

Z-BAR/XT/XR WHEEL LOADER

TIER 4 FINAL CERTIFIED



ENGINE			
Make	FPT		
Model	F4HFE613W		
Emissions Certificat	tion Tier 4 Final		
Туре	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 ³ (6.7 L)		
Fuel	#2 Diesel, #1 and #2 mixture rmitted for cold temperatures		
Fuel injection	Direct injection - electronic		
Fuel filter	Replaceable		
Fuel pump	Bosch		
Gradeability: Side-to-side Fore and aft	35° 35°		
Air filter	Dry type elements / warning restriction indicator		
Mid-mount cooling module:			
	Mid-mount air/water		
Fan – hydraulic driv			
Style Diameter	8 blade puller 32 in (813 mm)		
Water pump	Integral		

Engine oil pump operating angle ratings:

Side-to-side

Fore and aft

Oil filtration

Engine speeds

Horsepower:

Rated - full load

Maximum Power Mode:

Standard Power Mode:

Economy Power Mode: Peak gross @ 1500 RPM

Peak gross @ 1800 RPM

Peak gross @ 1800 RPM

Net rated @ 2000 RPM

Peak net @ 1800 RPM

Net rated @ 2000 RPM

Peak net @ 1500 RPM

Net rated @ 2000 RPM

Peak net @ 1800 RPM

Torque - peak:	
Maximum Power Mode:	
Gross @ 1600 RPM	538 lb·ft (730 N·m)
Net @ 1600 RPM	510 lb·ft (692 N·m)
Standard Power Mode:	
Gross @ 1300 RPM	530 lb·ft (719 N·m)
Net @ 1300 RPM	508 lb·ft (689 N·m)
Economy Power Mode:	
Gross @ 1200 RPM	527 lb·ft (715 N·m)
Net @ 1200 RPM	508 lb·ft (689 N·m)
Torque rise:	
Maximum power range	33%
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	2.66:1
Differential: Limited slip w/ 30% trans rear axles	sfer on front and
Rear axle oscillation	24° total
Front and rear axles:	
Differential ratio	3.18
Dianatam, ratio	6.40

Front and rear axles:	
Differential ratio	3.18
Planetary ratio	6.40
Final axle ratio	20.34
Heavy-duty axles – ontional:	

Heavy-duty axles – optional:

Front axle equipped w/ locking differential Rear axle equipped w/ open differential

Planetaries Outboard

Service brakes:

35°

35°

RPM

2000

Replaceable

172 hp (128 kW)

151 hp (113 kW)

162 hp (121 kW)

156 hp (116 kW)

138 hp (103 kW)

146 hp (109 kW)

133 hp (99 kW)

101 hp (75 kW)

125 hp (93 kW)

Hydraulically actuated, maintenance-free, multiple wet disc w/ accumulator to all

four wheels

Brake surface area:

480 in² (0.31 m²) Front hub - each Rear hub - each 480 in2 (0.31 m2)

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	4.3 (6.9)	4.5 (7.3)	
2nd	8.4 (13.5)	8.8 (14.2)	
3rd	14.9 (23.9)	15.6 (25.0)	
4th	24.0 (38.6)	_	

NOTE: Travel speeds at full engine throttle w/ 20.5-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; 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; DEF gauge; Diff. lock*.

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/ 2.75 yd³ (2.1 m³) Case pin on bucket w/ edge; 20.5-R25 L3 Radial tires; ROPS cab w/ heater and A/C; Std. battery; Heavy counterweight – 1,950 lb (885 kg); Front and rear fenders; Lights; 165 lb (75 kg) operator:

28,159 lb (12 773 kg)

XT

Unit equipped w/ 2.5 yd 3 (1.9 m 3) CNH w/ edge and JRB coupler; 20.5-R25 L3 Radial tires; ROPS cab w/ heater and A/C; Std. battery; Heavy counterweight – 1,950 lb (885 kg); Front and rear fenders; Lights; 165 lb (75 kg) operator:

29,076 lb (13 188 kg)

XR

Unit equipped w/ 2.5 yd^3 (1.9 m^3) Case pin on bucket w/ edge; 20.5-R25 L3 Radial tires; ROPS cab w/ heater and A/C; Std. battery; Heavy counterweight – 1,950 lb (885 kg); Front and rear fenders; Lights; 165 lb (75 kg) operator:

28,483 lb (12 920 kg)

HYDRAULICS

Pump – steering/implement:
Closed center pressure/flow compensated

Variable displacement - load-sensing:

45.2 gpm @ 2000 RPM (171 L/min @ 2000 RPM)

Loader control valve:

Closed-center, sectional 2, 3 or 4-function w/ pilot control for lift, tilt and auxiliary hydraulics, electromagnetic detents in float, raise and rollback

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

Freelands	05.0 1 (0.40.0.1)			
Fuel tank	65.0 gal (246.0 L)			
DEF tank - Diesel Exhaust Fluid:				
Usable capacity	9.8 gal (37.1 L)			
Total	15.6 gal (58.9 L)			
Hydraulic system:				
Reservoir	24.0 gal (90.8 L)			
Total	39.0 gal (147.6 L)			
Transmission:				
Service w/ filter	28.2 qt (26.7 L)			
Front and rear axle:				
Front axle	23.2 qt (22.0 L)			
Rear axle	23.2 qt (22.0 L)			
Front and rear axle – optional:				
Front axle	23.2 qt (22.0 L)			
Rear axle	23.2 qt (22.0 L)			
Engine oil w/ filter	13.9 qt (13.2 L)			
Cooling system	28.4 qt (26.8 L)			

OTHER SPECIFICATIONS

Dump cylinder - Z-Bar and XR:

 Bore diameter
 5.0 in (127 mm)

 Rod diameter
 3.0 in (76 mm)

 Stroke
 24.4 in (620 mm)

Dump cylinder – XT:

 Bore diameter
 4.5 in (114 mm)

 Rod diameter
 2.5 in (64 mm)

 Stroke
 32.6 in (820 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:

Z-Bar 6.3 sec

XR 6.3 sec

XT 6.5 sec

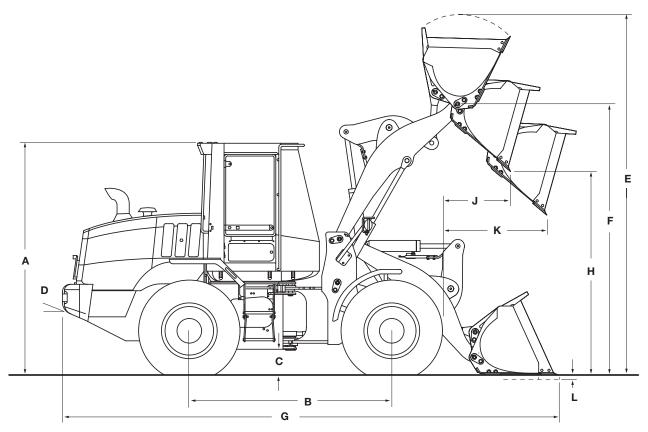
Dump w/ rated bucket load:

Z-Bar 1.2 sec

XR 1.2 sec XT 2.4 sec Float down:

Z-Bar 4.8 sec XR 4.8 sec XT 4.2 sec

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

DIMENSIONS	
A. Height to top of ROPS cab	133.2 in (3 384 mm)
Height to drawbar	42.1 in (1 070 mm)
B. Wheelbase	114.2 in (2 900 mm)
C. Ground clearance	15.3 in (389 mm)
D. Angle of departure	25°
Width:	
Overall* without bucket	97.6 in (2 478 mm)
Centerline tread	76.8 in (1 950 mm)
Turning radius* – outside	205.6 in (5 223 mm)
Turning angle:	
From center	40°
Total angle	80°
Rear axle oscillation – total	24°

NOTE: *Dimensions taken with 20.5-R25 (L3 Radial) tires. For transport dimensions, refer to specific bucket width and overall length on pages 4 through 8.

