

## ENGINE

Model	Case F5C Diesel, Tier 4 Interim Emissions Certified
Type	4-stroke, turbocharged
Cylinders	4
Bore/Stroke	3.9 in x 4.33 in (99 mm x 110 mm)
Displacement	207 in <sup>3</sup> (3.4 L)
Fuel injection	Direct high pressure common rail (HPCR)
Fuel	Diesel
Fuel filter	w/ water trap
Air intake	Cross-flow
Cooling	Liquid
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 w/ viscous fan**	95 hp (71 kW)
Net	90 hp (67 kW)
Maximum torque @ 1400 RPM:	
Gross	334 lb-ft (453 N-m)
Net w/ viscous fan**	333 lb-ft (452 N-m)
Net	326 lb-ft (442 N-m)
Torque rise at rated speed	45%

NOTE: \*Engine speeds with standard transmission.

Meets federal emission regulations.

\*\* Viscous fan included with Cab  
Convenience package.

Radiator:	
Core size area	486 in <sup>2</sup> (3145 cm <sup>2</sup> )
Rows of tubes/with AC	3/5
39 degree fan:	
Style	7 blade suction
Diameter	19.65 in (499 mm)
Angle – std./opt.	33°/39°
Ratio	1.1:1
Water pump style	Integral
Engine oil pump:	
Deep sump plate cooler w/ pressurized under-piston nozzles	
Pump operating angle ratings:	
Side-to-side	Rated 35°
Fore and aft	Rated 35°
Oil filtration	Replaceable, full-flow cartridge

## POWERTRAIN

Transmission – optional:	
4F-4R Power Shuttle Synchronesh transmission manual gear shift, fully synchronized	
Transmission – standard:	
Powershift S-Type, 4F-3R fully synchronized	

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

## POWERTRAIN (CONT.)

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

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

### Travel speeds:

	Forward	Reverse
	mph (km/h)	mph (km/h)
1st	3.8 (6.1)	4.5 (7.3)
2nd	6.0 (9.7)	7.2 (11.6)
3rd	12.8 (20.6)	15.4 (24.7)
4th	24.0 (38.6)	28.8* (46.3)

NOTE: Travel speeds at 2293 engine RPM with  
19.5 L x 24 tires. Speeds decrease with  
17.5 L x 24 rear tires. 4R not available on  
PowerShift S-Type.

Transmission – optional:

PowerShift H-Type, 4F-3R hydraulic clutch  
shifting with 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 (km/h)	mph (km/h)
1st	3.9 (6.2)	4.6 (7.4)
2nd	6.3 (10.1)	7.5 (12.1)
3rd	13.3 (21.4)	16.0 (25.7)
4th	23.6 (38.0)	–

NOTE: Travel speeds at 2312 engine RPM with  
19.5 L x 24 tires. Speeds decrease with  
17.5 L x 24 rear tires.

Torque converter ratio	2.6
Differential lock	On-the-go push-button activation
Front 4WD/Rear axle:	
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

Disc area 384 in<sup>2</sup> (.25 m<sup>2</sup>)

Parking brakes:

Trans Mounted spring applied hydraulic  
release (SAHR)

## ELECTRICAL

Voltage	12 Volts, negative ground
Alternator	120 amp
Battery	850 cold-cranking amps

## ELECTRICAL (CONT.)

Opt. batteries (2)	850 cold-cranking amps
Power plugs (2)	30 amps total

## OPERATOR ENVIRONMENT

ROPS/FOPS canopy; Key start; Hydrostatic  
steering; Vinyl mechanical suspension seat w/  
180° swivel; Seat turn around; Electronic hand  
and foot throttles; Ergonomic loader control  
lever w/ push-button activation of differential  
lock and transmission de-clutch; Backhoe foot-  
swing w/ 3 lever control; (2) Accessory power  
plugs (30 amp); Anti-vandalism covers (canopy  
only); Cup holder; Coat hook w/ tether strap  
(cab only); Interior rearview mirror; 2 in (51 mm)  
retractable seat belt; Storage compartment  
w/lid; Left side storage tray.

