

ENGINE

Model	Case F5C, Tier 4 Interim Emissions Certified
Type	Diesel 4-stroke, turbocharged
Cylinders	4
Bore/Stroke	3.90 x 4.33 in (99 x 110 mm)
Displacement	207 in ³ (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	2320 – 2430
Horsepower @ 2200 RPM:	
Gross	110 hp (82 kW)
Net	108 hp (81 kW)
Maximum torque @ 1400 RPM:	
Gross	339 lb-ft (460 N-m)
Net	338 lb-ft (458 N-m)
Torque rise at rated speed	30%
Radiator:	
Core type	Square wave
Core size area	486 in ² (3145 cm ²)
Rows of tubes	4
Fan:	
Style	Viscous 9 blade suction
Diameter	19.685 in (500 mm)
Ratio	1.4:1
Pump operating angle ratings:	
Side to side	Rated 35°
Fore and aft	Rated 35°
Oil filtration	Replaceable, full flow cartridge

NOTE: *Engine speeds w/ standard transmission.
Meets federal emission regulations.

POWERTRAIN

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

POWERTRAIN (cont.)

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	3.9 (6.3)	4.7 (7.6)
2nd	6.3 (10.1)	7.5 (12.1)
3rd	13.2 (21.3)	15.9 (25.6)
4th	24.2 (38.9)	29.0 (46.7)*

NOTE: Travel speeds at 2306 engine RPM
w/ 21.0 L X 24.0 rear tires.
*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	4.0 (6.4)	4.8 (7.7)
2nd	6.5 (10.5)	7.8 (12.6)
3rd	13.7 (22.0)	16.4 (26.4)
4th	23.0 (37.0)	–

NOTE: Travel speeds at 2306 engine RPM.

Torque converter ratio	2.6
Differential lock	On-the-go push-button activation

Front 4WD – H-Type/rear axle:	
Differential ratio	2.1 (2.133)/2.5
Planetary hub ratio	6.0 (6.0)/6.4
Total reduction ratio	12.8 (12.8)/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 ² (0.25 m ²)
Parking brakes	Trans Mounted spring-applied hydraulic release – SAHR

ELECTRICAL

Voltage	12 Volts, negative ground
Alternator	120 amp
Battery	850 cold-cranking amps
Opt. batteries (2)	850 cold-cranking amps
Power plugs (2)	30 amps total

OPERATOR ENVIRONMENT

ROPS/FOPS canopy; Key start; Hydrostatic steering; Vinyl air-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; Transmission temperature; Water in fuel filter; Battery voltage; Low fuel; Air filter restriction; Hydraulic filter restriction; A/C not functioning.

Horn dual switched front and rear

OPERATING WEIGHT

Configuration – SAE Transport:

93 in (2.36 m) 4 IN 1[®] bucket, 4WD, Extendahoe[®], 24 in (0.61 m) HD bucket, flip stabilizer pads, 1,100 lb (500 kg) counterweight, 2-door ROPS cab, air-suspension seat, ride control, tool box, backhoe coupler, backhoe auxiliary hydraulics, dual battery, no operator: 20,458 lb (9280 kg)

Add-on weights:

Cab – over canopy	0 lb (0 kg)
Counterweights	700 lb (318 kg) 1,100 lb (500 kg)
Extendahoe [®]	335 lb (152 kg)
4WD w/ driveshaft guard	393 lb (178 kg)

Buckets:

93 in (2.36 m) 4 IN 1 [®]	1,685 lb (764 kg)
93 in (2.36 m) Long Lip	1,188 lb (539 kg)
96 in (2.44 m) Long Lip	1,415 lb (642 kg)
24 in (0.61 m) Heavy-Duty Universal:	427 lb (194 kg)

HYDRAULICS

Pump:
 Bosch Rexroth Series 31 Variable Displacement Axial Piston Pump, dual mode torque regulation, mode selected by solenoid

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:
 43 gpm @ 2,340 psi (162.6 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 to 31.5 gpm (0 to 119 L/min)

Backhoe flow @ rated engine RPM:
 43 gpm @ 2,340 psi (162.6 L/min @ 161 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 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.

