### **ENGINE**

Model	FPT F5BFL413B
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	97 hp (72 kW)
Net	95 hp (71 kW)
Maximum torque @ 1400 F	RPM:
Gross	334 lb·ft (453 N·m)
Net	333 lb·ft (452 N·m)
Torque rise at rated speed	45% +/- 5%
Radiator:	

Ratio

Core type

Viscous fan:

Diameter

Style

Core size area Rows of tubes

Pump operating angle ratings:
Side to side Rated 35°
Fore and aft Rated 35°
Oil filtration Replaceable,
full flow cartridge

Square wave 486 in<sup>2</sup> (3 145 cm<sup>2</sup>)

9 blade viscous suction

19.6 in (500 mm)

1.4:1

NOTE: \*Engine speeds w/ standard transmission.

Meets federal emission regulations.

### **DRIVETRAIN**

Transmission - standard:

Powershift S-Type, 4F-3R Power Shuttle Synchromesh w/ hydraulic gear shifting

Transmission - optional:

4F-4R Power Shuttle Synchromesh transmission manual gear shift, fully synchronized

### **DRIVETRAIN** (cont.)

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

	Forward/Reverse
	5.603/4.643
	3.431/2.884
	1.584/1.313
	0.793/0.657*
Forward	Reverse
mph (kph)	mph (kph)
3.9 (6.3)	4.7 (7.6)
6.2 (10.0)	7.5 (12.0)
13.3 (21.4)	16.0 (25.7)
24.1 (38.8)	28.9 (46.6)*
	mph (kph) 3.9 (6.3) 6.2 (10.0) 13.3 (21.4)

NOTE: \*4R not available on Powershift S-Type.

Transmission - optional:

Powershift H-Type, 4F-3R hydraulic clutch shifting w/ auto function

Gear ratios		Forward/Reverse
1st		5.533/4.549
2nd		3.359/2.762
3rd		1.533/1.260
4th		0.811/ —
Travel speeds	Forward	Reverse
	mph (kph)	mph (kph)
1st	3.9 (6.3)	4.7 (7.6)
2nd	6.4 (10.3)	7.7 (12.4)
3rd	13.6 (21.9)	16.3 (26.3)
4th	23.0 (37.0)	<u> </u>

NOTE: Travel speeds at 2295 engine RPM specified: w/ 21.0 L X 24.0 tires.

Torque converter ratio	
Limited slip differential – 4WD	
Front 4WD/Rear Axle:	
Differential ratio	2.3/2.5
Planetary hub ratio	6.0/6.4
Total reduction ratio	13.7/16.0

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

### **ELECTRICAL**

Voltage	12 Volts, negative ground
Alternator	160 amp
Battery	850 cold-cranking amps
Opt. batteries (2)	850 cold-cranking amps
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 mirror, convex 3.54 in (90 mm) wide x 10.83 in (275 mm) high; 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; Hydraulic oil filter bypass; Parking brake engagement; Low fuel; Water in fuel; Low DEF fluid.

Audible alarms w/ diagnostics:

Coolant temperature; Engine oil pressure; Parking brake engagement; Converter oil temperature; Shuttle engagement/seat position; Backup alarm; Low DEF fluid.

Horn Dual switched front and rear

### **OPERATING WEIGHT**

### Configuration - SAE Transport:

No Operator, 4:1 Loader Bucket, E-hoe, 2 Door Cab w/ Heat and AC, Front Counter Weight, Fully fueled, Heavy Lift, Powershift transmission, air seat, ride control, pilot backhoe controls, 21 L – 24 Rear tires. 20,077 lb (9 107 kg)

## Add-on weights:

Cab-over canopy	309 lb (140 kg
Fabricated stabilizer pads	141 lb (64 kg
Counterweights	700 lb (318 kg
Extendahoe®	286 lb (130 kg
4WD w/ driveshaft guard	283 lb (128 kg

#### **HYDRAULICS**

Р	п	r	r	ı	n	•

Bosch Rexroth Series 31 Variable Displacement Axial Piston Pump

Main relief pressure:	
Standard	3,450 +/- 50 psi
	(238 +/- 3.5 bar)
Power Lift	3,780 +/- 50 psi
	(261 +/- 3.5 bar)

7 micron, full flow replaceable cartridge on return line, condition indicator light for filter.

Loader flow @ rated engine RPM:

41 gpm @ 2,340 psi (156.2 L/min @ 161 bar)

Loader control valve w/ pilot or manual backhoe controls:

Two or three-spool closed center sectional control valve. Single lever manual control for lift and tilt functions. The 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.

