

W80C

COMPACT WHEEL LOADER



ENGINE	
Model	FPT F5H FL463 A
Emissions certification	Tier 4 Final
Type	4-stroke
Cylinders	4
Bore/Stroke	3.9 x 4.3 in (99 x 110 mm)
Displacement	207 in ³ (3.4 L)
Fuel injection	High pressure, common rail injection
Fuel	Diesel
Fuel filter	Spin on, Beta (4) = 20
Air filter	Dry type element w/ warning restriction indicator
Exhaust aftertreatment:	
Cooled Exhaust Gas Recirculation (CEGR) w/ Diesel Oxidation Catalyst (DOC)	
Radiator:	
Core type	All aluminum
Fan:	
Style	Direct drive
Lubrication/cooling oil pump:	
Style	Integral
Engine Oil:	
Pump:	
Rotor Pump w/ deep sump pan, plate cooled & pressurized under piston nozzles	
Pump operating angle ratings:	
Side-to-side	Rated 35°
Fore and aft	Rated 35°
Oil filtration	Spin on, full flow
Engine speeds	RPM
Rated – full load	2500
Low idle	950
High idle – no load	2500
Horsepower @ 2500 RPM:	
Gross	74 hp (55 kW)
Net	70 hp (52 kW)
Peak torque @ 1400 RPM:	
Gross	232 lb-ft (314 N-m)
Net	227 lb-ft (308 N-m)

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

ELECTRICAL	
Voltage	12 volts
Alternator	120 amp
Batteries	95 AHR, 900 CCA

DRIVETRAIN		
Transmission	Hydrostatic transmission	
Pump relief	6092 psi (42 000 kPa)	
Pump flow @ 2500 RPM	37.0 gpm (140 L/min)	
Differential:	Limited slip or 100% lock opt.	
Front axles:		
Differential ratio	3.67	
Planetary ratio	6.00	
Final axle ratio	22.00	
Gear box:		
1st ratio	2.46	
Gear box HS:		
1st ratio	2.75	
2nd ratio	1.16	
Planetaries	Outboard	
Service brakes:	Master cylinder hydraulically actuated, wet disc on front axle	
SAHR parking brake:	Mechanical, caliper on front axle	
Travel speeds	Forward	Reverse
	mph (kph)	mph (kph)
1st low	3.6 (5.9)	3.6 (5.9)
2nd high	12.4 (20.00)	12.4 (20.00)
Travel speeds – HS	Forward	Reverse
	mph (kph)	mph (kph)
1st low	3.6 (5.9)	3.6 (5.9)
2nd high	12.4 (14.4)	12.4 (14.4)
3rd high	25 (40.0)	25 (40.0)

NOTE: Travel speeds at full engine throttle w/ 365/80 R29 tires.

OPERATOR ENVIRONMENT	
ROPS/FOPS four post canopy: Adjustable vinyl mechanical suspension seat w/ automatic weight control; ROPS: ISO 3471: 2,008 lb (6 800 kg); Base and Deluxe Cab w/ heater and A/C; Key start; Articulated power steering w/ tilt column; Adjustable, cloth suspension seat; Foot throttle; Single joystick w/ electronic speed shift control F/N/R switch, proportional loader control and proportional hydraulic auxiliary w/detent switch hydraulic; Cup holder; Storage tray on Deluxe Cab; Sun screen – front; Opening side window; Dome light; Wipers – front and rear; 12-volt auxiliary power; Lighter cigar and ashtray; Pocket cellular phone; Coat hook; External rearview mirrors; Loader control lockout; Display w/ encoder; SSL compatible coupler.	
Electronic information center	
Rear view camera	
Displays/Gauges:	
Vehicle speed; Hourmeter; Floating functionality on; High flow functionality on; Clock; Vehicle directions; Gear number engaged; PM Catalyst icons.	
Indicator lights:	
Diff. lock; Main hydraulic enabled; Turn light – left and right; Rear work lamps; Work lamps; Main high beam; Side lights; Stop; Warning signal; Rabbit; Hand brake; Brake fluid level; Quick coupler on; Ride Control on; Creep speed; PM Catalyst; Low fuel level; Clogging air filter; Engine oil pressure; Glow plug; Alternator changing.	
Audible alarms:	
Caution alarm; Critical alarm; Backup alarm.	
Horn	

NOTE: If equipped w/ option.