WEIGHT ADJUSTMENTS				
Select Options	Weight Adjustment	Tipping Load Adjustment Straight: Deflected*	Tipping Load Adjustment 40° Turn: Deflected*	
20.5 x 25 12 ply L2 Bias tires	-592 lb (-269 kg)	-618 lb (-280 kg)	-934 lb (-424 kg)	
20.5 x 25 12 ply L3 Bias tires	-20 lb (-9 kg)	+240 lb (+109 kg)	+321 lb (+146 kg)	
20.5-R25 L2 Radial tires	-256 lb (-116 kg)	-259 lb (-117 kg)	-215 lb (-98 kg)	
20.5-R25 Snow Radial Tires	-132 lb (-60 kg)	-175 lb (-79 kg)	-139 lb (-63 kg)	
20.5-R25 Solid Tires Req. Diff Axles, Ltd Speed Controler	+4,782 lb (+2 169 kg)	+3,140 lb (+1 424 kg)	+3,216 lb (+1 459 kg)	
Light counterweight	-810 lb (-367 kg)	-1,778 lb (-807 kg)	-1,407 lb (-638 kg)	

NOTE: Unit equipped with Z-Bar loader arms, 2.5 yd³ (1.9 m³) general purpose pin on bucket with bolt-on edge, 20.5-R25 (L3 Radial) tires, ROPS cab with heater and air conditioner, heavy counterweight, standard batteries, front and rear fenders, full fuel and 165 lb (79 kg) operator. Adjust select options from rated weight. *Tipping loads: ISO 14397-1 Deflected Tires.

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PERFORMANCE SPECS				
621G Z-Bar*		2.5 yd ³ (1.9 m ³) Bucket	2.4 yd ³ (1.8 m ³) Bucket	2.75 yd³ (2.1 m³) Bucket
		with Bolt-on Edge - Pin On	with Teeth Only - Pin On	with Bolt-on Edge - Pin On
Operating weight		28,093 lb (12 743 kg)	28,013 lb (12 707 kg)	28,159 lb (12 773 kg)
E. Operating height - fully raised v	with spillguard	194.5 in (4 941 mm)	194.5 in (4 941 mm)	195.6 in (4 968 mm)
F. Hinge pin height – fully raised		150.9 in (3 833 mm)	150.9 in (3 834 mm)	150.9 in (3 833 mm)
G. Overall length – bucket level on	ground	284.9 in (7 237 mm)	290.6 in (7 382 mm)	287.9 in (7 312 mm)
Dump angle – fully raised		51°	51°	51°
H. Dump height - fully raised, 45°	dump	114.1 in (2 899 mm)	110.4 in (2 805 mm)	112.2 in (2 849 mm)
J. Bucket reach - fully raised, 45°	dump	36.0 in (916 mm)	40.2 in (1 021 mm)	38.0 in (965 mm)
K. Bucket reach - 7 ft 0 in (2.13 m) height, 45° dump	57.7 in (1 466 mm)	60.0 in (1 525 mm)	58.7 in (1 491 mm)
L. Dig depth		2.8 in (72 mm)	3.0 in (76 mm)	3.1 in (78 mm)
Operating load – ISO Rigid Tires		10,724 lb (4 864 kg)	10,860 lb (4 926 kg)	10,594 lb (4 805 kg)
Operating load – ISO Deflected Tire	es	9,700 lb (4 400 kg)	9,824 lb (4 456 kg)	9,579 lb (4 345 kg)
Maximum material density - ISO Ri	gid Tires	4,289 lb/yd³ (2 545 kg/m³)	4,525 lb/yd³ (2 685 kg/m³)	3,852 lb/yd3 (2 286 kg/m3)
Maximum material density – ISO De	eflected Tires	3,880 lb/yd³ (2 302 kg/m³)	4,093 lb/yd³ (2 429 kg/m³)	3,483 lb/yd³ (2 067 kg/m³)
Tipping load – ISO Rigid Tires:	Straight	24,606 lb (11 161 kg)	24,903 lb (11 296 kg)	24,322 lb (11 032 kg)
	40° turn	21,447 lb (9 728 kg)	21,719 lb (9 852 kg)	21,188 lb (9 611 kg)
Tipping load - ISO Deflected Tires:	Straight	22,881 lb (10 378 kg)	23,155 lb (10 503 kg)	22,610 lb (10 256 kg)
	40° turn	19,401 lb (8 800 kg)	19,648 lb (8 912 kg)	19,158 lb (8 690 kg)
Lift capacity:	Full height	16,442 lb (7 458 kg)	16,530 lb (7 498 kg)	16,368 lb (7 424 kg)
	Ground	25,278 lb (11 466 kg)	26,675 lb (12 100 kg)	23,900 lb (10 841 kg)
Breakout force with tilt cylinder		27,280 lb (12 374 kg)	29,182 lb (13 237 kg)	25,487 lb (11 561 kg)
Loader clearance circle with bucket		451.9 in (11 478 mm)	454.8 in (11 552 mm)	453.6 in (11 521 mm)

621G XR		2.5 yd³ (1.9 m³) Bucket with Bolt-on Edge - Pin On	2.4 yd ³ (1.8 m ³) Bucket with Teeth Only - Pin On	2.75 yd ³ (2.1 m ³) Bucket with Bolt-on Edge - Pin On
Operating Weight	Operating Weight		28,403 lb (12 883 kg)	28,549 lb (12 950 kg)
E. Operating height - fully raised v	vith spillguard	211.2 in (5 365 mm)	211.2 in (5 365 mm)	212.3 in (5 392 mm)
F. Hinge pin height – fully raised		167.6 in (4 258 mm)	167.6 in (4 258 mm)	167.6 in (4 258 mm)
G. Overall length - bucket level on	ground	301.1 in (7 648 mm)	306.8 in (7 792 mm)	304.0 in (7 722 mm)
Dump angle – fully raised		45°	45°	45°
H. Dump height - fully raised, 45°	dump	130.8 in (3 323 mm)	127.1 in (3 229 mm)	128.9 in (3 273 mm)
J. Bucket reach - fully raised, 45°	dump	36.1 in (916 mm)	40.2 in (1 022 mm)	38.0 in (966 mm)
K. Bucket reach - 7 ft 0 in (2.13 m) height, 45° dump	71.6 in (1 817 mm)	74.1 in (1 883 mm)	72.7 in (1 846 mm)
L. Dig depth		3.0 in (76 mm)	3.2 in (81 mm)	3.3 in (83 mm)
Operating load – ISO Rigid Tires		8,949 lb (4 059 kg)	9,059 lb (4 109 kg)	8,847 lb (4 013 kg)
Operating load - ISO Deflected Tire	Operating load – ISO Deflected Tires		8,299 lb (3 764 kg)	8,099 lb (3 674 kg)
Maximum material density – ISO Rig	gid Tires	3,580 lb/yd³ (2 124 kg/m³)	3,775 lb/yd³ (2 240 kg/m³)	3,217 lb/yd³ (1 909 kg/m³)
Maximum material density - ISO De	flected Tires	3,279 lb/yd³ (1 945 kg/m³)	3,458 lb/yd³ (2 052 kg/m³)	2,945 lb/yd³ (1 748 kg/m³)
Tipping load – ISO Rigid Tires:	Straight 40° turn	20,633 lb (9 359 kg) 17,898 lb (8 119 kg)	20,872 lb (9 467 kg) 18,119 lb (8 219 kg)	20,410 lb (9 258 kg) 17,694 lb (8 026 kg)
Tipping load – ISO Deflected Tires:	Straight 40° turn	19,384 lb (8 792 kg) 16,393 lb (7 436 kg)	19,609 lb (8 895 kg) 16,598 lb (7 529 kg)	19,170 lb (8 695 kg) 16,199 lb (7 348 kg)
Lift capacity:	Full height Ground	15,959 lb (7 239 kg) 25,759 lb (11 684 kg)	16,044 lb (7 277 kg) 25,976 lb (11 783 kg)	15,889 lb (7 207 kg) 25,530 lb (11 580 kg)
Breakout force with tilt cylinder		28,096 lb (12 744 kg)	30,037 lb (13 625 kg)	26,232 lb (11 898 kg)
Loader clearance circle with bucket		467.0 in (11 862 mm)	470.4 in (11 948 mm)	468.9 in (11 911 mm)