Vehicle Control Module w/ menu driven options  
and onboard diagnostics:

Foot throttle sensitivity; Cold weather idle  
settings; Maintenance settings.

Gauges:

Engine water temperature; Converter oil  
temperature; Fuel; Tachometer/hourmeter;  
Voltmeter.

Warning lights:

Air cleaner restriction; Alternator; A/C high  
pressure; Cold start; Engine oil pressure;  
Hydraulic oil filter bypass; Parking brake;  
Low fuel.

Audible alarms w/ diagnostics:

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

Horn – dual switched front & rear.

## OPERATING WEIGHT

### Configuration 1 – SAE Transport:

82 in (2.08 m) LL bucket, 4WD, 19.5 L x 24  
rear tires, standard dipper, 24 in (610 mm) HD  
bucket, flip stabilizer pads, ROPS cab, non-  
suspension seat, dual battery, no operator:  
16,239 lb (7366 kg)

### Configuration 2 – SAE Transport:

82 in (2.08 m) loader bucket, 4WD,  
19.5 L x 24 rear tires, Extendahoe, 24 in  
(610 mm) HD bucket, flip stabilizer pad,  
700 lb (318 kg) CWT, ROPS cab, cloth seat,  
dual battery, mechanical backhoe coupler,  
no operator, power synchro-transmission:  
17,226 lb (7814 kg)

### Add-on weights:

Cab (over canopy)	0 lb (0 kg)
Counterweights	700 lb (318 kg)
Extendahoe®	286 lb (130 kg)
4WD w/ driveshaft guard	283 lb (128 kg)

## HYDRAULICS

Pump:	
Bosch Rexroth Series 31 Variable Displacement Axial Piston Pump	
Main relief pressure:	
Standard	3,450 +/- 50 psi (238 +/-3.5 bar)
Power Lift	3,625 +/- 50 psi (250 +/-3.5 bar)
Filtration:	
7-micron, full flow replaceable cartridge on return line, condition indicator light for filter	
Oil cooler	Heavy-duty
Loader flow @ rated engine RPM:	
40 gpm @ 2,340 psi (151.4 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 with proportional thumb switch w/ detent on loader control handle:	
0 to 31.5 gpm (0 to 119 L/min)	
Backhoe flow @ rated engine RPM:	
40 gpm @ 3,100 psi (151.4 L/min @ 161 bar)	
Manual backhoe control valve:	
Six or seven monoblock open center control valve. Features "Pro-Control" which includes custom designed spools for each individual function along with "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 with "swing cushioning" valve for zero-wag swing control. Basic control valve is closed center, with circuits in parallel with a post-compensated, flow sharing feature for simultaneous operation of all circuits.	
<b>Unidirectional auxiliary hydraulics:</b>	
Unidirectional hydraulic valve is equipped with 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	

## SERVICE CAPACITY

Fuel tank	42 gal (159 L)
Hydraulic system:	
Total	126 qt (119.2 L)
w/ Extendahoe®	132 qt (124.9 L)
Reservoir w/ filter	58 qt (54.5 L)
Reservoir w/o filter	56 qt (52.6 L)
Transmission – total system:	
2WD Standard	18 qt (17 L)
2WD Powershift S-Type	23 qt (21.7 L)
4WD Standard	21 qt (19.4 L)
4WD Powershift S-Type	22 qt (20.7 L)
4WD Powershift H-Type	19 qt (18 L)
Front axle:	
4WD Differential	8.1 qt (7.7 L)
4WD Planetaries (each)	0.5 qt (0.5 L)
Rear axle:	
Differential & Planetaries	14.4 qt (13.6 L)
Engine oil w/ filter	14.4 qt (13.6 L)
Cooling system:	
w/ heater	19 qt (18 L)
w/o heater	18.3 qt (17.3 L)
Window washer reservoir	3.0 qt (2.8 L)

