



## ENGINE

Model	FPT F5BFL413C
Emissions Certification	Tier 4 Final
Type	Diesel 4-stroke, Turbocharged
Cylinders	4
Bore/Stroke	3.90 x 4.33 in (99 x 110 mm)
Displacement	207 in <sup>3</sup> (3.4 L)
Fuel injection	Direct, high pressure common rail – HPCR
Fuel	Diesel
Engine speeds*	RPM
Rated speed – full load	2200
Low idle	900 – 1000
High idle – no load	2330 – 2430
Horsepower @ 2200 RPM:	
Gross	90 hp (67 kW)
Net w/ viscous fan**	89 hp (66 kW)
Net	83 hp (62 kW)
Maximum torque @ 1400 RPM:	
Gross	306 lb-ft (415 N-m)
Net w/ viscous fan	305 lb-ft (413 N-m)
Net	299 lb-ft (405 N-m)
Torque rise at rated speed	43% +/- 5%
Radiator:	
Core type	Square wave
Core size area	486 in <sup>2</sup> (3 145 cm <sup>2</sup> )
Rows of tubes	5
39° fan:	
Style	7 blade suction
Diameter	19.65 in (499 mm)
Ratio	1.1:1
Pump operating angle ratings:	
Side to side	Rated 35°
Fore and aft	Rated 35°
Oil filtration	Replaceable, full flow spin on

NOTE: \*Meets federal emission regulations.

\*\*Viscous fan included w/ Cab  
Convenience package.

## DRIVETRAIN

Transmission – standard:  
4F-4R Power Shuttle Synchronesh  
Transmission manual gear shift,  
fully synchronized

Transmission – optional:  
Powershift S-Type, 4F-3R fully synchronized  
electric/hydraulic shifting w/ auto shift mode

Specifications below apply to both Power Shuttle  
and Powershift S-Type transmission unless  
otherwise indicated.

Gear ratios	Forward/Reverse	
1st	5.603/4.643	
2nd	3.481/2.884	
3rd	1.584/1.313	
4th	0.793/0.657*	

Travel speeds	Forward	Reverse
	mph (kph)	mph (kph)
1st	3.8 (6.1)	4.5 (7.3)
2nd	6.1 (9.8)	7.3 (11.7)
3rd	13.1 (21.1)	15.7 (25.3)
4th	24.6 (39.6)	29.4 (47.3)*

Torque converter ratio	3.01
Differential-lock	On-the-go push-button activation

Front/Rear axle (w/ 4WD 12x16.5 front tires):	
Differential ratio	2.0/2.5
Planetary hub ratio	6.0/6.4
Total reduction ratio	12.0/16.0

Service brakes:	
Individually applied, power assisted, hydraulically actuated, maintenance-free, self-adjusting, outboard mounted, wet disc, 2 per side.	
Total disc area	384 in <sup>2</sup> (0.25 m <sup>2</sup> )

Parking brakes	Trans Mounted spring-applied hydraulic release – SAHR
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NOTE: \*4R not available on Powershift S-Type.  
Travel speeds at 2293 engine  
RPM specified: w/ 19.5 L x 24.0 tires.  
Speeds decrease w/ 17.5 L x 24.0 rear tires.

## ELECTRICAL

Voltage	12 Volts, negative ground
Alternator	160 amp
Battery	850 cold-cranking amps
Optional dual batteries:	850 cold-cranking amps each
Power plugs – 2	30 amps total

## OPERATOR ENVIRONMENT

ROPS/FOPS certified protective canopy;  
Anti-vandalism cover for dash – w/ canopy  
only; Rear fenders extensions; Coat hook w/  
garment strap; Interior rearview convex mirror;  
Non-suspension seat – 180° swivel – Vinyl; 2 in  
(50 mm) retractable seat belt; Cup holder/storage  
tray mounted on left-hand fender; Right-hand  
storage compartment w/ lid.

Gauges:  
Engine water temperature; Converter oil  
temperature; Fuel level; Tachometer/  
hourmeter; DEF Level.

Warning lights:  
Air cleaner restriction; Alternator; A/C high  
pressure; Cold start; Engine oil pressure  
low; Hydraulic oil filter bypass; Parking brake  
engagement; Low fuel; Water in fuel; Low DEF.