621G		Z-Bar/XR	Z-Bar/XR	Z-Bar/XR
Maximum rollback:	Ground	40°/40°	40°/40°	40°/40°
	Carry position	45°/45°	45°/45°	45°/45°
	@ Full height	55°/59°	55°/59°	55°/59°
Maximum grading angle with	bucket - back dragging	58°/58°	59°/59°	59°/59°
SAE bucket capacity - struck	<	2.15 yd ³ (1.64 m ³)	2.05 yd ³ (1.57 m ³)	2.32 yd ³ (1.77 m ³)
Heaped		2.50 yd ³ (1.91 m ³)	2.40 yd³ (1.83 m³)	2.75 yd ³ (2.10 m ³)
Bucket width - outside		102.4 in (2 602 mm)	102.1 in (2 593 mm)	102.4 in (2 602 mm)
Bucket weight		1,796 lb (814 kg)	1,716 lb (778 kg)	1,862 lb (844 kg)

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PERFORMANCE SPECS				
621G Z-Bar*	621G Z-Bar*		3.0 yd³ (2.3 m³) Bucket with Bolt-on Edge - Pin On	3.0 yd³ (2.3 m³) Bucket with Bolt-On Edge & Grapple - Pin On
Operating weight		28,079 lb (12 737 kg)	28,254 lb (12 816 kg)	30,012 lb (13 613 kg)
E. Operating height – fully raised v	vith spillguard	195.6 in (4 968 mm)	198.6 in (5 044 mm)	256.6 in (6 518 mm)
F. Hinge pin height – fully raised		150.9 in (3 833 mm)	150.9 in (3 833 mm)	150.8 in (3 831 mm)
G. Overall length – bucket level on	ground	293.6 in (7 457 mm)	290.6 in (7 380 mm)	290.7 in (7 383 mm)
Dump angle – fully raised		51°	51°	51°
H. Dump height – fully raised, 45°	dump	108.5 in (2 755 mm)	110.4 in (2 804 mm)	110.3 in (2 801 mm)
J. Bucket reach - fully raised, 45°	dump	42.2 in (1 071 mm)	39.8 in (1 010 mm)	39.8 in (1 010 mm)
K. Bucket reach - 7 ft 0 in (2.13 m) height, 45° dump	60.9 in (1 548 mm)	59.6 in (1 513 mm)	59.5 in (1 512 mm)
L. Dig depth		3.2 in (82 mm)	3.3 in (84 mm)	3.4 in (86 mm)
Operating load – ISO Rigid Tires		10,708 lb (4 857 kg)	10,452 lb (4 741 kg)	9,619 lb (4 363 kg)
Operating load - ISO Deflected Tire	s	9,683 lb (4 392 kg)	9,441 lb (4 282 kg)	8,585 lb (3 894 kg)
Maximum material density – ISO Rig	gid Tires	4,119 lb/yd³ (2 444 kg/m³)	3,484 lb/yd³ (2 067 kg/m³)	3,206 lb/yd³ (1 903 kg/m³)
Maximum material density – ISO De	eflected Tires	3,724 lb/yd³ (2 210 kg/m³)	3,147 lb/yd³ (1 867 kg/m³)	2,862 lb/yd³ (1 698 kg/m³)
Tipping load – ISO Rigid Tires:	Straight 40° turn	24,568 lb (11 144 kg) 21,416 lb (9 714 kg)	24,011 lb (10 891 kg) 20,905 lb (9 482 kg)	22,345 lb (10 136 kg) 19,238 lb (8 726 kg)
Tipping load – ISO Deflected Tires:	Straight 40° turn	22,839 lb (10 360 kg) 19,366 lb (8 784 kg)	22,307 lb (10 118 kg) 18,882 lb (8 565 kg)	20,604 lb (9 346 kg) 17,169 lb (7 788 kg)
Lift capacity:	Full height Ground	16,454 lb (7 464 kg) 24,889 lb (11 289 kg)	16,266 lb (7 378 kg) 22,395 lb (10 158 kg)	14,514 lb (6 584 kg) 20,444 lb (9 273 kg)
Breakout force with tilt cylinder		27,150 lb (12 315 kg)	24,031 lb (10 900 kg)	22,248 lb (10 091 kg)
Loader clearance circle with bucket		456.5 in (11 596 mm)	455.1 in (11 560 mm)	455.1 in (11 560 mm)

621G XR		2.6 yd ³ (2.0 m ³) Bucket with Teeth - Pin On	3.0 yd³ (2.3 m³) Bucket with Bolt-on Edge - Pin On	3.0 yd ³ (2.3 m ³) Bucket with Bolt-On Edge & Grapple - Pin On
Operating weight		28,469 lb (12 913 kg)	28,644 lb (12 993 kg)	30,402 lb (13 790 kg)
E. Operating height - fully raised v	vith spillguard	212.3 in (5 393 mm)	215.3 in (5 469 mm)	273.3 in (6 942 mm)
F. Hinge pin height – fully raised		167.6 in (4 258 mm)	167.6 in (4 258 mm)	167.5 in (4 255 mm)
G. Overall length - bucket level on	ground	309.7 in (7 867 mm)	306.7 in (7 789 mm)	306.7 in (7 791 mm)
Dump angle – fully raised		45°	45°	45°
H. Dump height - fully raised, 45°	dump	125.2 in (3 179 mm)	127.1 in (3 229 mm)	127.0 in (3 226 mm)
J. Bucket reach - fully raised, 45°	dump	42.2 in (1 072 mm)	39.8 in (1 011 mm)	39.8 in (1 011 mm)
K. Bucket reach - 7 ft 0 in (2.13 m) height, 45° dump	75.2 in (1 909 mm)	73.7 in (1 871 mm)	73.6 in (1 870 mm)
L. Dig depth		3.4 in (87 mm)	3.5 in (88 mm)	3.6 in (91 mm)
Operating load – ISO Rigid Tires		8,942 lb (4 056 kg)	8,734 lb (3 961 kg)	7,899 lb (3 583 kg)
Operating load - ISO Deflected Tire	S	8,188 lb (3 714 kg)	7,988 lb (3 623 kg)	7,133 lb (3 236 kg)
Maximum material density – ISO Rig	gid Tires	3,439 lb/yd³ (2 041 kg/m³)	2,911 lb/yd³ (1 727 kg/m³)	2,633 lb/yd³ (1 562 kg/m³)
Maximum material density – ISO De	eflected Tires	3,149 lb/yd³ (1 869 kg/m³)	2,663 lb/yd³ (1 580 kg/m³)	2,378 lb/yd³ (1 411 kg/m³)
Tipping load – ISO Rigid Tires:	Straight 40° turn	20,613 lb (9 350 kg) 17,884 lb (8 112 kg)	20,164 lg (9 146 kg) 17,467 lb (7 923 kg)	18,494 lb (8 389 kg) 15,797 lb (7 166 kg)
Tipping load – ISO Deflected Tires:		19,362 lb (8 782 kg) 16,376 lb (7 428 kg)	18,926 lb (8 585 kg) 15,975 lb (7 246 kg)	17,227 lb (7 814 kg) 14,267 lb (6 471 kg)
Lift capacity:	Full height Ground	15,973 lb (7 245 kg) 25,712 lb (11 663 kg)	15,791 lb (7 162 kg) 25,246 lb (11 451 kg)	14,039 lb (6 368 kg) 23,458 lb (10 641 kg)
Breakout force with tilt cylinder		27,928 lb (12 668 kg)	24,720 lb (11 213 kg)	22,929 lb (10 400 kg)
Loader clearance circle with bucket		472.4 in (11 999 mm)	470.7 in (11 956 mm)	470.7 in (11 956 mm)