OPERATING WEIGHT	
Z-Bar:	13,633 lb (6184 kg)
Unit equipped w/ ROPS/FOPS cab w/ HVAC, standard HD counterweight, 14.5-20 MPT-04 Bias Mitas tires, front and rear fenders, 1.3 yd ³ (1.0 m ³) general purpose bucket w/ edge, full fuel, 165 lb (75 kg) operator	

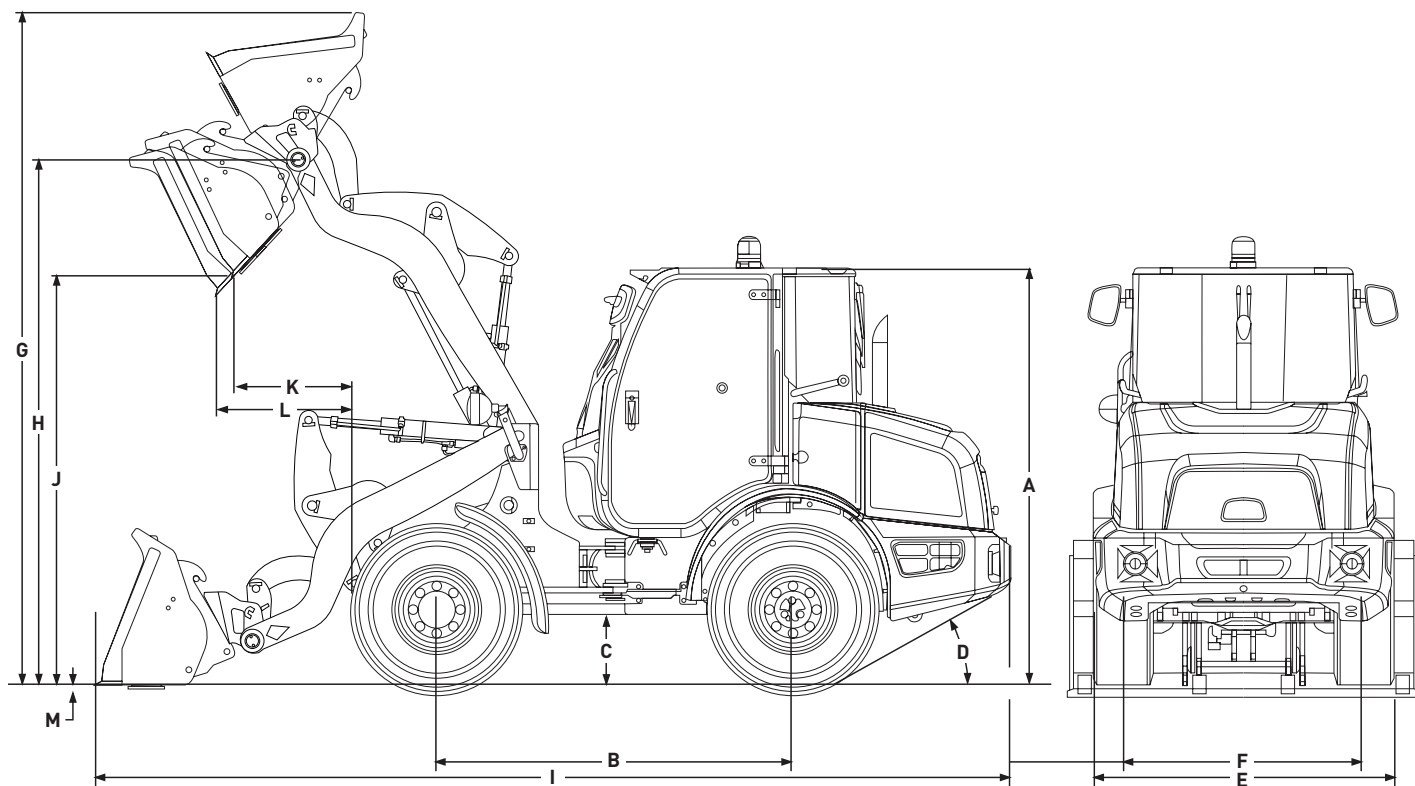
HYDRAULICS	
Pump – steering/implement:	
Open-centered pressure/flow compensated	
Fixed gear type:	
Standard flow:	Max. 22.5 gpm @ 3336 psi (Max. 85 L/min @ 230 bar)
Optional high flow:	Max. 34.3 gpm @ 2901 psi (Max. 130 L/min @ 200 bar)
Loader control valve:	
Open-center circuit. Electro-hydraulic control w/single lever includes: Forward/Neutral/ Reverse switch, Floating switch, Low/High Travel mode switch, Auxiliary Function Roller	
Loader auxiliary steering	
Main relief pressure	3336 psi (23 000 kPa)
Filtration:	
15-micron, full flow replaceable cartridges on return line	