Audible alarms:  
Coolant temperature; Engine oil pressure;  
Parking brake engagement; Shuttle  
engagement/seat position; Backup,  
Converter temperature; Low DEF.

Horn Dual switched front and rear

## OPERATING WEIGHT

### Configuration 1 – SAE Transport:

Standard dipper, 82 in (2.08 m) LL bucket,  
2WD, 19.5 L – 24 rear tires, 24 in HD backhoe  
bucket, flip over stabilizer pads, 1 Door Cab  
w/ Heat and A/C, Cloth Mechanical Suspension  
seat, Small front counter weight, S-type  
powershift transmission, no operator,  
fully fueled.

16,589 lb (7 525 kg)

### Configuration 2 – SAE Transport:

No Operator, 1 Door Cab, 4WD, AC, E-hoe,  
SPS Shift, Wobble Stick Mechanical BH  
Controls, Front Counterweight 4 Speed Manual  
Transmission, Boom Guard, Extendahoe®, 82 in  
GP Loader Bucket Galaxy 12-16.5 @ 49 psi  
Front Tires, Solideal 19.5 L – 24 @ 29 psi  
Rear Tires.

17,751 lb (8 052 kg)

### Add-on weights:

Cab-over canopy	309 lb (140 kg)
Fabricated stabilizer pads	141 lb (64 kg)
Counterweights	700 lb (318 kg)
Extendahoe®	285 lb (129 kg)
4WD w/ driveshaft guard	283 lb (128 kg)

## HYDRAULICS

<b>Pump:</b>	
Parker P330 Single Section Gear Pump	
<b>Main relief pressure:</b>	
Standard	3,350 +/- 50 psi (231 +/- 3.5 bar)
<b>Filtration:</b>	
7-micron, return line, full flow, spin on element, condition indicator light for filter.	
Oil cooler	Heavy-duty
<b>Loader flow @ rated engine RPM:</b>	
28.5 gpm @ 3,350 psi (108.0 L/min @ 231 bar)	
<b>Loader control valve:</b>	
Two or three-spool open center monoblock valve. Two and three-spool valves have a single lever manual control for lift and tilt functions. Three-spool valve uses a proportional Electro-Hydraulic control for the auxiliary function. The lift lever has a positive hold "Float" position and a "return-to-dig" feature.	
<b>Loader auxiliary hydraulics w/ proportional thumb switch w/ detent on loader control handle.</b>	
<b>Loader auxiliary hydraulics w/ full available flow:</b>	
0 – 28.5 gpm (0 – 108 L/min)	
<b>Backhoe flow @ rated engine RPM:</b>	
28.5 gpm @ 3,350 psi (108 L/min @ 231 bar)	
<b>Manual backhoe control valve:</b>	
Six-spool monoblock open center control valve w/ seventh and eighth spool bolt-on sections. Features "Pro-Control" which includes custom designed spools for each individual function along w/ "swing cushioning" valve for zero-wag swing control. Basic control valve has an open center parallel circuit for all functions.	

**Pilot backhoe control valve:**  
Six, seven or eight-spool sectional closed center control valve. Features "Pro-Control" which includes custom designed spools for each individual function along w/ "swing cushioning" valve for zero-wag swing control. Basic control valve is closed center, w/ circuits in parallel w/ a post-compensated, flow sharing feature for simultaneous operation of all circuits.

### 1-way flow auxiliary hydraulics:

1-way flow hydraulic valve is equipped w/ an adjustable LS relief valve to control attachment pressure and a 6 position flow control selector for 6 detented, distinct flow settings.

#### Actuation:

Manual backhoe controls – cab floor pedal  
Pilot controls – left-hand joystick

### 2-way flow auxiliary hydraulics\*:

#### Actuation:

Activate the 2-way flow Switch located on the rear console  
Manual shift – 2-way flow linkage on far right of backhoe tower  
Pilot controls – left-hand joystick.

NOTE: \*Available w/ 1-way/2-way Aux. Hyd. option.

