



## ENGINE

Model	FPT F5HFL413J*A002
Emissions Certification	Tier 4 Final Certified
Cylinders	4
Displacement	207.5 in3 (3.4 L)
Fuel injection	Common rail
Fuel	Diesel
Fuel filter	Spin-on w/ in-line strainer
Air intake	Cross-flow
Cooling	Liquid
Engine speeds	RPM
High idle - no load	2200 +/- 50
Rated - full load	2200
Low idle	1100 +/- 25
Horsepower @ 2000 RPM – SAE J1349:	
Net	92 hp (69 kW)
Gross	96 hp (72 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:	
Fins per inch	10.16
Fan:	
Diameter	26.0 in (662 mm)
Ratio	1.1:1

## DRIVETRAIN

Dual path hydrostatic:	
Pump	Variable axial piston
Motor	Variable bent axis piston
Max. drawbar pull*	41,010 lb (182.4 kN)
Transmission	Single lever control – electronic straight tracking
Transmission oil filter	4 micron, spin-on replaceable w/ 100 mesh suction screen
Travel speeds*:	
Forward	5.2 mph (8.4 kph)
Reverse	5.2 mph (8.4 kph)
Parking brakes	Heavy-duty, spring-applied, hydraulic release disc
Steering brakes	Hydrostatic
Final drive	2 helical gear reduction to planetary output
Ratio	61.4:1
Transmission cooling:	
Type	Oil to air
Core size	199.5 in2 (1 287 cm2)

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	(2) 12-volt, low-maintenance 925 cold-cranking amps @ -4° F (-20° C)
Electrical system	24 Volts

## OPERATOR ENVIRONMENT

ROPS cab; Single lever control for speed, steering and direction; Cloth air suspension seat w/ back adjustment; Retractable 2 in (51 mm) seat belt; Adjustable armrest; Two foot rest; Rearview mirror; Two door windshield wipers; Dome light; 12-volt accessory outlet; Headliner; Floor mat.

### Warning lights:

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

### Gauges:

Battery voltage; Fuel level; Digital hour meter/ tachometer/ diagnostic/service reminder; Transmission oil temperature; Transmission speed indicator; Water temperature.

### Audible warnings:

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

## OPERATING WEIGHT

Unit equipped w/ ROPS, full fuel tank, 170 lb (77 kg) operator, drawbar, side shield, track guides, backup alarm, horn and lights.	
Long track	20,040 lb (9 090 kg)
Wide track	20,679 lb (9 380 kg)
Low ground pressure	20,666 lb (9 374 kg)
Add-on weights:	
Drawbar	84 lb (38 kg)
Ripper – 3 shank	1,400 lb (635 kg)
Winch	1,960 lb (889 kg)
Front counterweight	827 lb (375 kg)
Cab	560 lb (254 kg)
Max-Life chain:	
18 in (457 mm)	92 lb (42 kg)
20 in (508 mm)	97 lb (44 kg)
24 in (610 mm)	93 lb (42 kg)
28 in (711 mm)	92 lb (42 kg)
Center rockguard	326 lb (148 kg)
Sweeps	139 lb (63 kg)