621G		Z-Bar/XR	Z-Bar/XR	Z-Bar/XR
Maximum rollback:	Ground	40°/40°	41°/40°	41°/40°
	Carry position	45°/45°	45°/45°	45°/45°
	@ Full height	55°/59°	55°/59°	55°/59°
Maximum grading angle wit	h bucket – back dragging	60°/59°	59°/59°	59°/59°
SAE bucket capacity - struc	ck	2.22 yd ³ (1.70 m ³)	2.56 yd ³ (1.96 m ³)	2.56 yd ³ (1.96 m ³)
Heaped		2.60 yd ³ (1.99 m ³)	3.00 yd ³ (2.29 m ³)	3.00 yd ³ (2.29 m ³)
Bucket width - outside		102.1 in (2 593 mm)	102.4 in (2 602 mm)	102.4 in (2 602 mm)
Bucket weight		1,782 lb (808 kg)	1,957 lb (888 kg)	3,715 lb (1 685 kg)

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PERFORMANCE SPECS				
621G Z-Bar*		4.5 yd³ (3.4 m³) Bucket with Bolt-on Edge - Pin On	2.5 yd ³ (1.9 m ³) Bucket with Bolt-On Edge - ACS Coupler	2.4 yd ³ (1.8 m ³) Bucket with Teeth - ACS Coupler
Operating weight		28,778 lb (13 053 kg)	29,109 lb (13 203 kg)	29,028 lb (13 167 kg)
E. Operating height - fully raised w	ith spillguard	212.9 in (5 408 mm)	199.2 in (5 059 mm)	199.2 in (5 059 mm)
F. Hinge pin height – fully raised		150.9 in (3 833 mm)	150.9 in (3 832 mm)	150.9 in (3 832 mm)
G. Overall length - bucket level on	ground	302.9 in (7 694 mm)	292.0 in (7 418 mm)	297.7 in (7 562 mm)
Dump angle - fully raised		50°	51°	51°
H. Dump height - fully raised, 45° c	lump	102.2 in (2 595 mm)	109.5 in (2 782 mm)	105.8 in (2 688 mm)
J. Bucket reach - fully raised, 45°	dump	47.9 in (1 216 mm)	41.5 in (1 053 mm)	45.6 in (1 158 mm)
K. Bucket reach - 7 ft 0 in (2.13 m)	height, 45° dump	62.9 in (1 598 mm)	60.8 in (1 545 mm)	62.9 in (1 597 mm)
L. Dig depth		4.4 in (111 mm)	2.9 in (73 mm)	3.1 in (78 mm)
Operating load – ISO Rigid Tires		10,274 lb (4 660 kg)	9,690 lb (4 395 kg)	9,811 lb (4 450 kg)
Operating load - ISO Deflected Tires	3	9,223 lb (4 183 kg)	8,724 lb (3 957 kg)	8,835 lb (4 008 kg)
Maximum material density - ISO Rig	id Tires	2,283 lb/yd³ (1 355 kg/m³)	3,876 lb/yd³ (2 300 kg/m³)	4,088 lb/yd³ (2 426 kg/m³)
Maximum material density - ISO Det	flected Tires	2,050 lb/yd³ (1 216 kg/m³)	3,490 lb/yd³ (2 071 kg/m³)	3,681 lb/yd³ (2 184 kg/m³)
11 0	Straight 40° turn	23,690 lb (10 746 kg) 20,548 lb (9 320 kg)	22,375 lb (10 149 kg) 19,380 lb (8 791 kg)	22,640 lb (10 269 kg) 19,623 lb (8 901 kg)
11 8	Straight 40° turn	21,915 lb (9 940 kg) 18,446 lb (8 367 kg)	20,750 lb (9 412 kg) 17,449 lb (7 915 kg)	20,996 lb (9 524 kg) 17,670 lb (8 015 kg)
. ,	Full height Ground	15,794 lb (7 164 kg) 21,930 lb (9 947 kg)	15,396 lb (6 984 kg) 17,992 lb (8 161 kg)	15,483 lb (7 023 kg) 18,795 lb (8 525 kg)
Breakout force with tilt cylinder		18,285 lb (8 294 kg)	22,635 lb (10 267 kg)	24,003 lb (10 887 kg)
Loader clearance circle with bucket		462.3 in (11 743 mm)	455.9 in (11 580 mm)	459.0 in (11 658 mm)

621G XR		4.5 yd³ (3.4 m³) Bucket with Bolt-on Edge - Pin On	2.5 yd ³ (1.9 m ³) Bucket with Bolt-On Edge - ACS Coupler	2.4 yd ³ (1.8 m ³) Bucket with Teeth - ACS Coupler
Operating weight		29,167 lb (13 230 kg)	29,498 lb (13 380 kg)	29,418 lb (13 344 kg)
E. Operating height - fully raised v	vith spillguard	229.6 in (5 833 mm)	215.9 in (5 484 mm)	215.9 in (5 484 mm)
F. Hinge pin height – fully raised		167.6 in (4 257 mm)	167.6 in (4 257 mm)	167.6 in (4 257 mm)
G. Overall length - bucket level on	ground	318.8 in (8 099 mm)	308.2 in (7 828 mm)	313.9 in (7 972 mm)
Dump angle – fully raised		45°	45°	45°
H. Dump height - fully raised, 45°	dump	119.2 in (3 027 mm)	126.2 in (3 206 mm)	122.5 in (3 113 mm)
J. Bucket reach - fully raised, 45°	dump	48.2 in (1 225 mm)	41.5 in (1 054 mm)	45.6 in (1 159 mm)
K. Bucket reach - 7 ft 0 in (2.13 m) height, 45° dump	77.7 in (1 973 mm)	75.0 in (1 904 mm)	77.3 in (1 964 mm)
L. Dig depth		4.5 in (115 mm)	3.1 in (78 mm)	3.2 in (82 mm)
Operating load – ISO Rigid Tires		8,535 lb (3 871 kg)	8,072 lb (3 662 kg)	8,173 lb (3 707 kg)
Operating load - ISO Deflected Tire	S	7,762 lb (3 521 kg)	7,355 lb (3 336 kg)	7,448 lb (3 379 kg)
Maximum material density – ISO Rig	gid Tires	1,897 lb/yd³ (1 125 kg/m³)	3,229 lb/yd³ (1 916 kg/m³)	3,405 lb/yd³ (2 021 kg/m³)
Maximum material density – ISO De	flected Tires	1,725 lb/yd³ (1 023 kg/m³)	2,942 lb/yd³ (1 746 kg/m³)	3,104 lb/yd³ (1 842 kg/m³)
Tipping load – ISO Rigid Tires:	Straight 40° turn	19,796 lb (8 979 kg) 17,070 lb (7 743 kg)	18,759 lb (8 509 kg) 16,145 lb (7 323 kg)	18,976 lb (8 607 kg) 16,345 lb (7 414 kg)
Tipping load – ISO Deflected Tires:	Straight 40° turn	18,511 lb (8 396 kg) 15,524 lb (7 041 kg)	17,570 lb (7 970 kg) 14,710 lb (6 673 kg)	17,775 lb (8 063 kg) 14,897 lb (6 757 kg)
Lift capacity:	Full height Ground	15,308 lb (6 944 kg) 24,802 lb (11 250 kg)	14,931 lb (6 772 kg) 23,840 lb (10 814 kg)	15,015 lb (6 811 kg) 24,049 lb (10 908 kg)
Breakout force with tilt cylinder		18,751 lb (8 505 kg)	23,336 lb (10 585 kg)	24,730 lb (11 217 kg)
Loader clearance circle with bucket		478.1 in (12 144 mm)	471.4 in (11 973 mm)	474.9 in (12 061 mm)