## SERVICE CAPACITIES

Fuel tank	35.0 gal (132.0 L)
DEF tank	3.6 gal (13.5 L)
<b>Hydraulic system:</b>	
Total	111 qt (105.0 L)
w/ Extendahoe®	117 qt (110.7 L)
Reservoir w/ filter	55 qt (52.4 L)
Reservoir w/o filter	53 qt (50.5 L)
<b>Transmission – total system:</b>	
2WD Standard	18 qt (17.0 L)
2WD Powershift	23 qt (21.7 L)
4WD Standard	21 qt (19.4 L)
4WD Powershift	22 qt (20.7 L)

<b>Standard front axle:</b>	
4WD Differential	8.1 qt (7.7 L)
4WD Planetaries – each	0.5 qt (0.5 L)
<b>Rear axle:</b>	
Differential and planetaries	14.4 qt (13.6 L)
<b>Engine oil w/ filter</b>	
8.5 qt (8.0 L)	
<b>Cooling system:</b>	
w/ heater	19.0 qt (18.0 L)
w/o heater	18.3 qt (17.3 L)
Window washer reservoir	3.0 qt (2.8 L)

## OTHER SPECIFICATIONS

<b>Front tires:</b>	
2WD	11.0 L x 16.0, 10-ply rating
4WD	12.0 L x 16.5, 10-ply rating
4WD	12.5/80 x 18.0 10-ply rating
<b>Rear tires:</b>	
2/4WD	19.5 L x 24.0, 10-ply rating
2/4WD	17.5 L x 24.0, 10-ply rating

### Turning radius: Curb to Curb:

<b>2WD:</b>	
Brakes on	10 ft 8 in (3.24 m)
Brakes off	12 ft 4 in (3.76 m)
<b>4WD – engaged*:</b>	
Brakes on	11 ft 4 in (3.45 m)
Brakes off	13 ft 10 in (4.21 m)
<b>4WD – disengaged*:</b>	
Brakes on	11 ft 0 in (3.36 m)
Brakes off	12 ft 3 in (3.72 m)

NOTE: \*Turning radius dimensions curb to curb w/ 12.0 x 16.5 front tires and 17.5 L x 24.0 rear tires.