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

SERVICE CAPACITY

Fuel tank 42.0 gal (159 L)

Hydraulic system:
 Total 139 qt (132.0 L)
 w/ Extendahoe® 145 qt (137.7 L)
 Reservoir w/ filter 53 qt (50.0 L)
 Reservoir w/o filter 50 qt (47.0 L)

Transmission – total system:
 2WD Standard 18 qt (17.0 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 (18.0 L)

Front axle:
 2WD each hub 0.8 qt (0.8 L)
 4WD Differential 9.1 qt (8.6 L)
 4WD Planetaries – each 1.1 qt (1.0 L)

Rear axle:
 Differential and planetaries 14.4 qt (13.6 L)

Engine oil w/ filter 14.4 qt (13.6 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:
 2WD 14.0 L x 17.5, 10-ply Industrial Rib
 4WD 14.0 L x 17.5, 10-ply SGL SS

Rear tires:
 2/4WD 21.0 L x 24.0, 10-ply R4

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.

Loader bucket sizes:

Width	Weight	Struck	Heaped
Long Lip Bucket (w/ lift points and bolt-on cutting edge)			
93 in (2.36 m)	1,123 lb (509 kg)	1.1 yd ³ (0.84 m ³)	1.3 yd ³ (0.99 m ³)
96 in (2.44 m)	1,324 lb (601 kg)	1.27 yd ³ (0.97 m ³)	1.5 yd ³ (1.15 m ³)
4 IN 1® Bucket			
93 in (2.36 m)	1,628 lb (738 kg)	1.0 yd ³ (0.76 m ³)	1.2 yd ³ (0.92 m ³)

OTHER SPECIFICATIONS (cont.)

Turning diameter*:

2WD:
 Brakes on 12 ft 8 in (3.87 m)
 Brakes off 13 ft 2 in (4.00 m)

4WD – engaged:
 Brakes on 12 ft 6 in (3.81 m)
 Brakes off 14 ft 4 in (4.36 m)

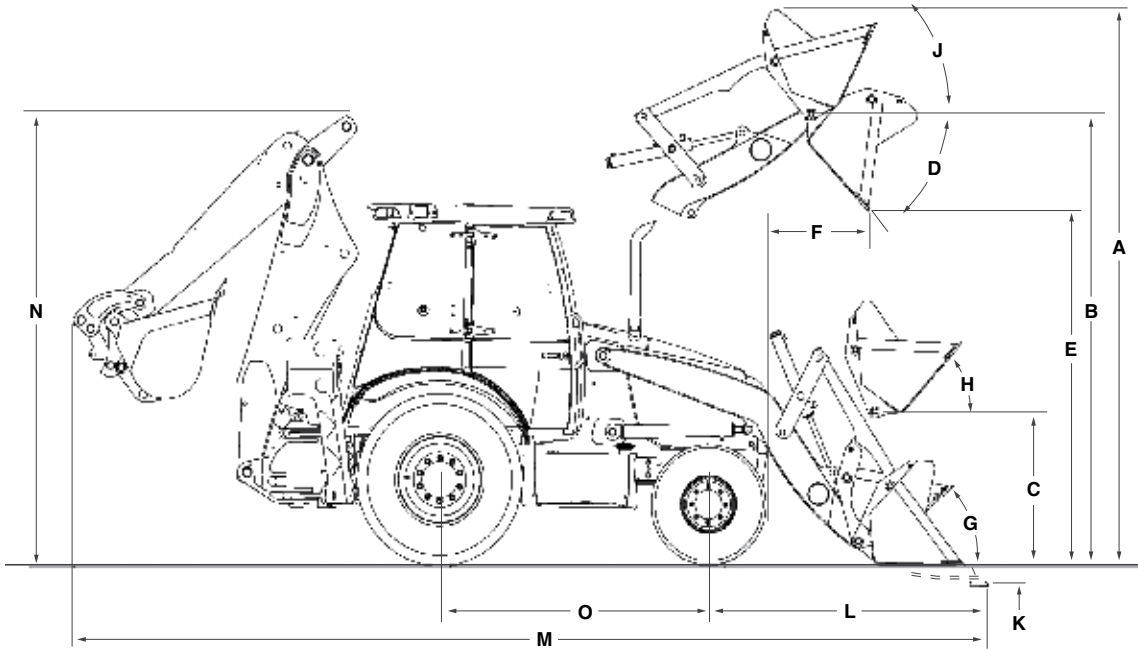
4WD – disengaged:
 Brakes on 11 ft 8 in (3.55 m)
 Brakes off 12 ft 8 in (3.86 m)

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/ flip over dirt pad.