	Z-Bar/XR	Z-Bar/XR	Z-Bar/XR
Ground	42°/42°	40°/40°	40°/40°
Carry position	45°/47°	45°/46°	45°/46°
@ Full height	55°/59°	55°/59°	55°/59°
bucket - back dragging	64°/63°	60°/60°	61°/60°
(3.71 yd ³ (2.84 m ³)	2.15 yd ³ (1.64 m ³)	2.05 yd³ (1.57 m³)
	4.50 yd ³ (3.44 m ³)	2.50 yd ³ (1.91 m ³)	2.40 yd ³ (1.83 m ³)
	102.4 in (2 602 mm)	102.4 in (2 602 mm)	102.1 in (2 593 mm)
	2,480 lb (1 125 kg)	2,811 lb (1 275 kg)	2,731 lb (1 239 kg)
	Carry position @ Full height bucket – back dragging	Ground 42°/42° Carry position 45°/47° @ Full height 55°/59° bucket – back dragging 64°/63° 3.71 yd³ (2.84 m³) 4.50 yd³ (3.44 m³) 102.4 in (2 602 mm)	Ground 42°/42° 40°/40° Carry position 45°/47° 45°/46° © Full height 55°/59° 55°/59° bucket – back dragging 64°/63° 60°/60° 3.71 yd³ (2.84 m³) 2.15 yd³ (1.64 m³) 4.50 yd³ (3.44 m³) 2.50 yd³ (1.91 m³) 102.4 in (2 602 mm) 102.4 in (2 602 mm)

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PERFORMANCE SPECS				
621G Z-Bar*	with E	3.0 yd³ (2.29 m³) Bucket Bolt-on Edge - ACS Coupler	2.80 yd ³ (2.14 m ³) Bucket with Teeth - ACS Coupler	2.5 yd³ (1.91 m³) Bucket with Bolt-on Edge - JRB Coupler
Operating weight		29,322 lb (13 300 kg)	29,242 lb (13 264 kg)	28,930 lb (13 122 kg)
E. Operating height - fully raised w	rith spillguard	203.7 in (5 173 mm)	203.7 in (5 173 mm)	200.4 in (5 090 mm)
F. Hinge pin height – fully raised		150.9 in (3 832 mm)	150.9 in (3 832 mm)	150.9 in (3 832 mm)
G. Overall length - bucket level on	ground	297.3 in (7 551 mm)	303.0 in (7 696 mm)	293.7 in (7 460 mm)
Dump angle – fully raised		51°	51°	51°
H. Dump height - fully raised, 45° d	dump	106.1 in (2 696 mm)	102.4 in (2 602 mm)	108.5 in (2 755 mm)
J. Bucket reach - fully raised, 45°	dump	45.5 in (1 155 mm)	49.6 in (1 260 mm)	42.7 in (1 085 mm)
K. Bucket reach - 7 ft 0 in (2.13 m)	height, 45° dump	62.9 in (1 598 mm)	64.8 in (1 646 mm)	61.5 in (1 562 mm)
L. Dig depth		2.9 in (74 mm)	3.1 in (78 mm)	2.9 in (73 mm)
Operating load – ISO Rigid Tires		9,477 lb (4 299 kg)	9,606 lb (4 357 kg)	9,646 lb (4 375 kg)
Operating load - ISO Deflected Tires	3	8,513 lb (3 861 kg)	8,630 lb (3 915 kg)	8,693 lb (3 943 kg)
Maximum material density - ISO Rig	jid Tires	3,159 lb/yd³ (1 875 kg/m³)	3,431 lb/yd³ (2 036 kg/m³)	3,859 lb/yd³ (2 290 kg/m³)
Maximum material density - ISO De	flected Tires	2,838 lb/yd³ (1 684 kg/m³)	3,082 lb/yd³ (1 829 kg/m³)	3,477 lb/yd³ (2 063 kg/m³)
Tipping load – ISO Rigid Tires:	Straight 40° turn	21,919 lb (9 942 kg) 18,955 lb (8 598 kg)	22,201 lb (10 070 kg) 19,212 lb (8 715 kg)	22,251 lb (10 093 kg) 19,293 lb (8 751 kg)
Tipping load – ISO Deflected Tires:	Straight 40° turn	20,296 lb (9 206 kg) 17,026 lb (7 723 kg)	20,558 lb (9 325 kg) 17,261 lb (7 829 kg)	20,649 lb (9 366 kg) 17,387 lb (7 886 kg)
Lift capacity:	Full height Ground	15,175 lb (6 883 kg) 16,546 lb (7 505 kg)	15,263 lb (6 923 kg) 17,354 lb (7 871 kg)	15,564 lb (7 060 kg) 16,975 lb (7 700 kg)
Breakout force with tilt cylinder		20,212 lb (9 168 kg)	21,315 lb (9 668 kg)	21,896 lb (9 932 kg)
Loader clearance circle with bucket		459.0 in (11 659 mm)	462.2 in (11 740 mm)	456.9 in (11 605 mm)

621G XR	with E	3.0 yd³ (2.29 m³) Bucket Bolt-on Edge - ACS Coupler	2.80 yd ³ (2.14 m ³) Bucket with Teeth - ACS Coupler	2.5 yd ³ (1.91 m ³) Bucket with Bolt-on Edge - JRB Coupler
Operating weight		29,711 lb (13 477 kg)	29,631 lb (13 440 kg)	29,319 lb (13 299 kg)
E. Operating height - fully raised v	vith spillguard	220.4 in (5 597 mm)	220.4 in (5 597 mm)	217.1 in (5 514 mm)
F. Hinge pin height – fully raised		167.6 in (4 256 mm)	167.6 in (4 256 mm)	167.6 in (4 257 mm)
G. Overall length - bucket level on	ground	313.4 in (7 961 mm)	319.1 in (8 106 mm)	309.8 in (7 870 mm)
Dump angle – fully raised		45°	45°	45°
H. Dump height - fully raised, 45°	dump	122.9 in (3 121 mm)	119.2 in (3 027 mm)	125.2 in (3 179 mm)
J. Bucket reach - fully raised, 45°	dump	45.5 in (1 156 mm)	49.7 in (1 261 mm)	42.8 in (1 086 mm)
K. Bucket reach - 7 ft 0 in (2.13 m) height, 45° dump	77.3 in (1 965 mm)	79.6 in (2 021 mm)	75.7 in (1 924 mm)
L. Dig depth		3.1 in (78 mm)	3.2 in (82 mm)	3.1 in (78 mm)
Operating load – ISO Rigid Tires		7,892 lb (3 580 kg)	7,997 lb (4 357 kg)	8,065 lb (3 658 kg)
Operating load - ISO Deflected Tire	S	7,175 lb (3 254 kg)	7,273 lb (3 299 kg)	7,356 lb (3 336 kg)
Maximum material density – ISO Rig	gid Tires	2,631 lb/yd³ (1 561 kg/m³)	2,856 lb/yd³ (1 695 kg/m³)	3,226 lb/yd³ (1 914 kg/m³)
Maximum material density - ISO De	flected Tires	2,392 lb/yd³ (1 419 kg/m³)	2,598 lb/yd³ (1 541 kg/m³)	2,942 lb/yd³ (1 746 kg/m³)
Tipping load – ISO Rigid Tires:	Straight 40° turn	18,375 lb (8 335 kg) 15,783 lb (7 159 kg)	18,604 lb (8 439 kg) 15,994 lb (7 255 kg)	18,717 lb (8 490 kg) 16,130 lb (7 316 kg)
Tipping load – ISO Deflected Tires:	Straight 40° turn	17,187 lb (7 796 kg) 14,350 lb (6 509 kg)	17,404 lb (7 894 kg) 14,547 lb (6 598 kg)	17,542 lb (7 957 kg) 14,711 lb (6 673 kg)
Lift capacity:	Full height Ground	14,715 lb (6 675 kg) 23,380 lb (10 605 kg)	14,799 lb (6 713 kg) 23,606 lb (10 707 kg)	15,104 lb (6 851 kg) 23,788 lb (10 790 kg)
Breakout force with tilt cylinder		20,843 lb (9 454 kg)	21,967 lb (9 964 kg)	22,571 lb (10 238 kg)
Loader clearance circle with bucket		474.8 in (12 061 mm)	478.4 in (12 152 mm)	472.4 in (12 000 mm)