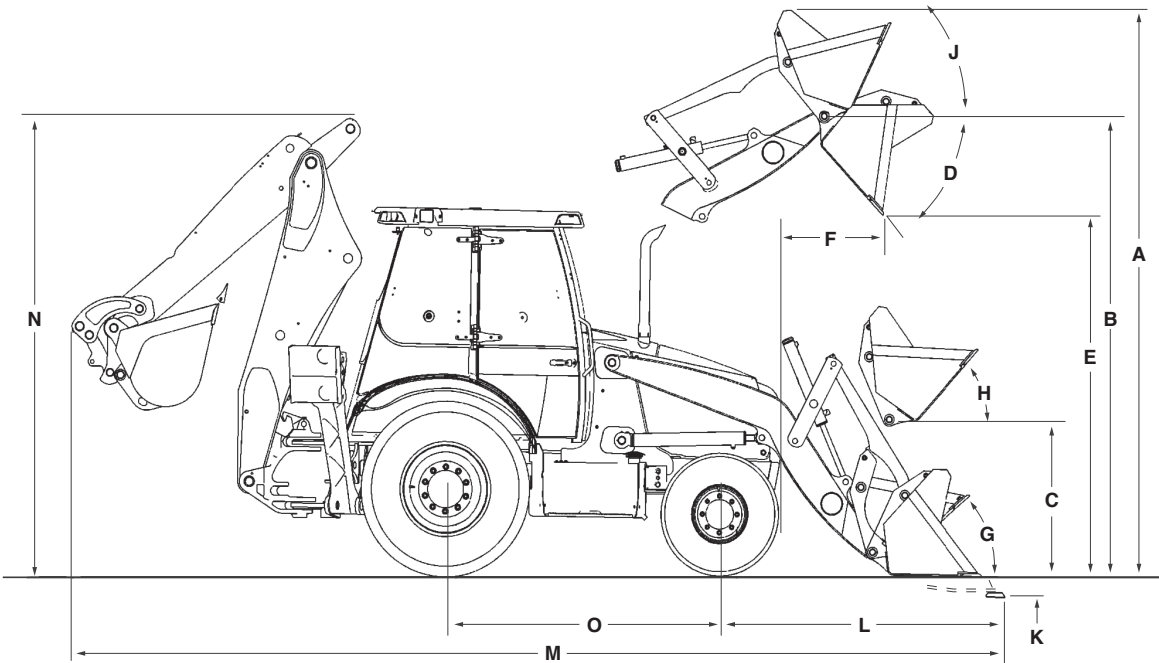
## LOADER BUCKET SIZES

Type	Width	Weight	Struck	Heaped Capacity
Long Lip Bucket without bolt-on edge	82 in (2.08 m)	683 lb (310 kg)	0.88 yd <sup>3</sup> (0.67 m <sup>3</sup> )	1.03 yd <sup>3</sup> (0.79 m <sup>3</sup> )
	93 in (2.36 m)	1,188 lb* (539 kg)	1.10 yd <sup>3</sup> (0.84 m <sup>3</sup> )	1.29 yd <sup>3</sup> (0.99 m <sup>3</sup> )
4 IN 1® Bucket with bolt-on edge	82 in (2.08 m)	1,572 lb* (713 kg)	0.85 yd <sup>3</sup> (0.65 m <sup>3</sup> )	1.05 yd <sup>3</sup> (0.80 m <sup>3</sup> )

NOTE: \*Weight of 4 IN 1® bucket includes edges, cylinders and tube lines.

## BACKHOE BUCKET SIZES

Type	Width	Weight	Heaped Capacity
General Purpose Trenching Buckets	18 in (457 mm)	232 lb (105 kg)	4.70 ft <sup>3</sup> (0.13 m <sup>3</sup> )
	24 in (610 mm)	272 lb (123 kg)	6.26 ft <sup>3</sup> (0.18 m <sup>3</sup> )
Universal Buckets	12 in (305 mm)	295 lb (137 kg)	3.40 ft <sup>3</sup> (0.10 m <sup>3</sup> )
	18 in (457 mm)	356 lb (162 kg)	5.30 ft <sup>3</sup> (0.15 m <sup>3</sup> )
	24 in (610 mm)	427 lb (194 kg)	7.70 ft <sup>3</sup> (0.22 m <sup>3</sup> )
	30 in (762 mm)	489 lb (222 kg)	10.20 ft <sup>3</sup> (0.29 m <sup>3</sup> )
	36 in (914 mm)	552 lb (251 kg)	12.70 ft <sup>3</sup> (0.36 m <sup>3</sup> )
High Capacity Buckets	24 in (610 mm)	447 lb (203 kg)	8.50 ft <sup>3</sup> (0.24 m <sup>3</sup> )



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

### LOADER DIMENSIONS

	Long Lip Bucket	4 IN 1® Bucket
<b>A.</b> Overall operating height – fully raised	13 ft 9 in (4.18 m)	13 ft 8 in (4.16 m)
Height to:		
<b>B.</b> Bucket hinge pin fully raised	11 ft 3 in (3.42 m)	11 ft 3 in (3.42 m)
<b>C.</b> Bucket hinge pin at SAE carry	13.6 in (345 mm)	13.6 in (345 mm)
<b>D.</b> Dump angle at full height	47°	47°
<b>E.</b> Dump clearance at full height, 45° dump:		
Bucket	8 ft 10 in (2.69 m)	8 ft 11 in (2.71 m)
Clam open	–	9 ft 8 in (2.96 m)
<b>F.</b> Dump reach at full height, 45° dump:		
Bucket	31.5 in (801 mm)	29.1 in (738 mm)
Clam open	–	15.3 in (388 mm)
Bucket rollback:		
<b>G.</b> @ Groundline	42°	42°
<b>H.</b> @ SAE carry	42°	42°
<b>J.</b> @ Full height	Adjustable	Adjustable
<b>K.</b> Digging depth below grade:		
Bucket flat	6.1 in (155 mm)	4.8 in (122 mm)
Clam open – dozing	–	4.1 in (103 mm)
<b>L.</b> Reach from front axle centerline – bucket on ground	6 ft 10 in (2.08 m)	6 ft 10 in (2.03 m)
Lift capacity to full height	6,803 lb (3 086 kg)	6,459 lb (2 930 kg)
Breakout force:		
Lift cylinders	9,506 lb (4 228 daN)	9,276 lb (4 126 daN)
Dump cylinders	10,622 lb (4 724 daN)	11,312 lb (5 032 daN)
Bucket cutting edge width	82.5 in (2.09 m)	82.0 in (2.08 m)
Maximum grading angle	114°	114°
Maximum clam opening	–	38.3 in (972 mm)
Moldboard height	–	36.8 in (934 mm)
Raising time to full height	4.6 sec	4.6 sec
Bucket dumping time	1.1 sec	1.1 sec
Lowering time:		
Power down	2.6 sec	2.6 sec
Return-to-dig	3.6 sec	3.6 sec
Clam:		
Open time	–	1.0 sec
Close time	–	1.0 sec