## OTHER SPECIFICATIONS

Front tires:			
2WD – 11 L x 16, 10-ply rating			
4WD – 12 L x 16.5, 8-ply rating			
Rear tires:			
2/4WD – 19.5 L x 24, 10-ply rating			
2/4WD – 17.5 L x 24, 10-ply rating			
Loader:			
Single-lever control for lift and tilt; Positive hold float; Return-to-dig; Automatic self-leveling; In-line, reverse linkage; Dual parallel dump cylinders; Clutch disconnect button on loader control and shift levers; Bucket position indicator.			
<b>Loader bucket sizes:</b>			
Width	Weight	Struck	Heaped
<b>Long Lip Bucket</b>			
<b>82 in w/o bolt-on edge / 93 w/bolt-on edge</b>			
82 in (2.08 m)	664 lb (392 kg)	0.88 yd <sup>3</sup> (0.67 m <sup>3</sup> )	1.01 yd <sup>3</sup> (0.77 m <sup>3</sup> )
93 in (2.36 m)	933 lb* (423 kg)	1.07 yd <sup>3</sup> (0.82 m <sup>3</sup> )	1.25 yd <sup>3</sup> (0.96 m <sup>3</sup> )
<b>4 IN 1® Bucket w/ bolt-on edge</b>			
82 in (2.08 m)	1,451 lb* (658 kg)	0.85 yd <sup>3</sup> (0.65 m <sup>3</sup> )	1.04 yd <sup>3</sup> (0.80 m <sup>3</sup> )

NOTE: \*Weight of 4IN1 bucket includes edges, cylinders, and tube lines.

## OTHER SPECIFICATIONS

### (CONTINUED)

#### Turning diameter:

2WD:	
Brakes on	10 ft 8 in (3.24 m)
Brakes off	12 ft 4 in (3.76 m)
4WD – engaged:	
Brakes on	11 ft 0 in (3.36 m)
Brakes off	14 ft 2 in (4.31 m)
4WD – disengaged:	
Brakes on	10 ft 12 in (3.35 m)
Brakes off	12 ft 8 in (3.85 m)

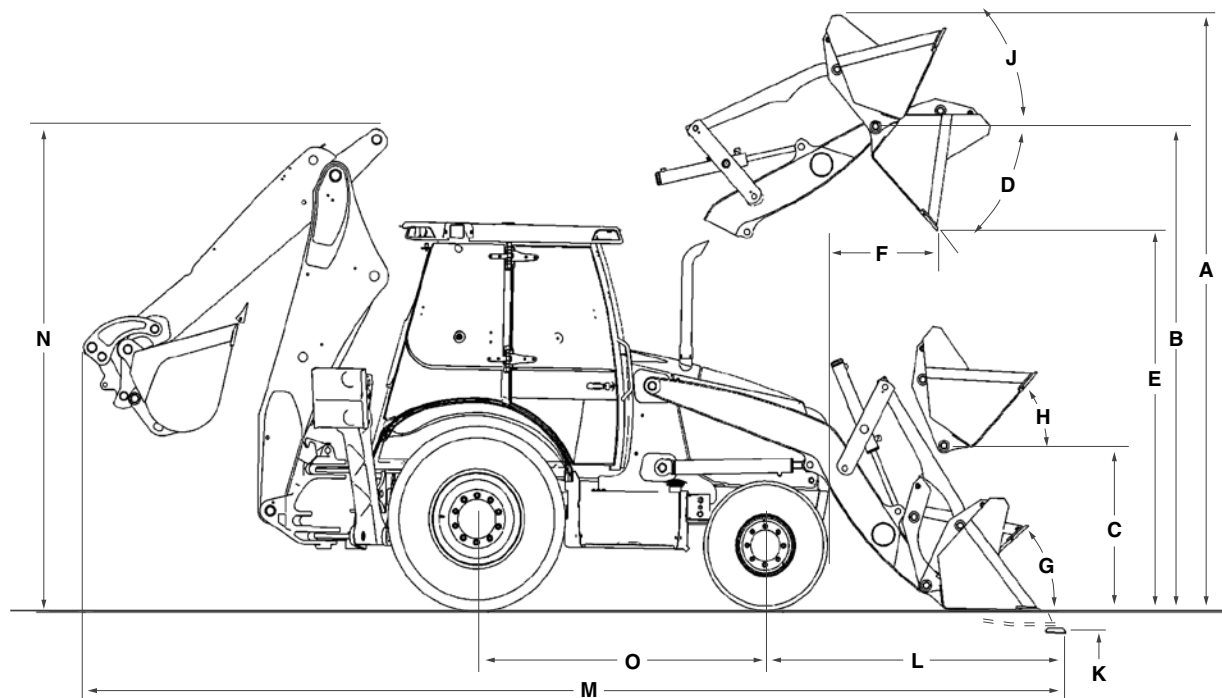
NOTE: Turning radius dimensions curb to curb w/ 17.5 L x 24 tires.