	Z-Bar/XR	Z-Bar/XR	Z-Bar/XR
Ground	40°/40°	40°/40°	40°/40°
Carry position	45°/46°	45°/46°	45°/46°
@ Full height	55°/59°	55°/59°	55°/59°
bucket - back dragging	61°/60°	63°/61°	60°/60°
<	2.60 yd ³ (1.99 m ³)	2.40 yd ³ (1.83 m ³)	2.15 yd³ (1.64 m³)
	3.00 yd ³ (2.29 m ³)	2.80 yd ³ (2.14 m ³)	2.50 yd ³ (1.91 m ³)
	102.4 in (2 602 mm)	102.1 in (2 593 mm)	102.4 in (2 602 mm)
	3,024 lb (1 372 kg)	2,944 lb (1 335 kg)	2,632 lb (1 194 kg)
	Carry position @ Full height bucket – back dragging	Ground 40°/40° Carry position 45°/46° @ Full height 55°/59° bucket – back dragging 61°/60° (2.60 yd³ (1.99 m³) 3.00 yd³ (2.29 m³) 102.4 in (2 602 mm)	Ground 40°/40° 40°/40° Carry position 45°/46° 45°/46° © Full height 55°/59° 55°/59° bucket – back dragging 61°/60° 63°/61° C 2.60 yd³ (1.99 m³) 2.40 yd³ (1.83 m³) 3.00 yd³ (2.29 m³) 2.80 yd³ (2.14 m³) 102.4 in (2 602 mm) 102.1 in (2 593 mm)

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PERFORMANCE SPECS				
621G Z-Bar*		2.4 yd³ (1.83 m³) Bucket with Teeth - JRB Coupler	3.0 yd³ (2.29 m³) Bucket with Bolt-On Edge - JRB Coupler	2.8 yd ³ (2.14 m ³) Bucket with Teeth - JRB Coupler
Operating weight		28,852 lb (13 087 kg)	29,119 lb (13 208 kg)	29,039 lb (13 172 kg)
E. Operating height - fully raised v	vith spillguard	200.4 in (5 090 mm)	205.1 in (5 209 mm)	205.1 in (5 209 mm)
F. Hinge pin height - fully raised		150.9 in (3 832 mm)	150.9 in (3 832 mm)	150.9 in (3 832 mm)
G. Overall length - bucket level on	ground	299.4 in (7 604 mm)	299.2 in (7 601 mm)	305.0 in (7 746 mm)
Dump angle - fully raised		51°	51°	51°
H. Dump height - fully raised, 45°	dump	104.8 in (2 661 mm)	104.9 in (2 664 mm)	101.2 in (2 570 mm)
J. Bucket reach - fully raised, 45°	dump	46.9 in (1 191 mm)	47.0 in (1 193 mm)	51.1 in (1 299 mm)
K. Bucket reach - 7 ft 0 in (2.13 m) height, 45° dump	63.6 in (1 614 mm)	63.7 in (1 618 mm)	65.5 in (1 664 mm)
L. Dig depth		3.0 in (77 mm)	2.9 in (73 mm)	3.0 in (77 mm)
Operating load - ISO Rigid Tires		9,767 lb (4 430 kg)	9,874 lb (4 479 kg)	9,546 lb (4 330 kg)
Operating load - ISO Deflected Tire	S	8,803 lb (3 993 kg)	8,898 lb (4 036 kg)	8,585 lb (3 894 kg)
Maximum material density - ISO Rig	gid Tires	4,070 lb/yd³ (2 415 kg/m³)	3,291 lb/yd³ (1 953 kg/m³)	3,409 lb/yd³ (2 023 kg/m³)
Maximum material density - ISO De	eflected Tires	3,668 lb/yd³ (2 176 kg/m³)	2,966 lb/yd³ (1 760 kg/m³)	3,066 lb/yd³ (1 819 kg/m³)
Tipping load – ISO Rigid Tires:	Straight 40° turn	22,515 lb (10 213 kg) 19,535 lb (8 861 kg)	22,835 lb (10 358 kg) 19,749 lb (8 958 kg)	22,037 lb (9 996 kg) 19,092 lb (8 660 kg)
Tipping load – ISO Deflected Tires:	Straight 40° turn	20,892 lb (9 476 kg) 17,605 lb (7 986 kg)	21,197 lb (9 615 kg) 17,796 lb (8 072 kg)	20,420 lb (9 262 kg) 17,171 lb (7 789 kg)
Lift capacity:	Full height Ground	15,649 lb (7 098 kg) 17,704 lb (8 030 kg)	15,397 lb (6 984 kg) 20,923 lb (9 491 kg)	15,452 lb (7 009 kg) 16,177 lb (7 338 kg)
Breakout force with tilt cylinder		23,163 lb (10 506 kg)	18,868 lb (8 558 kg)	20,530 lb (9 312 kg)
Loader clearance circle with bucket		460.0 in (11 683 mm)	460.2 in (11 689 mm)	463.4 in (11 771 mm)