Backhoe bucket sizes:

Width	Weight	Heaped
Universal Buckets		
12 in (305 mm)	295 lb (134 kg)	3.40 ft ³ (0.10 m ³)
18 in (457 mm)	356 lb (162 kg)	5.30 ft ³ (0.15 m ³)
24 in (610 mm)	427 lb (194 kg)	7.70 ft ³ (0.22 m ³)
30 in (762 mm)	489 lb (222 kg)	10.20 ft ³ (0.29 m ³)
36 in (914 mm)	552 lb (251 kg)	12.70 ft ³ (0.36 m ³)
High Capacity Buckets		
24 in (610 mm)	447 lb (203 kg)	8.50 ft ³ (0.24 m ³)
30 in (762 mm)	502 lb (228 kg)	10.60 ft ³ (0.30 m ³)

NOTE: *Turning diameter dimensions curb to curb w/ long lip bucket.



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

LOADER DIMENSIONS

	Long Lip Bucket*	4 IN 1® 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	12.8 in (325 mm)	12.8 in (325 mm)
D. Dump angle at full height	45°	45°
E. Dump clearance at full height, 45° dump:		
Bucket	8 ft 11 in (2.72 m)	9 ft 1 in (2.77 m)
Clam open	–	9 ft 10 in (3.01 m)
F. Dump reach at full height, 45° dump – from bumper:		
Bucket	29.2 in (741 mm)	27.8 in (707 mm)
Clam open	–	13.8 in (351 mm)
Bucket rollback:		
G. @ Groundline	40°	41°
H. @ SAE carry	46°	46°
J. @ Full height	Adjustable	Adjustable
K. Digging depth below grade:		
Bucket flat	6.2 in (157 mm)	5.9 in (150 mm)
Clam open – dozing	–	3.5 in (89 mm)
L. Reach from front axle centerline – bucket on ground	6 ft 7 in (2.05 m)	6 ft 5 in (1.99 m)
Lift capacity to full height – calculate values	8,325 lb (3 776 kg)	8,025 lb (3 640 kg)
Breakout force – calculate values:		
Lift cylinders	11,463 lb (5099 daN)	11,225 lb (4993 daN)
Dump cylinders	12,776 lb (5683 daN)	13,717 lb (6102 daN)
Bucket cutting edge width	92.7 in (2.36 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	3.8 sec	3.8 sec
Clam:		
Open time	–	1.3 sec
Close time	–	1.1 sec

NOTE: Loader dimensions taken with 4WD.

DIMENSIONS

	Standard Backhoe	Extendahoe®	
		Retracted	Extended
M. Overall transport length:			
Long Lip bucket	23 ft 10 in (7.25 m)	23 ft 10 in (7.25 m)	—
4 IN 1® bucket	23 ft 7 in (7.20 m)	23 ft 7 in (7.20 m)	—
Overall transport width	7 ft 9 in (2.36 m)	7 ft 9 in (2.36 m)	—
Height:			
To top of canopy	8 ft 9 in (2.68 m)	8 ft 9 in (2.68 m)	8 ft 9 in (2.68 m)
To top of cab	8 ft 11 in (2.71 m)	8 ft 11 in (2.71 m)	8 ft 11 in (2.71 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 7 in (3.54 m)	11 ft 8 in (3.54 m)	—
Ground clearance at backhoe frame	14.2 in (360 mm)	14.2 in (360 mm)	14.2 in (360 mm)
Angle of departure	18.7°	18.7°	18.7°
Front wheel tread:			
14.0 L x 17.5 Industrial Rib	74.3 in (1.89 m)	74.3 in (1.89 m)	—
14.0 L x 17.5	74.3 in (1.89 m)	74.3 in (1.89 m)	—
Rear wheel tread:			
21.0 L x 24.0	69.6 in (1.77 m)	69.6 in (1.77 m)	—
O. Wheelbase:			
2WD	84.0 in (2.13 m)	84.0 in (2.13 m)	—
4WD	84.5 in (2.15 m)	84.5 in (2.15 m)	—

NOTE: Dimensions taken with 21.0 L x 24.0 rear tires and 14.5/75.0 L x 16.1 front tires except that data marked 4WD is taken with 14.0 L x 17.5 front tires.

