b>K.</b> Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	88.9 in (2 258 mm)	91.5 in (2 325 mm)
<b>L.</b> Dig depth – edge below ground	5.6 in (141 mm)	5.6 in (142 mm)
Operating load – ISO Rigid Tires	11,887 lb (5 392 kg)	12,064 lb (5 472 kg)
Operating load – ISO Deflected Tires	10,394 lb (4 715 kg)	10,556 lb (4 788 kg)
Maximum material density – ISO Rigid Tires	2,972 lb/yd <sup>3</sup> (1 763 kg/m <sup>3</sup> )	3,175 lb/yd <sup>3</sup> (1 884 kg/m <sup>3</sup> )
Maximum material density – ISO Deflected Tires	2,598 lb/yd <sup>3</sup> (1 542 kg/m <sup>3</sup> )	2,778 lb/yd <sup>3</sup> (1 648 kg/m <sup>3</sup> )
Tipping load – ISO Rigid Tires:		
Straight	27,964 lb (12 684 kg)	28,351 lb (12 860 kg)
40° turn	23,773 lb (10 783 kg)	24,128 lb (10 944 kg)
Tipping load – ISO Deflected Tires:		
Straight	26,321 lb (11 939 kg)	26,689 lb (12 106 kg)
40° turn	20,788 lb (9 429 kg)	21,112 lb (9 576 kg)
Lift capacity:		
Full height	23,413 lb (10 620 kg)	23,572 lb (10 692 kg)
Ground	34,420 lb (15 613 kg)	34,752 lb (15 763 kg)
Breakout force with tilt cylinder	34,432 lb (15 618 kg)	36,585 lb (16 595 kg)
Loader clearance circle with bucket	549.4 in (13 955 mm)	553.5 in (14 059 mm)

<b>921G</b>	<b>Z-Bar/XR</b>	<b>Z-Bar/XR</b>
Maximum rollback:		
Ground	41°/37°	41°/37°
Carry position	45°/43°	45°/43°
@ Full height	59°/60°	59°/60°
Maximum grading angle with bucket – back dragging	62°/65°	64°/67°
SAE bucket capacity – struck	3.41 yd <sup>3</sup> (2.61 m <sup>3</sup> )	3.25 yd <sup>3</sup> (2.48 m <sup>3</sup> )
Heaped	4.00 yd <sup>3</sup> (3.06 m <sup>3</sup> )	3.80 yd <sup>3</sup> (2.91 m <sup>3</sup> )
Bucket width – outside	119.3 in (3 030 mm)	119.2 in (3 027 mm)
Bucket weight	4,770 lb (2 164 kg)	4,629 lb (2 100 kg)

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

Performance data unit equipped with 23.5-R25 L3 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 F4HFE613R  
Tier 4 Final Certified  
Selective Catalytic Reduction (SCR) with Diesel Oxidation Catalyst  
Selectable work modes:  
Maximum Power  
Standard Power  
Economy Power  
Auto Power  
Turbocharger  
Charge air cooling  
Automatic 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  
Open differential axles:  
Provides open type differentials in front and rear axles.  
Outboard planetary axles  
Transmission oil cooler  
Brake pedal transmission disconnect – declutch  
Hydraulic wet disc brakes  
Spring-applied hydraulic release parking brake  
Limp-Home Mode  
Greaseable rear axle trunnion  
3-piece rims

### HYDRAULICS

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

### ELECTRICAL

Alternator and voltage regulator  
Battery isolator/electrical disconnect  
120 amp alternator  
(2) 700 CCA 12-volt batteries  
Electric starter  
Lights:  
2 Front and 2 rear halogen flood lights  
2 Front driving headlights – high/low beam with integrated turn signals  
2 LED stop/tail lights with integrated turn signals  
Key start/stop switch  
Backup alarm  
Centrally located fuse box with all electrical circuits protected  
Remote jump start posts

### OTHER

Electric hood lift  
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  
Cloth mechanical suspension seat  
Headrest  
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  
LED rotating beacon  
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

5F/3R Autoshift/manual shift transmission, lockup torque converter, PowerInch de-clutch  
Heavy duty axle – heavy-duty application:  
Same size axles as standard axles but with automatic hydraulically-actuated differential lock on front axle, open differential on rear axle. Recommended for applications on hard surfaces or with solid tires.  
Cold weather package:  
Heavy-duty (2) 950 CCA 12V batteries  
Grid heater  
Fuel heater  
Hydraulic oil cooler bypass  
Low temperature hydraulic oil  
Fast-warm hydraulic valve

### HYDRAULICS

Auxiliary hydraulics  
Ride Control™  
Secondary steering  
Joystick steering with and without secondary steering  
2-function loader valve with single access control  
3-function loader valve with 3 lever control or with joystick plus lever  
4-function loader valve with joystick and 2 lever control

### LOADER

XR extended reach version  
Attachment auxiliary hydraulics  
Coupler systems – JRB or ACS compatible  
Buckets – see pages 4 through 6  
4 – 1 clamp buckets  
Forks

### TIRES

23.5 x 25 L2 bias – dirt/traction  
23.5 x 25 L3 bias – rock  
23.5-R25 L2 radial – dirt/traction  
23.5-R25 L3 radial – rock  
23.5-R25 radial Michelin SnoPlus  
Spare wheels and tires  
Axle oscillation stops

### ADVANCED ENGINE AIR FILTRATION

Variable speed hydraulic reversing fan  
Full-view air pre-cleaner  
Sy-Klone® ejector type pre-cleaner

### OTHER

Additional RH steps and platform with standard or wide fenders  
Side guards for rear frame  
Tool box – ground level access  
Light counterweight – Z-Bar  
Fire extinguisher  
License plate bracket  
12.4 mph (20 kph) maximum speed control  
Special paint  
Skid plate and transmission  
Standard fenders with right and left hand steps  
Wide full coverage fenders with right and left hand steps

