



## ENGINE

Model	FPT F5C F5HFL463D*G003
Emissions Certification	Tier 4 Final Certified
Cylinders	4
Displacement	207.5 in <sup>3</sup> (3.4 L)
Fuel injection	Common rail
Fuel	#2 Diesel
Fuel filter	Spin-on w/ in-line strainer
Air intake	Cross-flow
Cooling	Liquid
Engine speeds	RPM
High idle - no load	2340 +/- 50
Rated - full load	2200
Low idle	1100 +/- 25
Horsepower @ 2200 RPM – SAE J1349:	
Net	68 hp (50.6 kW)
Gross	73.8 hp (55 kW)
Engine lubrication:	
Pump	Deep sump plate cooler w/ pressurized under-piston nozzles
Pump operating angle ratings:	
Side-to-side	35°
Fore and aft	45°
Oil filtration	Replaceable, spin-on full-flow cartridge
Radiator:	
Core size area	367.5 in <sup>2</sup> (2 370.8 cm <sup>2</sup> )
Rows of tubes	24
Fan:	
Diameter	20 in (500 mm)
Ratio	1.1:1

## DRIVETRAIN

Dual path hydrostatic:	
Pump	Variable axial piston
Motor	Variable bent axis piston
Max. drawbar pull*	39,086 lb (173.9 kN)
Transmission	Single lever control – electronic straight tracking
Transmission oil filter	4 micron, spin-on replaceable
Travel speeds*:	
Forward	5.0 mph (8 kph)
Reverse	5.0 mph (8 kph)
Parking brakes	Heavy-duty, spring-applied, hydraulic pressure release
Steering brakes	Hydrostatic
Final drive	2 helical gear reduction to planetary output
Ratio	62.4:1
Transmission cooling:	
Type	Oil to air
Core size	216.9 in <sup>2</sup> (1 399.3 cm <sup>2</sup> )

NOTE: \*Measured using standard track chain. Increase travel speeds by 4% and reduce drawbar pull by 4% with the optional Max-Life track chain.

## ELECTRICAL

Alternator	120 amp
Battery	12-volt low-maintenance 925 cold-cranking amps @ 0° F (-18 C)
Electrical system	12 Volts

## OPERATOR ENVIRONMENT

Optional ROPS cab; Single lever control for speed, steering and direction; Forward/reverse speed ratio selector; Adjustable armrests; Foot rests; Retractable seat belt, 2 in (51 mm); Rear view mirror; Seat tilts for access.

### Warning lights:

Air filter; Alternator; Engine oil pressure; Diagnostic fault indicator; Engine coolant; temperature; Engine oil pressure; Low fuel level; Park brake engaged; Service soon indicator; Transmission temperature; Hi range; Hydraulic filter; Transmission filter; Transmission pressure.

### Gauges:

Battery voltage; Fuel level; Digital hourmeter/tachometer/diagnostics/service reminder; Transmission oil temperature; Water temperature.

### Audible warnings:

Engine oil pressure; Transmission pressure; Engine coolant temperature; Low fuel level; Transmission charge pressure; Transmission/hydraulic temperature.

## OPERATING WEIGHT

Unit equipped w/ ROPS, full fuel tank, 170 lb (77 kg) operator, track guides, backup alarm, horn and lights.

Long track	15,803 lb (7 168 kg)
Wide track	16,405 lb (7 441 kg)
Low ground pressure	16,839 lb (7 638 kg)

### Add-on weights:

Drawbar	128 lb (58 kg)
Ripper – 3 shank	1,400 lb (635 kg)
Winch	1,861 lb (844 kg)
Front counterweight	838 lb (380 kg)
Cab	1,874 lb (850 kg)
Max-Life chain	115 lb (52 kg)
Center rockguard	157 lb (71 kg)
Sweeps	110 lb (50 kg)
Dual batteries	60 lb (27 kg)
90 in blade	925 lb (420 kg)
96 in blade	1,001 lb (454 kg)
109 in blade	1,121 lb (508 kg)
120 in blade	1,235 lb (560 kg)
SALT w/ 15.6 in closed shoe	2,533 lb (1 149 kg)
Max-Life w/ 15.6 in open shoe	2,595 lb (1 177 kg)
SALT w/ 20 in closed shoe	2,889 lb (1 310 kg)
Max-Life w/ 20 in open shoe	2,951 lb (1 338 kg)
SALT w/ 24 in closed shoe	3,210 lb (1 456 kg)
Max-Life w/ 24 in open shoe	3,272 lb (1 484 kg)