NOTE: Loader dimensions taken with 4WD, 12.0 x 16.5 front tires and 19.5 L x 24.0 rear tires.

## DIMENSIONS

	2WD with 19.5 L x 24.0 tires	4WD with 19.5 L x 24.0 tires
<b>M. Overall transport length:</b>		
Long Lip bucket with Quick Coupler	23 ft 5 in (7.14 m)	23 ft 4 in (7.10 m)
4 IN 1® bucket with Quick Coupler	23 ft 3 in (7.07 m)	23 ft 1 in (7.04 m)
Long Lip bucket with Straight Links	23 ft 6 in (7.15 m)	23 ft 4 in (7.12 m)
4 IN 1® bucket with Straight Links	23 ft 3 in (7.09 m)	23 ft 2 in (7.06 m)
Overall transport width – rear tires	6 ft 10 in (2.07 m)	6 ft 10 in (2.07 m)
Height:		
To top of canopy	8 ft 9 in (2.66 m)	8 ft 9 in (2.66 m)
To top of cab	8 ft 11 in (2.72 m)	8 ft 11 in (2.72 m)
To top of exhaust stack	8 ft 7 in (2.62 m)	8 ft 7 in (2.61 m)
<b>N. Transport</b>	10 ft 10 in (3.30 m)	11 ft 1 in (3.37 m)
Ground clearance at backhoe frame	15.0 in (380 mm)	15.0 in (380 mm)
Angle of departure	15.3°	19.0°
Front wheel tread:		
11.0 L x 16.0	67.5 in (1.71 m)	67.5 in (1.71 m)
12.0 L x 16.5	67.7 in (1.72 m)	67.7 in (1.72 m)
12.5/80 x 18.0	70.3 in (1.79 m)	70.3 in (1.79 m)
Rear wheel tread:		
17.5 L x 24.0	63.1 in (1.60 m)	63.1 in (1.60 m)
19.5 L x 24.0	61.2 in (1.55 m)	61.2 in (1.55 m)
Width over tires:		
11.0 L x 16.0	79.3 in (2.01 m)	79.3 in (2.01 m)
12.0 L x 16.5	81.1 in (2.06 m)	81.1 in (2.06 m)
12.5/80 x 18.0	81.4 in (2.07 m)	81.4 in (2.07 m)
17.5 L x 24.0	81.7 in (2.07 m)	81.7 in (2.07 m)
19.5 L x 24.0	81.4 in (2.07 m)	81.4 in (2.07 m)
<b>O. Wheelbase</b>	84.0 in (2.13 m)	84.5 in (2.15 m)

## CYLINDERS

	Bore Diameter	Rod Diameter	Stroke	Closed Length
<b>Loader:</b>				
Lift – 2	3.25 in (82.6 mm)	1.75 in (44.5 mm)	28.86 in (733.0 mm)	41.81 in (1 062.0 mm)
Dump – 2	3.00 in (76.2 mm)	1.50 in (38.1 mm)	20.33 in (516.5 mm)	30.31 in (769.9 mm)
4 IN 1® clam – 2	3.00 in (76.2 mm)	1.75 in (44.5 mm)	9.08 in (230.6 mm)	19.62 in (498.3 mm)
<b>Backhoe:</b>				
Boom	4.50 in (114.3 mm)	2.25 in (57.2 mm)	38.22 in (971.5 mm)	52.82 in (1 341.6 mm)
Dipperstick	4.25 in (108.0 mm)	2.25 in (57.2 mm)	25.14 in (628.5 mm)	39.65 in (1 007.0 mm)
Bucket	3.25 in (82.6 mm)	2.25 in (57.2 mm)	35.35 in (897.9 mm)	48.17 in (1 223.6 mm)
Extendahoe®	3.00 in (76.2 mm)	1.75 in (44.5 mm)	42.05 in (1 068.0 mm)	56.22 in (1 428.0 mm)
Swing – 2	3.75 in (95.3 mm)	2.00 in (50.8 mm)	11.50 in (292.0 mm)	24.44 in (620.8 mm)
Stabilizer – 2	4.25 in (108.0 mm)	2.25 in (57.2 mm)	21.37 in (542.9 mm)	33.87 in (860.2 mm)