621G XR		2.4 yd ³ (1.83 m ³) Bucket with Teeth - JRB Coupler	3.0 yd ³ (2.29 m ³) Bucket with Bolt-On Edge - JRB Coupler	2.8 yd ³ (2.14 m ³) Bucket with Teeth - JRB Coupler
Operating weight		29,241 lb (13 264 kg)	29,508 lb (13 385 kg)	29,428 lb (13 348 kg)
E. Operating height – fully raised v	vith spillguard	217.1 in (5 514 mm)	221.8 in (5 634 mm)	221.8 in (5 634 mm)
F. Hinge pin height – fully raised		167.6 in (4 257 mm)	167.6 in (4 257 mm)	167.6 in (4 257 mm)
G. Overall length – bucket level on	ground	315.5 in (8 014 mm)	315.4 in (8 011 mm)	321.1 in (8 156 mm)
Dump angle – fully raised		45°	45°	45°
H. Dump height – fully raised, 45°	dump	121.5 in (3 086 mm)	121.6 in (3 088 mm)	117.9 in (2 995 mm)
J. Bucket reach - fully raised, 45°	dump	46.9 in (1 192 mm)	47.0 in (1 194 mm)	51.2 in (1 300 mm)
K. Bucket reach - 7 ft 0 in (2.13 m) height, 45° dump	78.1 in (1 983 mm)	78.2 in (1 987 mm)	80.4 in (2 041 mm)
L. Dig depth		3.2 in (81 mm)	3.1 in (78 mm)	3.2 in (82 mm)
Operating load – ISO Rigid Tires		8,165 lb (3 703 kg)	8,181 lb (3 711 kg)	7,981 lb (3 620 kg)
Operating load - ISO Deflected Tire	S	7,448 lb (3 378 kg)	7,454 lb (3 381 kg)	7,266 lb (3 296 kg)
Maximum material density - ISO Rig	gid Tires	3,402 lb/yd³ (2 019 kg/m³)	2,727 lb/yd³ (1 618 kg/m³)	2,850 lb/yd³ (1 691 kg/m³)
Maximum material density – ISO De	eflected Tires	3,103 lb/yd³ (1 841 kg/m³)	2,485 lb/yd³ (1 474 kg/m³)	2,595 lb/yd³ (1 540 kg/m³)
Tipping load – ISO Rigid Tires:	Straight 40° turn	18,933 lb (8 588 kg) 16,330 lb (7 407 kg)	19,042 lb (8 637 kg) 16,363 lb (7 422 kg)	18,538 lb (8 409 kg) 15,962 lb (7 240 kg)
Tipping load – ISO Deflected Tires:	Straight 40° turn	17,745 lb (8 049 kg) 14,896 lb (6 757 kg)	17,840 lb (8 092 kg) 14,907 lb (6 762 kg)	17,354 lb (7 872 kg) 14,532 lb (6 592 kg)
Lift capacity:	Full height Ground	15,186 lb (6 888 kg) 23,995 lb (10 884 kg)	14,924 lb (6 769 kg) 24,358 lb (11 049 kg)	14,995 lb (6 802 kg) 23,528 lb (10 672 kg)
Breakout force with tilt cylinder		23,864 lb (10 824 kg)	19,474 lb (8 833 kg)	21,155 lb (9 596 kg)
Loader clearance circle with bucket		476.0 in (12 089 mm)	476.2 in (12 095 mm)	479.8 in (12 187 mm)

621G		Z-Bar/XR	Z-Bar/XR	Z-Bar/XR	
Maximum rollback:	Ground	40°/40°	40°/40°	40°/40°	
	Carry position	45°/46°	45°/46°	45°/46°	
	@ Full height	55°/59°	55°/59°	55°/59°	
Maximum grading angle with bucket – back dragging		62°/61°	62°/61°	64°/62°	
SAE bucket capacity - struc	ck	2.05 yd ³ (1.57 m ³)	2.60 yd ³ (1.99 m ³)	2.40 yd ³ (1.83 m ³)	
Heaped		2.40 yd ³ (1.83 m ³)	3.00 yd³ (2.29 m³)	2.80 yd ³ (2.14 m ³)	
Bucket width - outside		102.1 in (2 593 mm)	102.4 in (2 602 mm)	102.1 in (2 593 mm)	
Bucket weight		2,554 lb (1 158 kg)	2,821 lb (1 280 kg)	2,741 lb (1 243 kg)	

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621G XT		2.50 yd ³ (1.91 m ³)	2.40 yd ³ (1.83 m ³)	3.00 yd ³ (2.3 m ³)	2.80 yd ³ (2.1 m ³)
		Bucket with Bolt-On Edge - ACS Coupler	Bucket with Teeth ACS Coupler	Bucket with Bolt-On Edge - ACS Coupler	Bucket with Teeth ACS Coupler
			· · · · · · · · · · · · · · · · · · ·		•
Operating weight		29,639 lb (13 444 kg)	29,561 lb (13 409 kg)	29,852 lb (13 541 kg)	29,774 lb (13 505 kg)
E. Operating height – fully raised v	vith spillguar	d 207.6 in (5 274 mm)	207.6 in (5 274 mm)	212.1 in (5 387 mm)	212.1 in (5 387 mm)
F. Hinge pin height – fully raised		155.9 in (3 959 mm)	155.9 in (3 959 mm)	155.9 in (3 959 mm)	155.9 in (3 959 mm)
G. Overall length – bucket level on ground		296.6 in (7 533 mm)	302.3 in (7 678 mm)	301.8 in (7 666 mm)	307.5 in (7 810 mm)
Dump angle – fully raised		55°	55°	55°	55°
H. Dump height – fully raised, 45° dump		111.5 in (2 831 mm)	107.8 in (2 737 mm)	108.1 in (2 745 mm)	104.4 in (2 653 mm)
J. Bucket reach – fully raised, 45° dump		46.9 in (1 191 mm)	51.0 in (1 296 mm)	50.9 in (1 293 mm)	55.1 in (1 399 mm)
K. Bucket reach - 7 ft 0 in (2.13 m) height, 45° dump 67.7 in (dump 67.7 in (1 721 mm)	69.8 in (1 774 mm)	69.9 in (1 776 mm)	71.9 in (1 826 mm)
L. Dig depth		2.5 in (62 mm)	2.6 in (67 mm)	2.5 in (63 mm)	2.6 in (65 mm)
Operating load – ISO Rigid Tires		9,096 lb (4 126 kg)	9,207 lb (4 176 kg)	8,903 lb (4 038 kg)	9,021 lb (4 092 kg)
Operating load – ISO Deflected Tires		8,141 lb (3 693 kg)	8,243 lb (3 739 kg)	7,947 lb (3 605 kg)	8,055 lb (3 654 kg)
Maximum material density – ISO Rigid Tires		3,638 lb/yd³ (2 159 kg/m³)	3,836 lb/yd³ (2 276 kg/m³)	2,968 lb/yd³ (1 761 kg/m³)	3,222 lb/yd³ (1 912 kg/m³)
Maximum material density – ISO Deflected Tires		3,256 lb/yd³ (1 932 kg/m³)	3,434 lb/yd³ (2 038 kg/m³)	2,649 lb/yd³ (1 572 kg/m³)	2,877 lb/yd³ (1 707 kg/m³)
Tipping load - ISO Rigid Tires:	Straight	21,018 lb (9 534 kg)	21,260 lb (9 643 kg)	20,608 lb (9 348 kg)	20,865 lb (9 464 kg)
	40° turn	18,191 lb (8 251 kg)	18,414 lb (8 353 kg)	17,807 lb (8 077 kg)	18,042 lb (8 184 kg)
Tipping load – ISO Deflected Tires:	Straight	19,415 lb (8 806 kg)	19,640 lb (8 908 kg)	19,002 lb (8 619 kg)	19,241 lb (8 727 kg)
	40° turn	16,282 lb (7 385 kg)	16,485 lb (7 478 kg)	15,895 lb (7 210 kg)	16,110 lb (7 307 kg)
Lift capacity:	Full height	14,197 lb (6 440 kg)	14,337 lb (6 503 kg)	13,929 lb (6 318 kg)	14,074 lb (6 384 kg)
	Ground	34,382 lb (15 596 kg)	35,919 lb (16 293 kg)	32,621 lb (14 797 kg)	34,152 lb (15 491 kg)
Breakout force with tilt cylinder		25,446 lb (11 542 kg)	26,841 lb (12 175 kg)	22,941 lb (10 406 kg)	24,092 lb (10 928 kg)
Loader clearance circle with bucket		449.0 in (11 405 mm)	450.9 in (11 454 mm)	451.0 in (11 456 mm)	453.0 in (11 506 mm)