## HYDRAULICS

Pump flow @ 2000 RPM @ 3,000 psi (20 880 kPa)	20.3 gpm (78.8 L/min)
Lift cylinder	Two (2)
Bore diameter	3.50 in (88.9 mm)
Rod diameter	1.75 in (44.4 mm)
Stroke	15.53 in (394.5 mm)
Angle cylinder	Two (2)
Bore diameter	3.50 in (88.9 mm)
Rod diameter	1.75 in (44.5 mm)
Stroke	13.46 in (342.0 mm)
Tilt cylinder	One (1)
Bore diameter	3.50 in (88.9 mm)
Rod diameter	1.75 in (44.4 mm)
Stroke	5.39 in (137 mm)

## SERVICE CAPACITIES

Fuel tank	40.8 gal (154.4 L)
Engine oil w/ filter	13 qt (12.3 L)
Engine oil w/o filter	12.2 qt (11.5 L)
Engine cooling system	23.9 qt (22.6 L)
Hydraulic reservoir	16.5 gal (72.7 L)
Final drive – per side	16 qt (15.1 L)
Track rollers – each	0.16 qt (0.15 L)
Front idlers – each	0.34 qt (0.326 L)
Carrier rollers – each	0.13 qt (0.136 L)

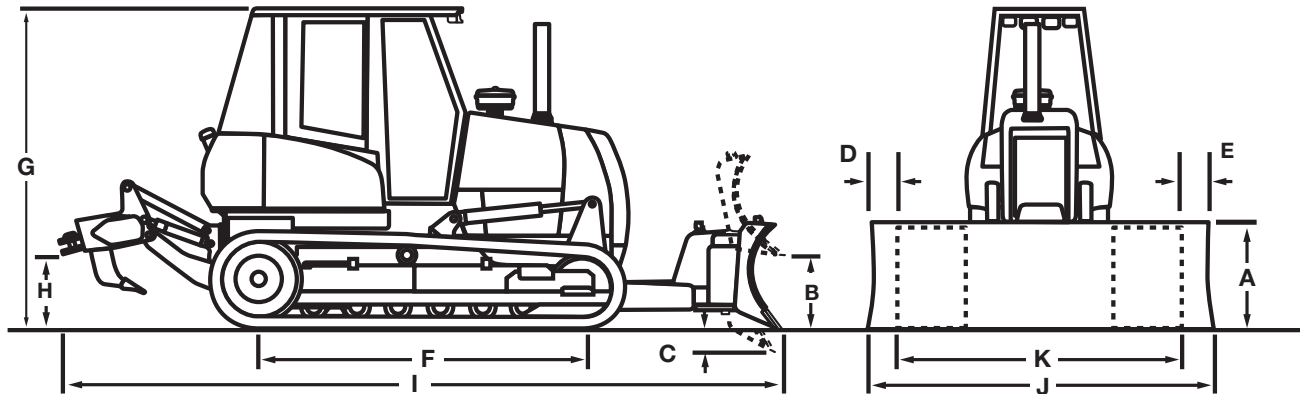
## OTHER SPECIFICATIONS

<b>Undercarriage:</b>	
Track adjustment	Hydraulic
Frame	Rigid suspension
Length of track on ground:	
	85 in (2 159 mm)
Track link pitch	6.125 in (155.575 mm)
Track shoe height	2.06 in (52 mm)
Pin diameter	1.125 in (28.575 mm)
Bushing diameter:	
SALT track	2.13 in (54 mm)
Max-Life track	2.68 in (68 mm)
Bolt diameter	0.625 in (16 mm)
Track shoes per side	40
Track rollers per side	6
Carrier rollers per side	1
Track roller rail diameter	5.98 in (152 mm)

<b>Track on ground:</b>	
Shoe area:	
15.6 in (395 mm)	2,644 in <sup>2</sup> (17 056 cm <sup>2</sup> )
20 in (508 mm)	3,372 in <sup>2</sup> (21 755 cm <sup>2</sup> )
24 in (610 mm)	4,083 in <sup>2</sup> (26 340 cm <sup>2</sup> )
<b>Track:</b>	
Long Track:	
15.6 in (395 mm) closed grousers and SALT	
15.6 in (395 mm) open grousers and Max-Life	
Wide Track:	
15.6 in (395 mm) closed grousers and SALT	
15.6 in (395 mm) open grousers and Max-Life	
20 in (508 mm) closed grousers and SALT	
20 in (508 mm) open grousers and Max-Life	
LGP:	
24 in (610 mm) closed grousers and SALT	
24 in (610 mm) open grousers and Max-Life	