#### Backhoe:

Over center design, Fabricated "S" boom; Pro-Control System; Dipperstick integrated serrated grip teeth; 17,940 lb-ft (24 370 N·m) swing torque; Case attachment coupler; Foot-swing w/ 3 lever control; Wing stabilizers w/ cleated dirt pad.

#### Backhoe bucket sizes:

Width	Weight	Heaped
<b>Universal Buckets</b>		
12 in (305 mm)	295 lb (134 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> )
<b>High Capacity Buckets</b>		
24 in (610 mm)	447 lb (203 kg)	8.50 ft <sup>3</sup> (0.24 m <sup>3</sup> )
30 in (762 mm)	502 lb (228 kg)	10.60 ft <sup>3</sup> (0.30 m <sup>3</sup> )



## 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 @ SAE carry	13.6 in (345 mm)	13.6 in (345 mm)
<b>D.</b> Dump angle @ full height	47°	47°
<b>E.</b> Dump clearance @ full height, 45° dump:		
Bucket	8 ft 10 in (2.69 m)	8 ft 11 in (2.71 m)
Clam open	NA	9 ft 8 in (2.96 m)
<b>F.</b> Dump reach @ full height, 45° dump (from bumper):		
Bucket	31.5 in (801 mm)	29.1 in (738 mm)
Clam open	NA	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)	NA	4.1 in (103 mm)
<b>L.</b> Reach from front axle centerline – bucket on ground	6 ft 8 in (2.09 m)	6 ft 7 in (2.04 m)
Lift capacity to full height (calculated values)	7,044 lb (3195 kg)	6,703 lb (3040 kg)
Breakout force (calculated values):		
Lift cylinders	9,833 lbf (4460 daN)	9,610 lbf (4359 daN)
Dump cylinders	10,947 lbf (4965 daN)	11,658 lbf (5288 daN)
Bucket cutting edge width	82.5 in (2.09 m)	82 in (2.08 m)
Maximum grading angle	114°	114°
Maximum clam opening	NA	38.3 in (972 mm)
Moldboard height	NA	36.8 in (934 mm)
Raising time to full height – manual/pilot controls	3.4/3.6 sec	3.4/3.6 sec
Bucket dumping time	1.8/2.0 sec	1.8/2.0 sec
Lowering time:		
Power down	2.5/2.6 sec	2.5/2.6 sec
Return-to-dig	3.6/2.8 sec	3.6/2.8 sec
Clam:		
Open time	NA	1.3 sec
Close time	NA	1.1 sec

NOTE: \*Loader dimensions taken with 4WD, 19.5 L x 24 rear tires.