Loader auxiliary hydraulics w/ proportional thumb switch w/ detent on loader control handle:

0 - 41 gpm (0 - 156.2 L/min)

Backhoe flow @ rated engine RPM:

41 gpm @ 3,100 psi (156.2 L/min @ 214 bar)

### Manual backhoe control valve:

Six or seven-spool monoblock open 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 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 zerowag 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.

### Unidirectional auxiliary hydraulics:

Unidirectional 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

### Bidirectional auxiliary hydraulics\*:

### Actuation:

Activate the bidirectional Switch located on the rear console

Manual shift - bidirectional linkage on far right of backhoe tower

Pilot controls - left-hand joystick

NOTE: \*Available w/ Combo Aux. Hyd. option.

#### SERVICE CAPACITIES

Fuel tank	35.0 gal (132.0 L)
DEF tank	3.6 gal (13.5 L)
Hydraulic system:	
Total w/ Extendahoe®	131 qt (123.6 L)
Reservoir w/ filter	55.4 qt (52.4 L)
Reservoir w/o filter	53.4 qt (50.5 L)
Transmission – total system:	
4WD Standard	21.0 qt (19.4 L)
4WD Powershift S-Type	22.0 qt (20.7 L)
4WD Powershift H-Type	19.0 qt (18.0 L)
Front axle:	
4WD Differential	9.1 qt (8.6 L)
4WD Planetaries	1.1 qt (1.0 L)
Rear axle:	
Differential	19.7 qt (18.6 L)
Engine oil w/ filter	8.5 qt (8.0 L)
Cooling system:	
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

Front tires:	
4WD	12.5/80 x 18.0, 10-ply rating
Rear tires:	
4WD	21.0 L x 24.0, 10-ply rating

#### Loader:

Bucket position indicator; Lifting lugs on standard bucket; Single lever control w/ selfleveling 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.

### Loader bucket sizes:

Width	Weight	Struck	Heaped	
Long Lip Bucket w/ bolt on edge				
93 in	1,188 lb	1.1 yd³	1.29 yd <sup>3</sup>	
(2.36 m)	(539 kg)	(0.84 m <sup>3</sup> )	(0.99 m <sup>3</sup> )	
4 II	N 1 <sup>®</sup> Bucket	w/ bolt on e	dge	
93 in	1,685 lb	1.0 yd³	1.2 yd <sup>3</sup>	
(2.36 m)	(764 kg)	(0.76 m <sup>3</sup> )	(0.92 m <sup>3</sup> )	

### OTHER SPECIFICATIONS (cont.)

Turning radius*: Curb to Curb		
4WD - engaged:		
Brakes on	12 ft 0 in (3.65 m)	
Brakes off	14 ft 11 in (4.54 m)	
4WD - disengaged:		
Brakes on	11 ft 3 in (3.43 m)	
Brakes off	13 ft 6 in (4.11 m)	

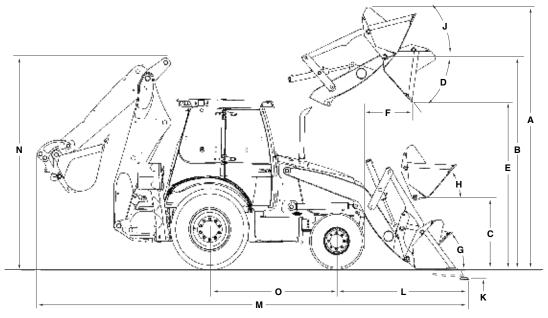
### Backhoe:

Over center design, Fabricated "S" boom"; Pro Control System; Dipperstick integrated serrated gripper teeth; Case mechanical coupler; Power Lift.

### Backhoe bucket sizes:

Width	Weight Heape			
	Universal Buckets	i		
12 in	n 295 lb			
(305 mm)	(134 kg)	(0.10 m <sup>3</sup> )		
18 in	356 lb	5.30 ft <sup>3</sup>		
(457 mm)	(162 kg)	(0.15 m <sup>3</sup> )		
24 in	427 lb	7.70 ft <sup>3</sup>		
(610 mm)	(610 mm) (194 kg)			
30 in	489 lb	10.20 ft <sup>3</sup>		
(762 mm)	(222 kg)	(0.29 m <sup>3</sup> )		
36 in	552 lb	12.70 ft <sup>3</sup>		
(914 mm)	(251 kg)	(0.36 m <sup>3</sup> )		
Hi	gh Capacity Bucke	ets		
24 in	447 lb	8.50 ft <sup>3</sup>		
(610 mm)	(203 kg)	(0.24 m <sup>3</sup> )		
30 in	502 lb	10.60 ft <sup>3</sup>		
(762 mm)	(228 kg)	(0.30 m <sup>3</sup> )		
NOTE *T :	P P			

NOTE: \*Turning radius dimensions curb to curb w/ 21.0 L x 24.0 tires.