621G XT		2.50 yd ³ (1.91 m ³)	2.40 yd ³ (1.83 m ³)	3.00 yd ³ (2.29 m ³)	2.80 yd ³ (2.1 m ³)
		Bucket with Bolt-On	Bucket with Teeth	Bucket with Bolt-On	Bucket with Teeth
		Edge - JRB Coupler	JRB Coupler	Edge - JRB Coupler	JRB Coupler
Operating weight		29,332 lb (13 305 kg)	29,253 lb (13 269 kg)	29,519 lb (13 389 kg)	29,442 lb (13 355 kg)
E. Operating height – fully raised v	vith spillguar	rd 212.0 in (5 386 mm)	212.0 in (5 386 mm)	216.7 in (5 505 mm)	216.7 in (5 505 mm)
F. Hinge pin height – fully raised		155.9 in (3 960 mm)	155.9 in (3 960 mm)	155.9 in (3 960 mm)	155.9 in (3 960 mm)
G. Overall length – bucket level on	ground	302.2 in (7 676 mm)	307.7 in (7 817 mm)	307.8 in (7 818 mm)	313.5 in (7 963 mm)
Dump angle – fully raised		55°	55°	55°	55°
H. Dump height – fully raised, 45° dump		107.8 in (2 739 mm)	104.3 in (2 648 mm)	104.3 in (2 648 mm)	100.6 in (2 554 mm)
J. Bucket reach - fully raised, 45° dump		51.2 in (1 301 mm)	55.2 in (1 402 mm)	55.5 in (1 409 mm)	59.6 in (1 515 mm)
K. Bucket reach - 7 ft 0 in (2.13 m) height, 45° du		dump 70.1 in (1 780 mm)	71.9 in (1 827 mm)	72.2 in (1 833 mm)	73.9 in (1 878 mm)
L. Dig depth		2.4 in (62 mm)	2.6 in (66 mm)	2.5 in (62 mm)	2.6 in (66 mm)
Operating load – ISO Rigid Tires		8,849 lb (4 014 kg)	8,561 lb (3 883 kg)	8,650 lb (3 924 kg)	8,762 lb (3 974 kg)
Operating load – ISO Deflected Tires		7,928 lb (3 596 kg)	7,677 lb (3 482 kg)	7,734 lb (3 508 kg)	7,836 lb (3 554 kg)
Maximum material density – ISO Rigid Tires 3		3,539 lb/yd³ (2 100 kg/m³)	3,567 lb/yd ³ (2 117 kg/m ³)	2,883 lb/yd³ (1 711 kg/m³)	3,129 lb/yd³ (1 857 kg/m³)
Maximum material density – ISO Deflected Tires 3		3,171 lb/yd³ (1 882 kg/m³)	3,199 lb/yd³ (1 898 kg/m³)	2,578 lb/yd³ (1 530 kg/m³)	2,799 lb/yd³ (1 661 kg/m³)
Tipping load – ISO Rigid Tires:	Straight	20,419 lb (9 262 kg)	19,742 lb (8 955 kg)	19,992 lb (9 068 kg)	20,235 lb (9 179 kg)
	40° turn	17,697 lb (8 027 kg)	17,123 lb (7 767 kg)	17,300 lb (7 847 kg)	17,523 lb (7 949 kg)
Tipping load – ISO Deflected Tires:	Straight	18,877 lb (8 562 kg)	18,262 lb (8 283 kg)	18,456 lb (8 372 kg)	18,683 lb (8 474 kg)
	40° turn	15,857 lb (7 193 kg)	15,354 lb (6 964 kg)	15,468 lb (7 016 kg)	15,672 lb (7 109 kg)
Lift capacity:	Full height	14,175 lb (6 430 kg)	13,985 lb (6 344 kg)	13,913 lb (6 311 kg)	14,055 lb (6 375 kg)
	Ground	28,545 lb (12 948 kg)	24,581 lb (11 150 kg)	26,995 lb (12 245 kg)	28,110 lb (12 750 kg)
Breakout force with tilt cylinder		22,854 lb (10 366 kg)	24,077 lb (10 921 kg)	20,671 lb (9 376 kg)	21,613 lb (9 803 kg)
Loader clearance circle with bucket		451.2 in (11 460 mm)	453.1 in (11 509 mm)	453.4 in (11 517 mm)	455.5 in (11 569 mm)

621G		ACS/JRB	ACS/JRB	ACS/JRB	ACS/JRB
Maximum rollback:	Ground	57°/57°	57°/57°	57°/57°	57°/57°
	Carry position	59°/59°	59°/59°	59°/59°	59°/59°
	@ Full height	59°/59°	59°/59°	59°/59°	59°/59°
Maximum grading angle with bucket - back dragging		60°/62°	62°/63°	62°/63°	63°/64°
SAE bucket capacity – struck	2	.15 yd ³ (1.64 m ³)	2.05 yd ³ (1.57 m ³)	2.60 yd ³ (1.99 m ³)	2.40 yd ³ (1.83 m ³)
Heaped	2	50 yd ³ (1.91 m ³)	2.40 yd ³ (1.83 m ³)	3.00 yd ³ (2.29 m ³)	2.80 yd ³ (2.14 m ³)
Bucket width - outside	102	.4 in (2 602 mm)	102.1 in (2 593 mm)	102.4 in (2 602 mm)	102.1 in (2 593 mm)
Bucket weight	2	,918 lb/2,610 lb	2,840 lb/2,532 lb	3,131 lb/2,797 lb	3,053 lb/2,721 lb
	(1 32	4 kg)/(1 184 kg)	(1 288 kg)/(1 149 kg)	(1 420 kg)/(1 269 kg)	(1 385 kg)/(1 234 kg)

NOTE: *Z-Bar performance data shown with full counterweight. Performance data unit equipped with 20.5-R25 Michelin XTLA (L2 Radial) tires, ROPS cab with heater and A/C, 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.

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STANDARD EQUIPMENT

OPERATOR ENVIRONMENT

See page 1

ENGINE

Case/FPT F4HFE613W

Tier 4 Final Certified

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

Limited-slip differentials - Z-Bar

Outboard planetary axles

Transmission oil cooler

Brake pedal transmission

disconnect - declutch

Hydraulic wet disc brakes

Spring-applied hydraulic release

parking brake

Limp-Home Mode

Greasable 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

Remote drain points

Grouped remote-mounted ecology drains:

Engine oil

Engine coolant

Hydraulic oil

TELEMATICS

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

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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

LED rotating beacon

Rear view camera

External rear view mirrors

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 (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

LOADER

XR extended reach version

XT tool carrier version

Attachment auxiliary hydraulics

Coupler systems - JRB or ACS compatible

Buckets - see pages 4 through 8

4 - 1 clamp buckets

Forks

TIRES

20.5-25 12 PR L2 bias - dirt/traction

20.5-25 12 PR L3 bias - rock

20.5-R25 L2 radial - dirt/traction

20.5-R25 L3 radial - rock

20.5-R25 radial Michelin SnoPlus

20.5-R25 radial Bridgestone Snow Wedge

SolidFlex HD solid tires on adapter rims

Spare wheels and tires

Axle oscillation stops

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

ADVANCED ENGINE AIR FILTRATION

Heavy Debris cooling system:

Slanted cooling module cover

Auto reversing fan

Sy-Klone® ejective air pre-cleaner

Increased cooling fin spacing

Added cooling module sealing

Variable speed hydraulic reversing fan

Full view air pre-cleaner

Sy-Klone® ejective air pre-cleaner

GUARDING

Skid plate, transmission and front chassis bottom guards

debris ejectors

Windscreen guard

Specialized guarding package:

Windscreen, articulation, front cover, chassis bottom, skid plate, transmission. lift cylinder, front lights, fuel tank, metal wrapped hoses and cylinder

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SAFETY™ 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.

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