## DIMENSIONS

	2WD w/ 17.5 L x 24 rear tires	4WD w/ 19.5 L x 24 rear tires
<b>M. Overall transport length:</b>		
Long Lip bucket w/ Quick Coupler	23 ft 5 in (7.14 m)	23 ft 4 in (7.10 m)
4 in 1° bucket w/ Quick Coupler	23 ft 3 in (7.07 m)	23 ft 1 in (7.04 m)
Long Lip bucket w/ Straight Links	23 ft 6 in (7.15 m)	23 ft 4 in (7.12 m)
4 in 1° bucket w/ Straight Links	23 ft 3 in (7.09 m)	23 ft 2 in (7.06 m)
Overall transport width	7 ft 2 in (2.17 m)	7 ft 2 in (2.17 m)
Height:		
To top of canopy	8 ft 8 in (2.64 m)	8 ft 9 in (2.66 m)
To top of cab	8 ft 9 in (2.68 m)	8 ft 11 in (2.72 m)
To top of exhaust stack	8 ft 5 in (2.58 m)	8 ft 7 in (2.62 m)
<b>N. Transport</b>	10 ft 10 in (3.29 m)	11 ft 1 in (3.37 m)
Ground clearance at backhoe frame	12 in (304 mm)	15 in (381 mm)
Angle of departure	15.3°	19°
Front wheel tread:		
11 L x 16	67.5 in (1.72 m)	
12 L x 16.5	67.7 in (1.72 m)	
19.5 L x 24	61.2 in (1.55 m)	
17.5 L x 24	63.1 in (1.60 m)	
Width across tires:		
11 L x 16	79.3 in (2.02 m)	
12 L x 16.5	81.1 in (2.06 m)	
19.5 L x 24	81.4 in (2.07 m)	
17.5 L x 24	81.7 in (2.07 m)	
	<b>2WD</b>	<b>4WD</b>
<b>O. Wheelbase:</b>		
19.5 L x 24	84 in (2.13 m)	84.5 in (2.15 m)
17.5 L x 24	84 in (2.13 m)	84.5 in (2.15 m)

## CYLINDERS

	Bore Diameter	Rod Diameter	Stroke	Closed Length
Loader:				
Lift (2)	3.25 in (82.6 mm)	1.75 in (44.5 mm)	28.86 in (733 mm)	42.95 in (1062 mm)
Dump (2)	3.0 in (76.2 mm)	1.5 in (38.1 mm)	20.33 in (516.5 mm)	29.9 in (759.5 mm)
4 IN 1° clam (2)	3.0 in (76.2 mm)	1.75 in (44.5 mm)	9.08 in (230.6 mm)	19.62 in (498.3 mm)
Backhoe:				
Boom	5.0 in (127 mm)	2.5 in (63.5 mm)	38.25 in (971.6 mm)	52.82 in (1341.6 mm)
Dipperstick	4.75 in (120.7 mm)	2.5 in (63.5 mm)	25.14 in (628.5 mm)	39.65 in (1007 mm)
Bucket	3.5 in (88.9 mm)	2.5 in (63.5 mm)	35.35 in (897.9 mm)	48.17 in (1223.6 mm)
Extendahoe®	3.0 in (76.2 mm)	1.75 in (44.5 mm)	42.05 in (1068 mm)	56.22 in (1428 mm)
Swing (2)	4.0 in (101.6 mm)	2.0 in (50.8 mm)	11.5 in (292 mm)	24.44 in (620.8 mm)
Stabilizer (2)	4.5 in (114.3 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 (8030 kg)	22,480 lb (10 197 kg)	15,732 lb (7136 kg)