CYLINDERS

	Bore Diameter	Rod Diameter	Stroke	Closed Length
Loader:				
Lift (2)	3.50 in (88.9 mm)	1.875 in (47.6 mm)	29.13 in (740.0 mm)	41.54 in (1055.0 mm)
Dump (2)	3.25 in (82.6 mm)	1.75 in (44.5 mm)	20.33 in (516.5 mm)	30.78 in (781.8 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)
Backhoe:				
Boom	5.50 in (139.7 mm)	2.75 in (69.9 mm)	40.57 in (1030.5 mm)	57.05 in (1449.0 mm)
Dipperstick	5.25 in (133.4 mm)	2.75 in (69.9 mm)	23.53 in (597.7 mm)	38.49 in (977.7 mm)
Bucket	3.50 in (88.9 mm)	2.50 in (63.5 mm)	38.95 in (989.4 mm)	51.78 in (1315.2 mm)
Extendahoe®	3.00 in (76.2 mm)	1.75 in (44.5 mm)	48.03 in (1220.0 mm)	64.02 in (1626.0 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 – 2WD	Rear	Front – 4WD
Maximum static	65,506 lb (29 713 kg)	70,848 lb (32 136 kg)	67,883 lb (30 791 kg)
Dynamic operating	44,261 lb (20 077 kg)	49,494 lb (22 450 kg)	47,426 lb (21 512 kg)
Static operating	17,704 lb (8031 kg)	19,798 lb (8980 kg)	18,969 lb (8604 kg)
SAE J43	12,000 lb (5443 kg)	16,197 lb (7347 kg)	12,182 lb (5526 kg)
Oscillation – front axle	22° total – 11% each side	—	22° total – 11% each side