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

# **LOADER DIMENSIONS**

	Long Lip Bucket	4 IN 1 <sup>®</sup> Bucket
A. Overall operating height – fully raised	13 ft 11 in (4.24 m)	13 ft 10 in (4.22 m)
Height to:		
B. Bucket hinge pin fully raised	11 ft 6 in (3.50 m)	11 ft 6 in (3.50 m)
C. Bucket hinge pin at SAE carry	12.75 in (324 mm)	12.75 in (324 mm)
D. Dump angle at full height	45°	45°
<b>E.</b> Dump clearance at full height, 43° dump:		
Bucket	8 ft 11 in (2.73 m)	9 ft 1 in (2.77 m)
Clam open	<u> </u>	9 ft 11 in (3.01 m)
<b>F.</b> Dump reach at full height, 45° dump – from bumper:		
Bucket	27.0 in (685 mm)	27.0 in (685 mm)
Clam open		13.9 in (353 mm)
Bucket rollback:	400	440
G. @ Groundline	40° 46°	41° 46°
<ul><li>H. @ SAE carry</li><li>J. @ Full height</li></ul>	46 Adjustable	40 Adjustable
	Adjustable	Adjustable
K. Digging depth below grade: Bucket flat	6.1 in (156 mm)	5.9 in (151 mm)
Clam open – dozing	0.1 III (130 IIIII) -	3.5 in (88 mm)
L. Reach from front axle centerline – bucket on ground	6 ft 9 in (2.05 m)	6 ft 6 in (1.99 m)
Lift capacity to full height – calculated values	8,425 lb (3 822 kg)	8,025 lb (3 640 kg)
Breakout force:	, ( 3,	, , ,
Lift cylinders	11,450 lb (5 093 daN)	11,241 lb (5 000 daN)
Dump cylinders	10,873 lb (4 837 daN)	11,674 lb (5 193 daN)
Bucket cutting edge width	94.2 in (2.39 m)	93.0 in (2.36 m)
Maximum grading angle	106°	106°
Maximum clam opening	_	38.3 in (972 mm)
Moldboard height	-	36.8 in (934 mm)
Raising time to full height	3.7 sec	3.7 sec
Bucket dumping time	2.0 sec	2.0 sec
Lowering time:		
Power down	2.5 sec	2.5 sec
Return-to-dig – manual controls/pilot controls	3.6 sec	3.0 sec
Clam:		
Open time	-	1.3 sec
Close time	=	1.1 sec

NOTE: Loader dimensions taken with 4WD, 21.0 L x 24.0 rear tires.

# **DIMENSIONS**

	Standard Backhoe	Ex	xtendahoe®
		Retracted	Extended
M. Overall transport length:			
Long Lip bucket	23 ft 4 in (7.11 m)	23 ft 4 in (7.11 m)	<del>-</del>
4 IN 1 <sup>®</sup> bucket	23 ft 1 in (7.04 m)	23 ft 1 in (7.04 m)	_
Overall transport width	8 ft 6 in (2.59 m)	8 ft 6 in (2.59 m)	_
Height – 4WD with 21.0 L x 24.0 tires:			
To top of canopy	8 ft 11 in (2.70 m)	8 ft 11 in (2.70 m)	8 ft 11 in (2.70 m)
To top of cab	8 ft 11 in (2.73 m)	8 ft 11 in (2.73 m)	8 ft 11 in (2.73 m)
To top of exhaust stack	8 ft 9 in (2.67 m)	8 ft 9 in (2.67 m)	8 ft 9 in (2.67 m)
N. Transport	11 ft 1 in (3.37 m)	11 ft 7 in (3.53 m)	· -
Ground clearance at backhoe frame	14.8 in (377 mm)	14.8 in (377 mm)	14.8 in (377 mm)
Angle of departure	18.6°	18.6°	18.6°
Wheel tread:			
12.5/80 x 18.0	75.6 in (1.92 m)	75.6 in (1.92 m)	75.6 in (1.92 m)
21.0 L x 24.0	69.6 in (1.77 m)	69.6 in (1.77 m)	69.6 in (1.77 m)
Width over tires:			
12.5/80 x 18.0	88.2 in (2.24 m)	88.2 in (2.24 m)	88.2 in (2.24 m)
21.0 L x 24.0	91.8 in (2.33 m)	91.8 in (2.33 m)	91.8 in (2.33 m)
O. Wheelbase:			
21.0 L x 24.0	84.5 in (2.15 m)	84.5 in (2.15 m)	84.5 in (2.15 m)