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 LIFT CAPACITIES

Boom Lift	Standard Backhoe		Extendahoe®			
	Standard Lift Capacity lb (kg)	Power Lift Lift Capacity lb (kg)	Retracted		Extended	
			Standard Lift Capacity lb (kg)	Power Lift Lift Capacity lb (kg)	Standard Lift Capacity lb (kg)	Power Lift Lift Capacity lb (kg)
+16 ft (4.87 m)	—	—	—	—	2,115 (959)	2,298 (1043)
+14 ft (4.27 m)	3,039 (1378)	3,285 (1490)	2,837 (1287)	3,083 (1398)	2,395 (1086)	2,603 (1181)
+12 ft (3.66 m)	3,413 (1548)	3,691 (1674)	3,201 (1452)	3,479 (1578)	2,536 (1151)	2,757 (1250)
+10 ft (3.05 m)	3,499 (1587)	3,784 (1716)	3,281 (1488)	3,566 (1618)	2,593 (1176)	2,818 (1278)
+8 ft (2.44 m)	3,485 (1581)	3,768 (1709)	3,263 (1480)	3,546 (1608)	2,564 (1163)	2,786 (1264)
+6 ft (1.83 m)	3,438 (1559)	3,717 (1686)	3,213 (1457)	3,492 (1584)	2,549 (1156)	2,770 (1257)
+4 ft (1.22 m)	3,374 (1530)	3,648 (1655)	3,146 (1427)	3,420 (1551)	2,521 (1144)	2,741 (1243)
+2 ft (0.61 m)	3,307 (1500)	3,575 (1622)	3,077 (1396)	3,345 (1517)	2,489 (1129)	2,706 (1227)
<b>Ground Level</b>	3,251 (1475)	3,513 (1594)	3,018 (1369)	3,280 (1488)	2,489 (1129)	2,706 (1227)
-2 ft (0.61 m)	3,201 (1452)	3,459 (1569)	2,965 (1345)	3,223 (1462)	2,466 (1118)	2,680 (1215)
-4 ft (1.22 m)	3,175 (1440)	3,430 (1556)	2,935 (1331)	3,190 (1447)	2,446 (1109)	2,659 (1206)
-6 ft (1.83 m)	3,182 (1443)	3,437 (1559)	2,938 (1333)	3,193 (1448)	2,443 (1108)	2,656 (1205)
-8 ft (2.44 m)	3,258 (1478)	3,520 (1597)	3,007 (1364)	3,269 (1483)	2,465 (1118)	2,679 (1215)
-10 ft (3.05 m)	3,441 (1561)	3,717 (1686)	3,175 (1440)	3,451 (1565)	2,530 (1148)	2,750 (1248)
-12 ft (3.66 m)	—	—	—	—	2,707 (1228)	2,943 (1335)
-14 ft (4.27 m)	—	—	—	—	3,239 (1469)	3,521 (1597)
<b>Dipper Lift:</b>						
+14 ft (4.27 m)	—	—	—	—	4,281 (1942)	4,281 (1942)
+12 ft (3.66 m)	5,822 (2641)	5,822 (2641)	5,618 (2548)	5,618 (2548)	4,046 (1835)	4,046 (1835)
+10 ft (3.05 m)	5,600 (2540)	5,600 (2540)	5,399 (2449)	5,399 (2449)	3,984 (1807)	3,984 (1807)
+8 ft (2.44 m)	5,562 (2523)	5,562 (2523)	5,360 (2431)	5,360 (2431)	3,913 (1775)	3,913 (1775)
+6 ft (1.83 m)	6,236 (2829)	6,236 (2829)	6,030 (2735)	6,030 (2735)	4,166 (1889)	4,166 (1889)
+4 ft (1.22 m)	7,424 (3368)	7,424 (3368)	7,203 (3267)	7,203 (3267)	4,102 (1861)	4,102 (1861)
+2 ft (0.61 m)	—	—	—	—	4,850 (2200)	4,850 (2200)