<b>Blade:</b>	
Variable blade pitch	52° – 60°
Lift speed – per second	19.7 in (500 mm)
Cutting edge	Reversible, replaceable
Width	8.0 in (203 mm)
Thickness	0.625 in (16 mm)

<b>Ripper:</b>	
Max. penetration:	
	15.3 in (389 mm) w/ grousers penetrated – see below
Width	73.1 in (1 856 mm)
Cut width	70.1 in (1 781 mm)
Max. ground clearance	15.5 in (393 mm)
Points	Replaceable
Max. number of shanks	3
Tooth spacing:	
w/ 3 teeth	31 in (785 mm)
Hydraulic cylinder	
Diameter	3.9 in (99.02 mm)
Stroke	8.4 in (213 mm)
Rod	1.75 in (44.5 mm)



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

## DIMENSIONS

	Long Track (LT)	Long Track (LT, WT)	Wide Track (WT)	Low Ground Pressure (LGP)
Blade width	90 in (2 286 mm)	96 in (2 438 mm)	109 in (2 769 mm)	120 in (3 048 mm)
SAE blade capacity	1.58 yd <sup>3</sup> (1.21 m <sup>3</sup> )	1.69 yd <sup>3</sup> (1.29 m <sup>3</sup> )	2 yd <sup>3</sup> (1.48 m <sup>3</sup> )	2.15 yd <sup>3</sup> (1.64 m <sup>3</sup> )
<b>A.</b> Blade height	33.1 in (841 mm)	33.1 in (841 mm)	33.1 in (841 mm)	33.1 in (841 mm)
<b>B.</b> Blade lift above ground	35.1 in (892 mm)	35.1 in (892 mm)	35.1 in (892 mm)	35.1 in (892 mm)
<b>C.</b> Blade depth below ground	21.0 in (533 mm)	21.0 in (533 mm)	21.0 in (533 mm)	21.0 in (533 mm)
Blade angle both directions	22.7°	22.7°	22.7°	22.7°
<b>D.</b> Cast reach	11.4 in (288.4 mm)	14.1 in (358.7 mm)	12.3 in (312.7 mm)	15.4 in (390.7 mm)
<b>E.</b> Cut reach	-0.37 in (-9.5 mm)	2.39 in (60.8 mm)	0.58 in (14.7 mm)	3.65 in (92.8 mm)
Blade tilt, each end – up to 9.7°	7.72 in (196 mm)	8.23 in (209 mm)	9.33 in (237 mm)	10.28 in (261 mm)
Track gauge	56.47 in (1.43 m)	56.47 in (1.43 m)	68 in (1.73 m)	68 in (1.73 m)
Maximum shoe width	15.6 in (395 mm)	15.6 in (395 mm)	20 in (508 mm)	24 in (610 mm)
<b>F.</b> Length of track on ground:				
Max-Life	85 in (2.16 m)	85 in (2.16 m)	85 in (2.16 m)	85 in (2.16 m)
Area of track on ground	2,644 in <sup>2</sup> (1.71 m <sup>2</sup> )	2,644 in <sup>2</sup> (1.71 m <sup>2</sup> )	3,400 in <sup>2</sup> (2.19 m <sup>2</sup> )	4,083 in <sup>2</sup> (2.63 m <sup>2</sup> )
Ground pressure	5.98 psi (41.2 kPa)	5.98 psi (41.2 kPa)	6.07 psi (41.9 kPa)	4.12 psi (28.4 kPa)
<b>G.</b> Height to top of ROPS	8 ft 8 in (2 648 mm)	8 ft 8 in (2 648 mm)	8 ft 8 in (2 648 mm)	8 ft 8 in (2 648 mm)
Height to top of cab with air conditioning	8 ft 9 in (2 653 mm)	8 ft 9 in (2 653 mm)	8 ft 9 in (2 653 mm)	8 ft 9 in (2 653 mm)
<b>H.</b> Ground clearance	13.07 in (332 mm)	13.07 in (332 mm)	13.07 in (332 mm)	13.07 in (332 mm)
<b>Length:</b>				
Blade straight with drawbar	13 ft 8 in (4 180 mm)	13 ft 8 in (4 180 mm)	13 ft 8 in (4 180 mm)	13 ft 8 in (4 180 mm)
<b>I.</b> Blade straight with ripper	16 ft 3 in (4 951 mm)	16 ft 3 in (4 951 mm)	16 ft 3 in (4 951 mm)	16 ft 3 in (4 951 mm)
<b>Width:</b>				
<b>J.</b> Blade straight	7 ft 6 in (2 286 mm)	8 ft 0 in (2 438 mm)	9 ft 1 in (2 769 mm)	10 ft 0 in (3 048 mm)
Blade angled	7 ft 1 in (2 159 mm)	7 ft 7 in (2 299 mm)	8 ft 7 in (2 613 mm)	9 ft 5 in (2 871 mm)
<b>K.</b> Over track	6 ft 0 in (1 829 mm)	6 ft 0 in (1 829 mm)	7 ft 0 in (2 122 mm)	7 ft 8 in (2 337 mm)