# **CYLINDERS**

	Bore Diameter	Rod Diameter	Stroke	Closed Length
Loader:				
Lift (2)	3.50 in (88.9 mm)	1.88 in (47.6 mm)	29.13 in (740.0 mm)	41.54 in (1 055.0 mm)
Bucket (2)	3.00 in (76.2 mm)	1.50 in (38.1 mm)	20.33 in (516.5 mm)	29.90 in (759.5 mm)
4 IN 1 <sup>®</sup> 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)
Backhoe:				
Boom	5.00 in (127 mm)	2.50 in (63.5 mm)	38.25 in (971.6 mm)	52.82 in (1 341.6 mm)
Dipperstick	4.75 in (120.7 mm)	2.50 in (63.5 mm)	25.14 in (628.5 mm)	39.65 in (1 007.0 mm)
Bucket	3.50 in (88.9 mm)	2.50 in (63.5 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)	4.00 in (101.6 mm)	2.00 in (50.8 mm)	11.50 in (292.0 mm)	24.44 in (620.8 mm)
Stabilizer (2)	5.25 in (133.4 mm)	2.50 in (63.5 mm)	20.40 in (518.1 mm)	33.57 in (852.7 mm)

# **AXLE RATINGS**

	Front – 4WD	Rear
Maximum static	67,883 lb (30 791 kg)	70,848 lb (32 136 kg)
Dynamic operating	47,426 lb (21 512 kg)	49,494 lb (22 450 kg)
Static operating	18,969 lb (8 604 kg)	19,798 lb (8 980 kg)
Oscillation – front axle	22° total – 11° side to side	22° total – 11° side to side

# **BACKHOE LIFT CAPACITIES**

	Standard	l Backhoe		Exte	ndahoe®	
			Retracted		Extended	
	Standard	Power Lift	Standard	Power Lift	Standard	Power Lift
Boom Lift	Lift Capacity					
	lb (kg)					
+16 ft (4.87 m)	_	_	_	_	2,115 (959)	2,447 (1 110)
+14 ft (4.27 m)	3,039 (1 378)	3,484 (1 580)	2,837 (1 287)	3,282 (1 489)	2,395 (1 086)	2,769 (1 256)
+12 ft (3.66 m)	3,413 (1 548)	3,913 (1 775)	3,201 (1 452)	3,701 (1 679)	2,536 (1 151)	2,935 (1 331)
+10 ft (3.05 m)	3,499 (1 587)	4,015 (1 821)	3,281 (1 488)	3,797 (1 722)	2,593 (1 176)	3,001 (1 361)
+8 ft (2.44 m)	3,485 (1 581)	4,005 (1 817)	3,263 (1 480)	3,783 (1 716)	2,564 (1 163)	2,972 (1 348)
+6 ft (1.83 m)	3,438 (1 559)	3,957 (1 795)	3,213 (1 457)	3,732 (1 693)	2,549 (1 156)	2,961 (1 343)
+4 ft (1.22 m)	3,374 (1 530)	3,890 (1 764)	3,146 (1 427)	3,662 (1 661)	2,521 (1 144)	2,935 (1 331)
+2 ft (0.61 m)	3,307 (1 500)	3,820 (1 733)	3,077 (1 396)	3,590 (1 628)	2,489 (1 129)	2,904 (1 317)
Ground Level	3,251 (1 475)	3,761 (1 706)	3,018 (1 369)	3,528 (1 600)	2,489 (1 129)	2,904 (1 317)
-2 ft (0.61 m)	3,201 (1 452)	3,710 (1 683)	2,965 (1 345)	3,474 (1 576)	2,466 (1 118)	2,882 (1 307)
-4 ft (1.22 m)	3,175 (1 440)	3,686 (1 672)	2,935 (1 331)	3,446 (1 563)	2,446 (1 109)	2,866 (1 300)
-6 ft (1.83 m)	3,182 (1 443)	3,699 (1 678)	2,938 (1 333)	3,455 (1 567)	2,443 (1 108)	2,869 (1 301)
-8 ft (2.44 m)	3,258 (1 478)	3,792 (1 720)	3,007 (1 364)	3,541 (1 606)	2,465 (1 118)	2,899 (1 315)
-10 ft (3.05 m)	3,441 (1 561)	3,951 (1 792)	3,175 (1 440)	3,685 (1 671)	2,530 (1 148)	2,979 (1 351)
-12 ft (3.66 m)	_	_	_	=	2,707 (1 228)	3,187 (1 446)
-14 ft (4.27 m)	_	_	_	_	3,239 (1 469)	3,759 (1 705)
Dipper Lift:						
+14 ft (4.27 m)	_	_	_		4,281 (1 942)	4,281 (1 942)
+12 ft (3.66 m)	5,822 (2 641)	5,822 (2 641)	5,618 (2 548)	5,618 (2 548)	4,046 (1 835)	4,046 (1 835)
+10 ft (3.05 m)	5,600 (2 540)	5,600 (2 540)	5,399 (2 449)	5,399 (2 449)	3,984 (1 807)	3,984 (1 807)
+8 ft (2.44 m)	5,562 (2 523)	5,562 (2 523)	5,360 (2 431)	5,360 (2 431)	3,913 (1 775)	3,913 (1 775)
+6 ft (1.83 m)	6,236 (2 829)	6,236 (2 829)	6,030 (2 735)	6,030 (2 735)	4,166 (1 889)	4,166 (1 889)
+4 ft (1.22 m)	7,424 (3 368)	7,424 (3 368)	7,203 (3 267)	7,203 (3 267)	4,102 (1 861)	4,102 (1 861)
+2 ft (0.61 m)	_	_	_	_	4,850 (2 200)	4,850 (2 200)