BACKHOE LIFT CAPACITIES

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

	Standard Backhoe		Extendahoe®			
	Standard	Power Lift	Retracted		Extended	
Boom Lift	Lift Capacity lb (kg)	Lift Capacity lb (kg)	Lift Capacity lb (kg)	Lift Capacity lb (kg)	Lift Capacity lb (kg)	Lift Capacity lb (kg)
+18 ft (5.50 m)	—	—	—	—	2,548 (1156)	2,710 (1229)
+16 ft (4.87 m)	—	—	—	—	2,783 (1262)	2,961 (1343)
+14 ft (4.27 m)	3,942 (1788)	4,177 (1895)	3,688 (1673)	3,923 (1779)	2,967 (1346)	3,156 (1431)
+12 ft (3.66 m)	4,160 (1887)	4,409 (2000)	3,898 (1768)	4,147 (1881)	3,037 (1378)	3,231 (1465)
+10 ft (3.05 m)	4,204 (1907)	4,456 (2021)	3,937 (1786)	4,188 (1900)	3,051 (1384)	3,246 (1472)
+8 ft (2.44 m)	4,180 (1896)	4,430 (2009)	3,908 (1773)	4,158 (1886)	3,052 (1384)	3,247 (1473)
+6 ft (1.83 m)	4,128 (1873)	4,374 (1984)	3,853 (1748)	4,099 (1859)	3,037 (1378)	3,231 (1466)
+4 ft (1.22 m)	4,064 (1843)	4,305 (1953)	3,785 (1717)	4,027 (1827)	3,011 (1366)	3,203 (1453)
+2 ft (0.61 m)	4,001 (1815)	4,239 (1923)	3,720 (1687)	3,957 (1795)	2,983 (1353)	3,174 (1440)
Ground Level	3,942 (1788)	4,175 (1894)	3,657 (1659)	3,891 (1765)	2,970 (1347)	3,160 (1433)
-2 ft (0.61 m)	3,893 (1766)	4,123 (1870)	3,606 (1635)	3,836 (1740)	2,946 (1336)	3,134 (1422)
-4 ft (1.22 m)	3,863 (1752)	4,091 (1856)	3,572 (1620)	3,800 (1724)	2,929 (1329)	3,116 (1413)
-6 ft (1.83 m)	3,861 (1751)	4,088 (1854)	3,565 (1617)	3,793 (1720)	2,924 (1326)	3,111 (1411)
-8 ft (2.44 m)	3,910 (1774)	4,141 (1878)	3,609 (1637)	3,839 (1741)	2,941 (1334)	3,129 (1419)
-10 ft (3.05 m)	4,088 (1854)	4,329 (1964)	3,776 (1713)	4,017 (1822)	2,985 (1354)	3,175 (1440)
-12 ft (3.66 m)	4,245 (1925)	4,494 (2038)	3,900 (1769)	4,149 (1882)	3,102 (1407)	3,300 (1497)
-14 ft (4.27 m)	—	—	—	—	3,307 (1500)	3,519 (1596)
Dipper Lift						
+16 ft (4.87 m)	—	—	—	—	4,312 (1956)	4,312 (1956)
+14 ft (4.27 m)	6,102 (2768)	6,102 (2768)	5,853 (2655)	5,853 (2655)	4,020 (1823)	4,020 (1823)
+12 ft (3.66 m)	6,651 (3017)	6,651 (3017)	6,409 (2907)	6,409 (2907)	5,252 (2382)	5,252 (2382)
+10 ft (3.05 m)	6,891 (3126)	6,891 (3126)	6,650 (3016)	6,650 (3016)	4,849 (2200)	4,849 (2200)
+8 ft (2.44 m)	7,147 (3243)	7,147 (3243)	6,903 (3131)	6,903 (3131)	4,945 (2243)	4,945 (2243)
+6 ft (1.83 m)	7,178 (3256)	7,178 (3256)	6,928 (3142)	6,928 (3142)	4,670 (2118)	4,670 (2118)
+4 ft (1.22 m)	8,226 (3731)	8,226 (3731)	7,953 (3608)	7,953 (3608)	4,424 (2007)	4,424 (2007)
+2 ft (0.61 m)	—	—	—	—	5,103 (2315)	5,103 (2315)

BACKHOE OPERATIONAL DATA (4WD)

	Standard Backhoe	Extendahoe®	
		Retracted	Extended
Digging depth:			
Maximum	15 ft 6 in (4.72 m)	15 ft 6 in (4.72 m)	19 ft 6 in (5.94 m)
Maximum with hi-capacity bucket	16 ft 0 in (4.88 m)	16 ft 0 in (4.88 m)	20 ft 0 in (6.10 m)
2 ft (610 mm) flat bottom	15 ft 5 in (4.69 m)	15 ft 5 in (4.69 m)	19 ft 5 in (5.92 m)
8 ft (2.44 m) flat bottom	14 ft 5 in (4.40 m)	14 ft 5 in (4.40 m)	18 ft 8 in (5.63 m)
Overall reach from:			
Rear axle centerline	23 ft 3 in (7.10 m)	23 ft 3 in (7.10 m)	27 ft 2 in (8.28 m)
Swing pivot	19 ft 7 in (5.98 m)	19 ft 7 in (5.98 m)	23 ft 6 in (7.17 m)
Loading height	13 ft 1 in (4.00 m)	13 ft 1 in (4.00 m)	15 ft 9 in (4.81 m)
Loading reach – dipper retracted	5 ft 1 in (1.56 m)	5 ft 1 in (1.56 m)	8 ft 1 in (2.47 m)
Swing arc 1	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 (centers):			
Flip pad	10 ft 9 in (3.26 m)	10 ft 9 in (3.26 m)	10 ft 9 in (3.26 m)
Cast pad	11 ft 1 in (3.37 m)	11 ft 1 in (3.37 m)	11 ft 1 in (3.37 m)
Digging force:			
Bucket cylinder – SAE rated 3,460 psi	14,940 lb (66 455 N)	14,940 lb (66 455 N)	14,940 lb (66 455 N)
Bucket cylinder – Power Lift	15,652 lb (69 623 N)	15,652 lb (69 623 N)	15,652 lb (69 623 N)
Dipper cylinder – SAE rated 3,460 psi	9,047 lb (40 244 N)	9,047 lb (40 244 N)	6,463 lb (28 748 N)
Dipper cylinder – Power Lift	9,478 lb (42 163 N)	9,478 lb (42 163 N)	6,770 lb (30 114 N)
Leveling angle:			
Flip pad	11.2°	11.2°	11.2°
Cast pad	12.0°	12.0°	12.0°