## HYDRAULICS

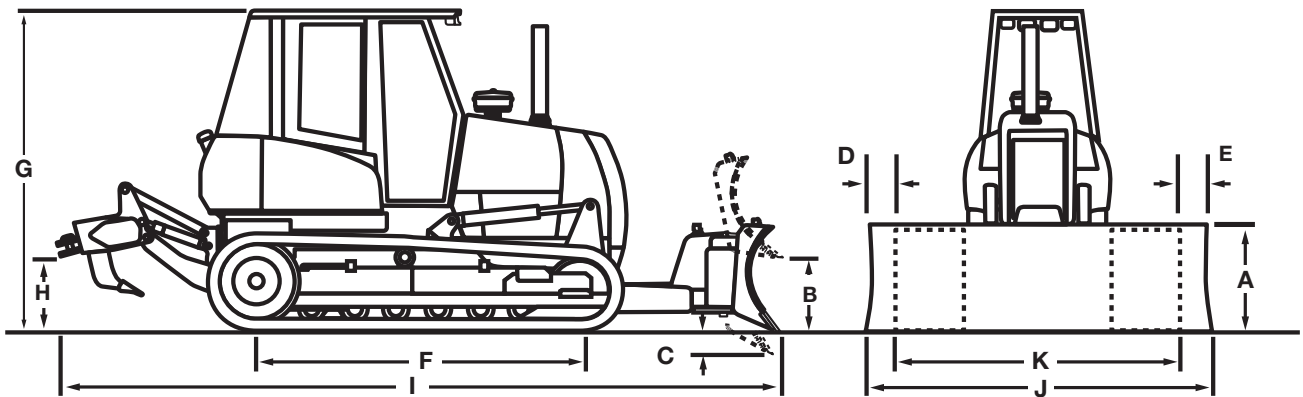
Pump flow @ 2000 RPM @ 3,000 psi (20 684 kPA)	20.3 gpm (78.8 L/min)
Lift cylinder	Two (2)
Bore diameter	3.50 in (88.9 mm)
Rod diameter	1.75 in (44.4 mm)
Stroke	14.26 in (394.5 mm)
Angle cylinder	Two (2)
Bore diameter	3.50 in (88.9 mm)
Rod diameter	1.75 in (44.4 mm)
Stroke	13.46 in (342.0 mm)
Tilt cylinder	One (1)
Bore diameter	3.50 in (88.9 mm)
Rod diameter	1.75 in (44.4 mm)
Stroke	5.39 in (137.0 mm)

## SERVICE CAPACITIES

Fuel Tank	50.0 gal (189.0 L)
Engine oil w/ filter	8.45 qt (8.0 L)
Engine oil w/o filter	7.65 qt (7.3 L)
Engine cooling system	5.75 gal (21.8 L)
Hydraulic reservoir	26 gal (98.4 L)
Final drive – per side	15.0 qt (14.2 L)
Track rollers – each	0.27 qt (0.26 L)
Front idlers – each	0.35 qt (0.33 L)
Carrier rollers – each	0.2 qt (0.19 L)
SALT HD & Max-life – each pin	0.68 oz (20 ml)

## OTHER SPECIFICATIONS

Undercarriage:		Track shoes per side	39	Lift speed – per second	19.7 in (500 mm)
Track adjustment	Hydraulic	Track rollers per side	6	Cutting edge	Reversible, replaceable
Frame	Rigid suspension	Carrier rollers per side	1	Width	8.0 in (203 mm)
Length of track on ground:		Track roller rail diameter	7.48 in (190 mm)	Thickness	0.75 in (19 mm)
SALT-HD	89.2 in (2 266 mm)	Track on ground:		Ripper:	
Max-Life	90.1 in (2 288 mm)	Shoe area:		Max. penetration:	14.4 in (365 mm)
Track link pitch	6.75 in (171.45 mm)	18 in (457 mm)	3,212 in <sup>2</sup> (20 720 cm <sup>2</sup> )	Width	71.1 in (1 806 mm)
Track shoe height	1.85 in (47 mm)	20 in (508 mm)	3,569 in <sup>2</sup> (23 023 cm <sup>2</sup> )	Cut width	69.5 in (1 765 mm)
Pin diameter	1.31 in (33.3 mm)	24 in (610 mm)	4,285 in <sup>2</sup> (27 645 cm <sup>2</sup> )	Max. ground clearance	16.4 in (417 mm)
Track link pitch	6.73 in (171 mm)	28 in (711 mm)	4,995 in <sup>2</sup> (32 223 cm <sup>2</sup> )	Max. number of shanks	3
Track shoe height	2.06 in (52.3 mm)	Track:		Tooth spacing:	
Pin diameter	1.32 in (33 mm)	Long Track:	18 in (457 mm) open grousers and Max-Life	w/ 3 teeth	30.9 in (785 mm)
Bushing diameter:		Wide track:	24 in (610 mm) open grousers and Max-Life	Hydraulic cylinder	Double-acting
SALT track	2.24 in (57 mm)	Blade:		Diameter	3.9 in (99 mm)
Max-Life track	3.0 in (76.2 mm)	Variable blade pitch	52° – 60°	Stroke	8.4 in (213 mm)
				Rod	1.75 in (44 mm)