NOTE: Boom and Dipper Lift Capacities are rated per SAE J31 and are 87% of the maximum hydraulic lift force available with the specified options.

## **BACKHOE OPERATIONAL DATA**

	Standard Backhoe	Exten	idahoe®
		Retracted	Extended
Digging depth:			
Maximum	14 ft 6 in (4.43 m)	14 ft 6 in (4.43 m)	18 ft 0 in (5.48 m)
Maximum with hi-capacity bucket	15 ft 1 in (4.59 m)	15 ft 1 in (4.59 m)	18 ft 6 in (5.64 m)
2 ft (610 mm) flat bottom	14 ft 5 in (4.39 m)	14 ft 5 in (4.39 m)	17 ft 11 in (5.45 m)
8 ft (2.44 m) flat bottom	13 ft 5 in (4.09 m)	13 ft 5 in (4.09 m)	17 ft 1 in (5.22 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 (7.71 m)
Swing pivot	18 ft 3 in (5.56 m)	18 ft 3 in (5.56 m)	21 ft 8 in (6.60 m)
Loading height	12 ft 0 in (3.66 m)	12 ft 0 in (3.66 m)	14 ft 4 in (4.38 m)
Loading reach	4 ft 8 in (1.42 m)	4 ft 8 in (1.42 m)	7 ft 3 in (2.22 m)
Swing arc	180°	180°	180°
Bucket rotation:			
Mechanical coupler	198.0°	198.0°	198.0°
Hydraulic coupler - Extendahoe® dipper	194.8°	194.8°	194.8°
Hydraulic coupler – standard dipper	198.0°	198.0°	198.0°
Stabilizer spread – operating:			
Flip pad	10 ft 9 in (3.28 m)	10 ft 9 in (3.28 m)	10 ft 9 in (3.28 m)
Cast pad	11 ft 1 in (3.38 m)	11 ft 1 in (3.38 m)	11 ft 1 in (3.38 m)
Digging force:			
Bucket cylinder – SAE rated 3,460 psi	13,795 lb (61 363 N)	13,795 lb (61 363 N)	13,795 lb (61 363 N)
Bucket cylinder – Power Lift	15,070 lb (67 039 N)	15,070 lb (67 039 N)	15,070 lb (67 039 N)
Dipper cylinder – SAE rated 3,460 psi	8,657 lb (38 508 N)	8,657 lb (38 508 N)	6,305 lb (28 045 N)
Dipper cylinder – Power Lift	9,458 lb (42 071 N)	9,458 lb (42 071 N)	
Leveling angle:			
Flip pad	11.5°	11.5°	11.5°
Cast pad	12.4°	12.4°	12.4°

NOTE: Lift capacities apply straight to the rear of prime mover. Equipped with 24 in (610 mm) Universal heavy-duty trenching bucket and Case coupler except as noted.