SERVICE CAPACITIES	
Fuel tank	22.7 gal (86.0 L)
Hydraulic system:	
Reservoir	10.6 gal (40.0 L)
Total	14.0 gal (53.0 L)
Front and rear axle:	
Front axle	1.6 gal (7.3 L)
Rear axle	1.9 gal (8.9 L)
Rear axle HS	2.3 gal (10.5 L)
Engine oil w/ filter	1.8 gal (7.0 L)
Cooling*	3.4 gal (13.0 L)

NOTE: *1.72 gal (6.5 L) antifreeze + 1.72 gal (6.5 L) water.

OTHER SPECIFICATIONS	
Lift cylinders	Two (2)
Bore diameter	3.25 in (82.5 mm)
Rod diameter	1.97 in (50.0 mm)
Stroke	29.57 in (751.0 mm)
Tilt cylinder:	
Bore diameter	3.49 in (88.7 mm)
Rod diameter	2.25 in (57.1 mm)
Stroke	22.24 in (535.0 mm)
Loader:	
Z-Bar:	
Z-Bar loader linkage	
Single control for lift and tilt	
Positive hold float	
Hydraulic attachment coupler:	
Skid steer compatible/horizontal pin compatible	
Cycle time:	
Z-Bar:	
Raise w/ rated bucket load	5.8 sec
Dump w/ rated bucket load	0.9 sec
Lower – empty	3.8 sec





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

DIMENSIONS

A	Height to top of ROPS cab	105.5 in (2680 mm)
B	Wheelbase	87.6 in (2225 mm)
C	Ground clearance under shaft	19.4 in (493 mm)
	Ground clearance under axles	14.6 in (370 mm)
D	Angle of departure	32°
	Width:	
E	Overall without bucket	73.2 in (1860 mm)
F	Centerline tread	59.1 in (1500 mm)
	Turning radius – outside	157.0 in (3987 mm)
	Turning angle:	
	From center	40°
	Total angle	80°
	Rear axle oscillation – total	20°

W80C COMPACT WHEEL LOADER SPECIFICATIONS

PERFORMANCE SPECS		
W80C Z-Bar	1.3 yd ³ GP (1.0 m ³) GP Bucket with Bolt-on Edge	1.7 yd ³ GP (1.3 m ³) LM Bucket with Bolt-on Edge
ISO bucket capacity – struck	1.05 yd ³ [0.8 m ³]	1.44 yd ³ [1.1 m ³]
Heaped	1.31 yd ³ [1.0 m ³]	1.70 yd ³ [1.3 m ³]
Bucket width – outside	82.7 in [2100 mm]	82.7 in [2100 mm]
Bucket weight – includes coupler and added components	1045 lb [474 kg]	1142 lb [518 kg]
G Operating height – fully raised with spillguard	175.1 in [4448 mm]	182.1 in [4626 mm]
H Hinge pin height – fully raised	133.7 in [3395 mm]	133.7 in [3395 mm]
I Overall length – bucket level on ground	235.4 in [5980 mm]	238.8 in [6035 mm]
Dump angle – fully raised	45°	46°
J Dump height – fully raised, 45° dump	97.1 in [2467 mm]	95.0 in [2412 mm]
K Bucket reach – fully raised, 45° dump	38.7 in [984 mm]	42.4 in [1077 mm]
L Bucket reach – 7 ft 0 in [2.13 m] height, 45° dump	51.5 in [1308 mm]	53.4 in [1356 mm]
M Dig depth	4.5 in [113 mm]	4.5 in [113 mm]
Operating Load (ROC) - ISO	4265 lb [1934 kg]	4316 lb [1958 kg]
Maximum material density – ISO	3261 lb/yd ³ [1935 kg/m ³]	2538 lb/yd ³ [1506 kg/m ³]
Tipping load – ISO:		
Straight	10,301 lb [4672 kg]	10,255 lb [4652 kg]
40° turn	8530 lb [3869 kg]	8632 lb [3916 kg]
Lift capacity:		
Full height	8036 lb [3657 kg]	7996 lb [3627 kg]
Maximum reach	10,022 lb [4546 kg]	9891 lb [4487 kg]
Ground	12,972 lb [5884 kg]	12,090 lb [5484 kg]
Breakout force with tilt cylinder	10,076 lb [4570 kg]	9021 lb [4092 kg]
Maximum rollback:		
@ Ground	39°	37°
@ Carry position	48°	48°
@ Maximum reach	66°	66°
@ Full height	70°	70°
Maximum grading angle with bucket – back dragging	60°	62°
Loader clearance circle with bucket	373.9 in [9496 mm]	376.1 in [9554 mm]