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

## DIMENSIONS

	Long Track (LT)	Wide Track (WT)
Blade width	96 in (2 438 mm)	112 in (2845 mm)
SAE blade capacity	1.69 yd <sup>3</sup> (1.29 m <sup>3</sup> )	1.94 yd <sup>3</sup> (1.48 m <sup>3</sup> )
<b>A.</b> Blade height	33.1 in (841 mm)	33.1 in (841 mm)
<b>B.</b> Blade lift above ground	33.85 in (860 mm)	33.85 in (860 mm)
<b>C.</b> Blade depth below ground	22.84 in (580 mm)	22.84 in (580 mm)
Blade angle both directions	22.7°	22.7°
<b>D.</b> Cast reach	9.11 in (231.3 mm)	9.31 in (236.6 mm)
<b>E.</b> Cut reach	-2.63 in (-66.8 mm)	-2.42 in (-61.5 mm)
Blade tilt, each end – up to 9.7°	8.15 in (207 mm)	9.29 in (236 mm)
Track gauge	62 in (1.57 m)	70 in (1.78 m)
Maximum shoe width	20 in (508 mm)	24 in (610 mm)
<b>F.</b> Length of track on ground: Max-Life	90.1 in (2.28 m)	90.1 in (2.28 m)
Area of track on ground	3,569 in <sup>2</sup> (2.3 m <sup>2</sup> )	4,285 in <sup>2</sup> (2.76 m <sup>2</sup> )
Ground pressure	5.36 psi (0.37 bar)	4.61 psi (0.32 bar)
<b>G.</b> Height to top of ROPS canopy with air conditioning	9 ft 1 in (2 755 mm)	9 ft 1 in (2 755 mm)
<b>H.</b> Ground clearance	14.0 in (355 mm)	14.0 in (355 mm)
Length:		
Blade straight with drawbar	14 ft 1 in (4 284 mm)	14 ft 1 in (4 284 mm)
<b>I.</b> Blade straight with ripper	16 ft 8 in (5 110 mm)	16 ft 8 in (5 110 mm)
Width:		
<b>J.</b> Blade straight	8 ft 0 in (2 438 mm)	9 ft 1 in (2 796 mm)
Blade angled	7 ft 7 in (2 316 mm)	8 ft 7 in (2 625 mm)
<b>K.</b> Over track	6 ft 5 in (1 984 mm)	7 ft 6 in (2 290 mm)

NOTE: Ground clearance and overall height dimensions are with the grousers fully penetrated. Add 2.07 in (52.5 mm) if unit is on solid surface.

## STANDARD EQUIPMENT

### OPERATOR ENVIRONMENT

See page 1

### ENGINE

FPT F5HFL413J\*A002  
Tier 4 Final Certified  
Cold start aid – glow plugs with standard dual 12-volt batteries  
Automatic fan belt tensioner  
Integral engine oil cooling  
Fuel filter  
Dual element air cleaner  
120 amp alternator  
950 CCA 12-volt battery  
Engine side panels

### DRIVETRAIN

Dual path infinitely variable, single-lever controlled hydrostatic drive, with electronic straight tracking, power turns and counter-rotation  
Final drive:  
Triple reduction; helical gear/planetary decelerator with hydrostatic drive retardation  
Spring-applied hydraulic release parking brake

### BLADE

52° – 60° variable pitch, with integral adjustment tool  
Single lever control for blade lift, angle and tilt

### UNDERCARRIAGE

Hydraulic track adjusters  
Easy clean track covers  
Case Lubricated Track Chain  
Permanently lubricated track and carrier rollers  
Track adjuster guard  
Track guides – front and rear  
Shock resistance idler mounting

### OTHER

Backup alarm  
Horn  
Work lights:  
2 front  
1 rear  
Master disconnect switch  
Mirror  
Pre-cleaner  
Front pull hook

### TELEMATICS

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

## OPTIONAL EQUIPMENT

### OPERATOR ENVIRONMENT

Cab with heat, A/C, defroster, lights  
Seat belt – 3 in (76 mm)  
Rear wiper for cab  
Radio

### HYDRAULICS

4-spool hydraulic valve for field-installed ripper

### REAR MOUNTED EQUIPMENT

Ripper – 5 position with 3 shanks  
Hydraulic pump with PTO  
Rear tow hook  
Drawbar

### BLADES

96 in (2 438 mm)  
104 in (2 642 mm)

### GUARDS

Sweeps  
Center rock guard

### SCREENS

Radiator brush screen  
Sandblast screen

### OTHER

Environmental drains  
Case Extended Life Track  
Additional work lights  
Front counterweight  
Blade guidance ready – Trimble  
Blade guidance ready – Leica  
Blade guidance ready – Topcon  
Rearview mirror