### **OPERATOR ENVIRONMENT**

See page 1

### **ENGINE**

FPT F5BFL413B diesel

Diesel Oxidation Catalyst with SCR

Full flow engine oil filter

Air cleaner – replaceable dry type with radial seal

Aspirated air cleaner

Fuel filter with water trap

Radiator with overflow bottle

Antifreeze to -34° F (-37° C)

Electronic throttles - foot and rotary hand

Self adjusting belt

High Pressure Common Rail computer controlled injection with diagnostic features

### **DRIVETRAIN**

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

#### Front axle:

4WD heavy-duty mechanically driven front axle with 14.0 x 17.5 tires, limited slip differential and drive shaft guard

#### Rear axle

4WD heavy-duty outboard planetary drive with 21.0 x 24.0 tires

Torque converter - 12 in (305 mm)

On-the-go electric 4WD control

Electric F/R shuttle control

Electric differential lock control, push-button

Park brake, spring-applied, hydraulic release – SAHR

### **HYDRAULICS**

Ground level remote hydraulic test ports Variable displacement axial piston pump

Pump 41 gpm @ 3,000 psi

(156.2 L/min @ 207 bar)

Heavy-duty oil cooler

7-micron, spin on oil filter

### **LOADER**

See page 2

### **BACKHOE**

Power Lift

See page 2

### OTHER

Front tire 12.5/80 x 18.0, 10-PR

Rear tire 21.0 L x 24.0, 10-PR

Forward tilt engine hood

Replaceable, molded front bumpers

Front/Rear tie downs

Reflective logos

Lights - cab and canopy:

2 front driving

2 rear tail/stop

2 front flashers/turn

2 rear flashers/turn

# Cab only:

Adjustable halogen work lights - 55 W:

2 front

2 side - left and right

4 rear

# Canopy only:

Adjustable halogen work lights - 55 W:

2 front

2 side - left and right

2 side 4 rear

### **TELEMATICS**

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

### **OPTIONAL EQUIPMENT**

### **OPERATOR ENVIRONMENT**

Speed Selectable Auto Ride Control – 4WD models

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

ROPS/FOPS certified protective cab with rear wipers and floor mat

Cab Convenience Package containing pull-down sun visor, window washer – front and rear, left-hand storage tray, deluxe interior package, sound Reduction Package for cab models – levels reduced to 72 dB (A), right-hand threshold storage box

Air-conditioning for cab models

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

Air Ride suspension seat with flip-up armrests, 180° swivel, heated, electric height adjustment, adjustable back rest and lumbar support – cab units cloth, canopy units vinyl

Pull-down sun visor for canopy models

Radio - AM/FM Stereo/WB, MP3 auxiliary input

### **ENGINE**

Cold Weather Starting Aid with dual 12 Volt batteries and glow plugs

Block heater

### DRIVETRAIN

Standard Powershuttle, 4F-4R Power Shuttle Synchromesh transmission, manual gear shift, fully synchronized

Powershift H-Type transmission, 4F-3R hydraulic clutch shifting with auto function

### **LOADER**

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

Hydraulic front quick coupler

Loader linkage without loader bucket

Tool portfolio of additional attachments

Buckets - see page 2

### BACKHOE

Auxiliary backhoe unidirectional hydraulics

Auxiliary backhoe combo hydraulics:

Hand lever operated for bidirectional manual controls

Button operated for pilot controls, includes unidirectional and bidirectional

Auxiliary hydraulics with flow from 0 to 41 gal/min (0 to 156.2 L/min)

Bolt on hardened gripper teeth

Two-lever control - backhoe or Extendahoe®

## **BACKHOE** (continued)

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

Hydraulic bucket quick coupler

Universal coupler - CAT/Deere compatible

Flip over stabilizer pads

Cemetery/Street pads

Buckets - see page 2

### **OTHER**

Front:

12.5/80 x 18, 10 PR

Rear

21 L x 24, 10 PR

Special paint

Tool box - bolt-on, step mounted

Front counterweights:

700 lb and 1,100 lb (318 kg and 500 kg)

Rotating beacon

Master disconnect switch and remote jump-start terminals

Eco-Mode – Detent on backhoe hand throttle, push switch on dash



NOTE: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

NOTE: All engines meet current EPA emissions requirements.

IMPORTANT: Case Construction Inc. reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Case Construction Inc. does not warrant the safety or reliability of attachments from other manufacturers.

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