## STANDARD EQUIPMENT

### OPERATOR ENVIRONMENT

See page 1

### ENGINE

FPT F5C F5HFL463D\*G003  
Tier 4 Final Certified  
Dual DOC  
CEGR  
Automatic fan belt tensioner  
Integral engine oil cooling  
Fuel filter  
Dual element radial seal air cleaner  
120 amp alternator  
925 CCA 12-volt battery  
Engine side panel  
Anti-freeze to -34°F  
Pusher fan  
Radiator – Anti-sandblast

### DRIVETRAIN

Dual path infinitely variable, single-lever controlled hydrostatic drive with electronic straight tracking & counter-rotation  
Final drive:  
Triple reduction; helical gear/planetary decelerator with hydrostatic drive retardation  
Decelerator with hydrostatic drive retardation  
Automatic spring-applied parking brake  
10 incremental speed settings - Operator preference settings for max speed, shuttle sensitivity and steering sensitivity

## OPTIONAL EQUIPMENT

### OPERATOR ENVIRONMENT

Cab with heater, 22,700 BTU (6.65 kW)/hr air conditioner, defroster, front windshield washer and 2F-1R lights  
3 in (76 mm) seat belt  
Deluxe air suspension seat

### HYDRAULICS

4 spool hydraulic valve for field-installed ripper

### REAR MOUNTED EQUIPMENT

Ripper, parallelogram 5 slots with 3 shanks

### BLADE

52° – 60° variable pitch  
Single lever control for blade lift, angle and tilt  
90 in (2.29 m) blade 650M LT  
96 in (2.44 m) blade 650M LT/WT  
109 in (2.8 m) blade 650M WT  
120 in (3.0 m) blade 650M LGP

### UNDERCARRIAGE

Hydraulic track adjusters  
Easy clean track covers  
Case sealed and lubricated track chain  
Permanently lubricated track and carrier rollers  
H.D. track covers  
Track adjuster guard  
Track gauge – 56 in or 68 in  
Track guides – front and rear  
Length of track on ground – 85 in  
High visibility track idler  
Heavy duty track frame, sprocket and mounting pads

### OTHER

Anti-vandalism package  
Backup alarm  
Hinged grill  
Decelerator  
Final drive seal guard  
Hand throttle

### BLADES

90 in (2.29 m)  
96 in (2.44 m)  
109 in (2.77 m)  
120 in (3.05 m)

### GUARDS

Brush guards (Sweeps)  
Center rockguard

### SCREENS

Rear ROPS and cab  
Side ROPS  
Radiator brush screen

Horn  
Work lights:  
2 front  
1 rear  
Master disconnect switch  
Mirror  
Operator's manual enclosure  
O-ring face seal hydraulic fittings  
Pre-cleaner  
Vertical spin-on hydraulic/filters  
Hydraulics – 3 spool valve  
Fuse circuit protection  
Single key start switch  
Pre-wired for work lights  
Two additional power sources available for heater, air seat or auxiliary 12 volt power port  
Crankcase  
Transmission bottom  
CASE ProCare – 3-yr/3000-hr factory warranty, planned maintenance and SiteWatch™ Telematics

### TELEMATICS

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

### OTHER

Case Max-Life track  
Cold start aid (Grid Heater)  
Counterweight, front  
Drawbar  
Front pull hook  
Lights – halogen, 2 front, 1 rear for cab or ROPS  
Retrieval hitch  
Special paint  
Turbo precleaner  
Winch drive PTO  
Rear Wiper for cab  
Lights without brush guard  
Lights with brush guard  
Diagnostics check fittings  
Environmental drains  
Lift/Tow decals (Export)

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650M

3 of 3