## BACKHOE OPERATIONAL DATA

	Standard Backhoe	Extendahoe®	
		Retracted	Extended
<b>Digging depth:</b>			
Maximum	14 ft 6 in (4.41 m)	14 ft 6 in (4.41 m)	17 ft 11 in (5.47 m)
Maximum w/ hi-capacity bucket	15 ft 0 in (4.51 m)	15 ft 0 in (4.51 m)	18 ft 6 in (5.63 m)
2 ft (610 mm) flat bottom	14 ft 4 in (4.37 m)	14 ft 4 in (4.37 m)	17 ft 10 in (5.43 m)
8 ft (2.44 m) flat bottom	13 ft 4 in (4.06 m)	13 ft 4 in (4.06 m)	17 ft 1 in (5.19 m)
<b>Overall reach from:</b>			
Rear axle centerline	21 ft 10 in (6.66 m)	21 ft 10 in (6.66 m)	25 ft 3 in (7.69 m)
Swing pivot	18 ft 2 in (5.55 m)	18 ft 2 in (5.55 m)	21 ft 7 in (6.58 m)
<b>Loading height</b>	12 ft 1 in (3.67 m)	12 ft 1 in (3.67 m)	14 ft 5 in (4.38 m)
<b>Loading reach</b>	4 ft 7 in (1.41 m)	4 ft 7 in (1.41 m)	7 ft 3 in (2.20 m)
<b>Swing arc</b>	180°	180°	180°
<b>Bucket rotation:</b>			
Straight Links	175.6°	175.6°	175.6°
Mechanical Coupler	198°	198°	198°
Hyd. Coupler – Extendahoe dipper	194.8°	194.8°	194.8°
Hyd. Coupler – Standard dipper	198°	198°	198°
<b>Stabilizer spread – operating:</b>			
Flip pad	9 ft 3 in (2.82 m)	9 ft 3 in (2.82 m)	9 ft 3 in (2.82 m)
Cast pad	9 ft 7 in (2.93 m)	9 ft 7 in (2.93 m)	9 ft 7 in (2.93 m)
<b>Digging force:</b>			
Bucket cylinder – SAE rated 3,460 psi	13,576 lbf (60 388 N)	13,576 lbf (60 388 N)	13,576 lbf (60 388 N)
Bucket cylinder – Power Lift	14,223 lbf (63 267 N)	14,223 lbf (63 267 N)	14,223 lbf (63 267 N)
Dipper cylinder – SAE rated 3,460 psi	8,657 lbf (38 508 N)	8,657 lbf (38 508 N)	6,305 lbf (28 045 N)
Dipper cylinder – Power Lift	9,070 lbf (40 345 N)	9,070 lbf (40 345 N)	6,606 lbf (29 382.7 N)
<b>Leveling angle:</b>			
Flip pad	11.8°	11.8°	11.8°
Cast pad	12.8°	12.8°	12.8°

NOTE: Lift capacities apply straight to the rear of prime mover. 4WD with 19.5 L x 24 tires equipped with 24 in (610 mm) Heavy-duty bucket and Case coupler except as noted.

## STANDARD EQUIPMENT

### OPERATOR ENVIRONMENT

See page 2.

### ENGINE

Case F5C Interim Tier 4 with CEGR/DPF after treatment turbocharged diesel  
IT4 or Tier 4 A Emissions compliant  
Full flow engine oil filter  
Air cleaner – replaceable dry type with radial seal  
Aspirated air cleaner  
Muffler, non spark arresting  
Fuel filter w/ water trap  
Self-adjusting belt tensioner  
Balanced engine  
High Pressure Common Rail computer controlled injection with diagnostic features  
Electronic throttles (foot and rotary hand)  
Antifreeze to -34° F (-37° C)  
Radiator with de-aeration bottle

### LOADER

See page 2.

### BACKHOE

See page 2.