FORKS	
W80C Z-Bar	
Fork length	47.2 in [1200 mm]
Fork weight – includes coupler	394 lb [869 kg]
Operating load – level ground	4998 lb [2267 kg]
Operating mass	13,468 lb [6109 kg]
Tipping load – straight	7372 lb [3344 kg]
Tipping load – 40° turn	6247 lb [2834 kg]
Fork load center	19.7 in [500 mm]

Standard Equipment

Operator Environment

- See page 1
- Radio, antenna, and speakers (cab only)

Engine

- FPT F5H FL463 A
- Fuel filter with water trap
- Dual element air cleaner
- Smart Mode feature

Loader

- See page 3

Drivetrain

- 4-wheel drive
- Limited slip – front and rear axles
- Hydrostatic transmission
- Single joystick with electronic speed shift control F/N/R switch and proportional loader control
- Outboard planetary axles
- Hydraulic wet disc brakes
- Mechanical parking brake

Hydraulics

- 3-spool loader control valve
- 3 Diagnostic quick couplers
- Adjustable electro hydraulic (EH) loader controls
Smooth, moderate & aggressive settings for both lift and tilt responsiveness:
 - Return to Dig
 - Hydraulic skid steer compatible coupler
 - Connect under pressure connectors
 - Remote drain of hydraulic oil
 - Aux. Hydraulic drain line coupling
- Auxiliary flow:
22.5 gpm @ 3,336 psi (85 l/min @ 230 bar)

Other

- Front and rear fenders
- Lights:
 - 2 Front driving headlights – high/low beam
 - 2 Rear flood lights
 - 2 Stop tail lights and backup light
 - Front and rear turn signal/flash
- Drawbar pin
- Articulation locking pin
- Tie-down and Lift-up point – front and rear
- Backup alarm
- Tool box
- Rotating beacon
- Bucket position indicator
- Front electrical socket for powered attachments
- Rear view camera

Telematics

- New Holland FleetForce™ Telematics – includes hardware and a 5-year advanced data subscription for 2-way communication

Optional Equipment

Operator Environment

- Creep speed: 0 – 3.1 mph (5 kph)
- TeleScop adjustable steering column on Deluxe Cab
- Canopy cab
- Rotating beacon
- 100% lock – front and open rear axles
- Horizontal pin coupler

Loader

- Buckets – see performance data:
 - General purpose standard
 - General purpose light material
- STD forks
- Auto Ride Control
- Cold weather with Block Heater - Two 680 CCA batteries and Low-temp Hytran oil
- Optional High Flow:
Max 34.3 gpm @ 3,336 psi
(Max 130 L/min @ 200 bar)
- Adjustable Ride Control Settings
- Anti-burst valves

Tires

- 14.5-20 MPT-04 Bias Mitas
- 360/80 R20 Nokian Tri 2 Snow
- 365/80 R20 EM-01 Mitas
- 365/80 R20 Goodyear Powerload
- 405/70 R20 ALLIANCE
- 405/70 R20 EM-01 Mitas
- 405/70 R20 Goodyear Powerload
- 550/45 R22.5 ATG Flotation

Other

- LED work lights, 2 front and 2 rear
- 4 Corner strobes
- Wheel Chocks



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Learn more at www.newholland.com

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Safety begins with a thorough understanding of the equipment. Always make sure you and your operators read the Operator's Manual before using the equipment. Pay close attention to all safety and operating decals and never operate machinery without all shields, protective devices and structures in place. This is a one-person machine. Never allow riders in the cab, outside the machine, or in/on any bucket or attachment.

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