## AXLE RATINGS

	Front – 2WD	Rear	Front – 4WD
Maximum static	70,821 lb (32 124 kg)	90,145 lb (40 889 kg)	64,613 lb (29 308 kg)
Dynamic operating	44,261 lb (20 076 kg)	56,200 lb (25 492 kg)	39,328 lb (17 839 kg)
Static operating	17,704 lb (8 030 kg)	22,480 lb (10 197 kg)	15,732 lb (7 136 kg)
Oscillation – front axle	22° total – 11° side to side	—	22° total – 11° side to side

**BACKHOE LIFT CAPACITIES**

Standard Backhoe		Extendahoe®	
Boom Lift	Lift Capacity lb (kg)	Retracted Lift Capacity lb (kg)	Extended Lift Capacity lb (kg)
+16 ft (4.87 m)	—	—	1,693 (768)
+14 ft (4.27 m)	2,472 (1 121)	2,271 (1 030)	1,979 (897)
+12 ft (3.66 m)	2,857 (1 296)	2,644 (1 199)	2,124 (964)
+10 ft (3.05 m)	2,966 (1 345)	2,748 (1 246)	2,172 (985)
+8 ft (2.44 m)	2,983 (1 353)	2,761 (1 252)	2,169 (984)
+6 ft (1.83 m)	2,963 (1 344)	2,739 (1 242)	2,173 (985)
+4 ft (1.22 m)	2,929 (1 329)	2,701 (1 225)	2,165 (982)
+2 ft (0.61 m)	2,892 (1 312)	2,662 (1 207)	2,153 (977)
<b>Ground Level</b>	<b>2,858 (1 297)</b>	<b>2,625 (1 191)</b>	<b>2,153 (977)</b>
-2 ft (0.61 m)	2,834 (1 285)	2,598 (1 178)	2,145 (973)
-4 ft (1.22 m)	2,827 (1 282)	2,588 (1 174)	2,143 (972)
-6 ft (1.83 m)	2,853 (1 294)	2,609 (1 183)	2,154 (977)
-8 ft (2.44 m)	2,949 (1 338)	2,698 (1 224)	2,189 (993)
-10 ft (3.05 m)	3,319 (1 506)	3,053 (1 385)	2,270 (1 030)
-12 ft (3.66 m)	—	—	2,429 (1 102)
-14 ft (4.27 m)	—	—	3,115 (1 413)
<b>Dipper Lift</b>			
+14 ft (4.27 m)	—	—	3,154 (1 431)
+12 ft (3.66 m)	4,343 (1 970)	4,139 (1 877)	2,981 (1 352)
+10 ft (3.05 m)	4,027 (1 827)	3,826 (1 735)	2,823 (1 281)
+8 ft (2.44 m)	4,112 (1 865)	3,910 (1 774)	2,855 (1 295)
+6 ft (1.83 m)	4,563 (2 070)	4,357 (1 976)	3,010 (1 365)
+4 ft (1.22 m)	5,398 (2 449)	5,177 (2 348)	2,948 (1 337)
+2 ft (0.61 m)	—	—	3,486 (1 581)