### POWERTRAIN

Standard Powershuttle, 4F-4R Power Shuttle  
Synchromesh transmission  
Front axle:  
2WD heavy-duty front axle w/ 11 L x 16 tires  
4WD heavy-duty mechanically driven front axle w/ 12 L x 16.5 tires and drive shaft guard  
Rear axle:  
2/4WD heavy-duty outboard planetary drive, w/ 17.5 L x 24, 10 PR (R4) tires  
11.8 in (300 mm) torque converter  
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  
Maximum loader capacity:  
40 gpm @ 2,340 psi (151.4 L/min @ 161 bar)  
Loader torque regulation:  
27.4 gpm @ 3,450 psi (103.4 L/min @ 238 bar)  
Maximum backhoe capacity:  
40 gpm @ 3,100 psi (151.4 L/min @ 214 bar)

### HYDRAULICS (CONT.)

Backhoe torque regulation:  
35 gpm @ 3,450 psi (132 L/min @ 238 bar)  
Heavy-duty oil cooler  
7 micron, spin-on oil filter

### OTHER

Forward tilt engine hood  
Replaceable, molded front bumpers  
Front/rear tie downs  
Reflective logos  
Lights – cab and canopy:  
Rear tail/stop (2)  
Front flashers/turn (2)  
Rear flashers/turn (2)  
Cab only:  
2 front driving lights (55 W)  
Adjustable halogen work lights (55 W):  
2 front, 2 side (left & right), 4 rear  
Canopy only:  
2 front driving lights (55 W)  
Adjustable halogen work lights (55 W):  
2 side (left & right), 2 rear

## OPTIONAL EQUIPMENT

### OPERATOR ENVIRONMENT

Auto Ride Control – 4WD models  
Standard Ride Control – 2WD models  
Comfort Steering with momentary latching switch, two speed steering pump and 3rd/4th gear cutout.  
ROPS/FOPS certified protective cab w/ rear wipers and floor mat  
Cab Convenience Package containing:  
Pull-down sunvisor  
Window washer, front and rear  
Left-hand storage tray  
Deluxe interior package  
Tilt steering column  
Sound Reduction Package for cab models:  
levels reduced to 72 dB (A)  
Right-hand threshold storage box  
Viscous fan  
Air-conditioning for cab models  
Mechanical suspension seat with flip-up arm rests, 180° swivel, cloth or vinyl, adjustable seat and weight, backrest angle, lumbar and cushion angle  
Air Ride suspension seat with flip-up arm rests, 180° swivel  
Electric height adjustment, adjustable back rest and lumbar support – cab units cloth, canopy units vinyl  
Pull-down sunvisor for canopy models  
Radio, AM/FM Stereo/WB, MP3 aux input (cab models)  
3 in (75 mm) seat belt for mechanical and air suspension seat

### ENGINE

Cold Weather Starting Aid  
w/ dual 12 Volt batteries  
Block heater

### LOADER

Auxiliary hydraulics for loader-mounted equipment with thumb-operated proportional control  
Hydraulic front quick coupler  
Bolt-on cutting edges  
Loader linkage w/o loader bucket  
Tool portfolio of additional attachments  
Buckets (see page 2)

### BACKHOE

Auxiliary hydraulics with flow from 0 to 36 gal/min (0 to 136 L/min)  
Extendahoe®  
Power Lift  
Serrated dipper teeth extensions  
Two-lever control (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  
Hydraulic bucket quick coupler  
Bucket retrofit kit  
Buckets (see page 2)

### POWERTRAIN

Powershift S-Type transmission, 4F-3R electronic transmission controller and kick down in loader control lever (2WD or 4WD)  
Powershift H-Type transmission, 4F-3R hydraulic clutch shifting with auto function  
Rear axle heavy-duty outboard planetary drive w/ 19.5 L x 24 tires either 2WD or 4WD

### HYDRAULICS

Auxiliary backhoe unidirectional hydraulics  
Auxiliary backhoe bidirectional hydraulics  
Hand lever operated for manual controls  
Button operated for pilot controls

### OTHER

Electrical master disconnect switch and remote jump start  
11 L x 16 or 12 L x 16.5 front tires  
17.5 L x 24 or 19.5 L x 24 rear tires  
Front counterweights:  
700 lb and 1,100 lb (318 kg and 500 kg)  
Rotating beacon

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

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