NOTE: Lift capacities apply straight to the rear of prime mover. 4WD equipped with 24 in (610 mm) Universal HD trenching bucket and Case coupler except as noted.

STANDARD EQUIPMENT

OPERATOR ENVIRONMENT

See page 1

ENGINE

Case F5C Interim Tier 4 with
CEGR/DPF after-treatment

IT4 or Tier 4 A Emissions compliant

Full flow engine oil filter

Air cleaner – replaceable dry type
with radial seal

Aspirated air cleaner

Diesel Particulate Filter – spark arresting

Fuel filter with water trap

Fuel tank – useable capacity 42 gal (159 L)

Radiator with de-aeration bottle

Antifreeze to -34° F (-37° C)

Glow plugs cold start

Electronic throttles – foot and rotary hand

Viscous drive fan

Self adjusting belt tensioner

High Pressure Common Rail computer
controlled injection with diagnostic features

POWERTRAIN

Standard Powershuttle, 4F-4R Power Shuttle
Synchromesh transmission

Front axle:

2WD heavy-duty front axle with 14.0 L x 17.5
tires with Industrial Rib tread

4WD heavy-duty mechanically driven front
axle with 14.0 L x 17.5 tires and drive
shaft guard

POWERTRAIN (continued)

Rear axle:

2/4WD heavy-duty outboard planetary drive
with 21.0 L x 24.0 tires

Torque converter – 11.8 in (300 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

Maximum loader capacity:

43.0 gpm @ 2,340 psi (162.6 L/min @ 161 bar)

Loader torque regulation:

28.5 gpm @ 3,450 psi (107.8 L/min @ 238 bar)

Maximum backhoe capacity:

43.0 gpm @ 3,100 psi (162.6 L/min @ 214 bar)

Backhoe torque regulation:

33.0 gpm @ 3,450 psi (125.0 L/min @ 238 bar)

Heavy-duty oil cooler

7 micron, spin on oil filter

LOADER

See page 2

BACKHOE

Power Lift

See page 2

OTHER

14.0 L x 17.5, 10 PR (4WD) front tires

21.0 L x 24.0, 10 PR rear tires

Forward tilt engine hood

Replaceable, molded front bumpers

Front/Rear tie downs

Reflective logos

Lights – cab and canopy:

2 Rear tail/stop

2 Front flashers/turn

2 Rear flashers/turn

Lights – cab only:

2 front driving lights – 55 W

Adjustable halogen work lights – 55 W:

2 front

2 side – left and right

4 rear

Lights – canopy only:

2 front driving lights – 55 W

Adjustable halogen work lights – 55 W:

2 side – left and 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 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, tilt steering column, 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

Electric height adjustment, adjustable backrest
and lumbar support – cab units cloth,
canopy units vinyl

Pull-down sun visor for canopy models

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
with dual 12 Volt batteries

Block heater

POWERTRAIN

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

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

HYDRAULICS

Auxiliary backhoe unidirectional hydraulics

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

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

Gripper teeth extensions on dipper

Auxiliary hydraulics flow from
0 to 36 gal/min (0 to 136 L/min)

Extendahoe®

Two-lever control – backhoe or Extendahoe®

Standard dipper

Bucket retrofit kit

Flip over stabilizer pads

Cemetery/Street pads

Buckets – see page 2

OTHER

Electrical master disconnect switch and
remote jump-start

14.0 L x 17.5 10 PR industrial rib (2WD) front
tires

Lift hooks – export

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

Rotating beacon

Export protection package



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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All Case construction equipment is biodiesel ready.