**BACKHOE OPERATIONAL DATA**

Standard Backhoe		Extendahoe®	
		Retracted	Extended
Digging depth:			
Maximum	14 ft 9 in (4.50 m)	14 ft 9 in (4.50 m)	18 ft 3 in (5.55 m)
2 ft (610 mm) flat bottom	14 ft 8 in (4.46 m)	14 ft 8 in (4.46 m)	18 ft 1 in (5.52 m)
8 ft (2.44 m) flat bottom	13 ft 8 in (4.16 m)	13 ft 8 in (4.16 m)	17 ft 4 in (5.29 m)
Overall reach from:			
Rear axle centerline	21 ft 11 in (6.68 m)	21 ft 11 in (6.68 m)	25 ft 4 in (7.72 m)
Swing pivot	18 ft 4 in (5.57 m)	18 ft 4 in (5.57 m)	21 ft 8 in (6.60 m)
Loading height	11 ft 9 in (3.59 m)	11 ft 9 in (3.59 m)	14 ft 1 in (4.30 m)
Loading reach – dipper retracted	6 ft 9 in (2.04 m)	6 ft 9 in (2.04 m)	9 ft 4 in (2.84 m)
Swing arc	180°	180°	180°
Bucket rotation:			
Straight links	175.6°	175.6°	175.6°
Mechanical coupler	198.0°	198.0°	198.0°
Stabilizer spread – centers:			
Flip pad	9 ft 5 in (2.87 m)	9 ft 5 in (2.87 m)	9 ft 3 in (2.81 m)
Cast Pad	9 ft 9 in (2.97 m)	9 ft 9 in (2.97 m)	9 ft 7 in (2.92 m)
Digging force:			
Bucket cylinder	11,517 lb (51 228 N)	11,517 lb (51 228 N)	11,517 lb (51 228 N)
Dipper cylinder	6,710 lb (29 484 N)	6,710 lb (29 484 N)	4,887 lb (21 738 N)
Leveling angle:			
Flip pad	12.8°	12.8°	12.8°
Cast pad	13.8°	13.8°	13.8°

## STANDARD EQUIPMENT

### OPERATOR ENVIRONMENT

See page 1

### ENGINE

FPT F5BFL413C diesel  
Cooled EGR  
Selective Catalytic Reduction – SCR  
Full flow engine oil filter  
Aspirated air cleaner - replaceable dual element dry type with radial seal  
Fuel filter with water trap  
Radiator with de-aeration bottle  
Antifreeze to -34° F (-37° C)  
Throttles, both rotary hand and foot  
Self adjusting belt  
High Pressure Common Rail computer controlled injection with diagnostic features  
Engine ECO Mode – Detent on backhoe hand throttle, push button switch on dash  
Auto Engine Idle  
Auto Engine Shutdown  
Auto Protection Shutdown

### DRIVETRAIN

Front axle, as selected:  
2WD front axle with 11.0 L x 16.0 tires  
4WD mechanically driven front axle, with 12.0 L x 16.5 tires  
Rear axle:  
2/4WD heavy-duty outboard planetary drive, with 17.5 L x 24.0 tires  
4F-4R Power Shuttle  
Synchronmesh transmission  
Torque converter – 11.8 in (300 mm)  
On-the-go electric 4WD control  
Electric F/R shuttle control  
Electric differential lock control, with push-button activation on the loader control lever  
Park brake, spring-applied, hydraulic release – SAHR

### HYDRAULICS

Gear pump:  
28.5 gal/min @ 3,350 psi  
(107.9 L/min @ 231 bar)  
Heavy-duty hydraulic oil cooler  
7-micron, spin on oil filter

### LOADER

Bucket position indicator; Lifting lugs on standard bucket; Single lever control with self-leveling and return-to-dig; Hand operated clutch disconnects on loader and shift levers, single lever 4-function loader control: lift, dump, clutch cut-out, differential lock

### BACKHOE

Over center design, Fabricated “S” boom;  
Open-center hydraulics – Pro Control System

### OTHER

Forward tilt engine hood  
Replaceable, molded front bumpers  
Front/Rear tie downs  
Reflective logos  
Signal Lights – cab and canopy:  
2 rear tail/stop  
2 front flashers/turn  
2 rear flashers/turn  
Working/Driving Lights – cab only:  
Adjustable halogen work lights – 55 W:  
4 front  
2 side – one left, one right  
4 rear  
Working/Driving Lights – canopy only:  
Adjustable halogen work lights – 55 W:  
2 front  
2 side – one left, one right  
2 rear  
Master disconnect switch and remote jump-start terminals  
Hydrostatic steering  
Backup alarm  
Vertical spin-on engine oil, fuel and hydraulic filters

### TELEMATICS

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

### WARRANTY

1-Year/Unlimited-Hour Full-Coverage Base Limited Warranty  
2-Year/2,000-Hour Extended Engine Warranty



## OPTIONAL EQUIPMENT

### OPERATOR ENVIRONMENT

Speed Selectable Auto Ride Control – 4WD models

Standard Ride Control – 2WD models

Comfort Steering with two-speed steering pump and 3rd/4th gear cutout

Deluxe Canopy with glass windshield, windshield wiper, windshield washer, floor mat, 85 dba sound level, two additional front lights, two additional rear lights and anti-vandalism cover

ROPS/FOFS certified protective cab available in LH Door or 2 door with heat, A/C, defroster, door activated dome light, 4 front, 4 rear and 2 adjustable side lights, floor mat, tinted glass, radio ready, front and rear wiper and fender extensions.

Deluxe Cab package with deluxe interior, viscous fan, pull-down sun visor and 72 dba sound level

Tilt steering wheel – cab models

Mechanical suspension seat with flip-up armrests, 180° swivel, adjustable seat and weight, backrest angle, lumbar and cushion angle – cab units cloth or vinyl, canopy units vinyl only

Air suspension seat with flip-up armrests, 180° swivel, electric height adjustment, adjustable backrest and lumbar and cushion angle – cab units cloth or vinyl, canopy units vinyl only

Heated seat option for vinyl and cloth Air suspension seats – cab units cloth or vinyl, canopy units vinyl only

Radio, AM/FM Stereo/WB, MP3 auxiliary input – cab models

3 in (75 mm) seat belt for mechanical and air-suspension seat

### ENGINE

Cold Weather Starting Aid:  
Dual 12 volt batteries, glow plugs, engine block heater and heated CCV hose

Severe Cold Weather Starting Aid:  
Synthetic transmission, hydraulic and engine oil – order with cold weather starting aid

### DRIVETRAIN

Powershift S-Type transmission, 4F-3R fully synchronized, electronic transmission controller, kick down in loader control lever and auto shift mode – 2WD or 4WD

Drive shaft guard – 4WD models

4WD heavy-duty mechanically driven front axle with 12.5/80 x 18.0 tires

### LOADER

Auxiliary hydraulics for loader-mounted equipment with thumb-operated proportional control

Hydraulic front quick coupler

Tool portfolio of additional attachments

Buckets – see page 2

### BACKHOE

1-way Auxiliary backhoe hydraulics for hammers, plate compactors or similar 1-way flow attachments

1-way/2-way Auxiliary backhoe hydraulics for hammers, plate compactors or similar 1-way flow attachments or switch to 2-way flow for thumbs, augers or similar 2-way flow attachments

Extendahoe®

Two-lever controls – backhoe or Extendahoe®

Pilot operated control system:  
Fingertip proportional Electro-Hydraulic stabilizer controls  
Thumb-operated proportional Electro-Hydraulic Extendahoe® control  
Thumb-operated horn button  
Thumb-operated auxiliary hydraulic control  
Infinitely adjustable towers  
In-cab switchable “excavator to backhoe” control pattern change

Flip over stabilizer pads

Cemetery/Street pads

Case mechanical quick coupler

Universal coupler – CAT/Deere compatible

Buckets – see page 2

### OTHER

Front tires:  
11.0 L x 16.0 10-ply or 12.0 L x 16.5 10-ply  
12.5/80 x 18.0 10-ply includes heavy duty front axle

Rear tires:  
17.5 L x 24.0 10-ply or 19.5 L x 24.0 10-ply

Special paint

Canopy lights – Additional 2 front and 2 rear halogen lights – 55 W

Tool box – bolt-on, step-mounted

LED Working/Driving Light Package:  
4 front  
4 rear  
2 side

Front counterweights:  
700 lb and 1,100 lb (318 kg and 500 kg)

Rotating beacon

Chaff Screen – Additional fine mesh screen in front of standard grille

Locking DEF/Fuel covers

Front Fenders

