

3754D



Engine	3754D Road Builder	3754D Live Heel	3754D Butt & Top
Manufacturer and Model	John Deere 6090H		
Non-Road Emission Standards	EPA Tier 3/EU Stage IIIA		
Cylinders	6		
Engine Displacement	9.0 L (549 cu. in.)		
Net Peak Power (ISO 9249)	220 kW (296 hp)		
Off-Level Capacity	100% (45 deg.)		
Aspiration	Turbocharged, air-to-air charge air cooler		
Cooling			
Fan Drive	Cool-on-demand hydraulic-driven, suction-type, remote-mounted drive		
Engine Coolant Rating	-37 deg. C (-34 deg. F)		
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low	3.4 km/h (2.1 mph)		
High	5.5 km/h (3.4 mph)		
Controls	Pilot levers, short stroke, low effort; hydraulic pilot with shutoff lever		
Hydraulics			
Open center, load sensing			
Main Pumps			
Maximum Rated Flow x 2	304 L/m (80.3 gpm)		
Pilot Pump (one gear)			
Maximum Rated Flow	34 L/m (8.9 gpm)		
System Relief Pressure	3900 kPa (566 psi)		
Maximum Secondary Pump Flow			
34 L/m (8.9 gpm)			
System Operating Pressure			
Implement Circuits	34 300 kPa (4,975 psi)		
Travel Circuits	34 300 kPa (4,975 psi)		
Swing Circuits	34 300 kPa (4,975 psi)		
Power Boost	36 300 kPa (5,265 psi)		
Pilot Circuits at 34 L/m (8.9 gpm)	3900 kPa (566 psi)		
Cylinders			
Heat-treated, chrome-plated, polished cylinder rods; hardened steel (replaceable bushings) pivot pins			
Boom (2)			
Bore	145 mm (5.7 in.)	170 mm (6.7 in.)	170 mm (6.7 in.)
Rod Diameter	100 mm (3.9 in.)	115 mm (4.5 in.)	115 mm (4.5 in.)
Stroke	1520 mm (59.8 in.)	1465 mm (57.7 in.)	1465 mm (57.7 in.)
Arm (1)			
Bore	170 mm (6.7 in.)	190 mm (7.5 in.)	190 mm (7.5 in.)
Rod Diameter	115 mm (4.5 in.)	130 mm (5.1 in.)	130 mm (5.1 in.)
Stroke	1740 mm (68.5 in.)	1700 mm (66.9 in.)	1700 mm (66.9 in.)
Bucket (1)			
Bore	140 mm (5.5 in.)	N/A	N/A
Rod Diameter	95 mm (3.7 in.)	N/A	N/A
Stroke	1250 mm (49.2 in.)	N/A	N/A
Heel (1)			
Bore	N/A	145 mm (5.7 in.)	N/A
Rod Diameter	N/A	95 mm (3.7 in.)	N/A
Stroke	N/A	1250 mm (49.2 in.)	N/A
Tilt (1)			
Bore	N/A	N/A	115 mm (4.53 in.)
Rod Diameter	N/A	N/A	80 mm (3.1 in.)
Stroke	N/A	N/A	1060 mm (41.7 in.)

Specifications are subject to change without notice.



Electrical	3754D Road Builder	3754D Live Heel	3754D Butt & Top
Voltage	24 volt		
Batteries	2 x 12 volt		
Reserve Capacity	440 min.		
Alternator Rating	80 amp		
Undercarriage			
Carrier Rollers (per side)	2		
Track Rollers (per side)	8		
Shoes, Double Grousers (per side)	49		
Drawbar Pull	36 102 kg (79,590 lb.)		
Track Adjustment	Hydraulic		
Track Guides	Front and center		
Swing Mechanism			
Swing Speed	11 rpm		
Swing Torque, Standard	111 194 Nm (81,950 lb.-ft.)		
Swing Torque, Optional	148 462 Nm (109,500 lb.-ft.)		
Ground Pressure			
700-mm (28 in.) Double-Grouser Shoes	63.8 kPa (9.26 psi)	74.5 kPa (10.80 psi)	74.5 kPa (10.80 psi)
Refill Capacities			
Fuel Tank	1050.0 L (277.0 gal.)	1050.0 L (277.0 gal.)	1050.0 L (277.0 gal.)
Cooling System	40.0 L (11.0 gal.)	40.0 L (11.0 gal.)	40.0 L (11.0 gal.)
Engine Oil with Filter	27.0 L (7.0 gal.)	27.0 L (7.0 gal.)	27.0 L (7.0 gal.)
Hydraulic Tank	195.0 L (52.0 gal.)	195.0 L (52.0 gal.)	195.0 L (52.0 gal.)
Hydraulic System	340.0 L (90.0 gal.)	367.0 L (97.0 gal.)	367.0 L (97.0 gal.)
Propel Gearbox (each)	9.2 L (9.7 qt.)	9.2 L (9.7 qt.)	9.2 L (9.7 qt.)
Swing Gearbox	17.0 L (18.0 qt.)	17.0 L (18.0 qt.)	17.0 L (18.0 qt.)
Pump Drive Gearbox	1.1 L (1.2 qt.)	1.1 L (1.2 qt.)	1.1 L (1.2 qt.)
Operating Weights			
With full fuel tank, 79-kg (175 lb.) operator, and 700-mm (28 in.) double-grouser shoes	6215-kg (13,702 lb.) counterweight; 1285-kg (2,832 lb.), 1220-mm (48 in.) riser and side-entry cab; 1.76-m ³ (2.3 cu. yd.), 1370-mm (54 in.), 1160-kg (2,557 lb.) bucket; and 3.2-m (10 ft. 6 in.) arm	8446-kg (18,620 lb.) counterweight; 1718-kg (3,788 lb.), 1220-mm (48 in.) riser and side-entry cab; and 998-kg (2,200 lb.) grapple	8446-kg (18,620 lb.) counterweight; 1718-kg (3,788 lb.), 1220-mm (48 in.) riser and side-entry cab; and 2245-kg (4,950 lb.) grapple
SAE Operating Weight	41 196 kg (90,882 lb.)	46 108 kg (101,651 lb.)	46 262 kg (101,990 lb.)

Lift Capacity — 3754D Road Builder with 3.2-m (10 ft. 6 in.) arm, 1.76-m³ (2.3 cu. yd.) bucket, and 700-mm (28 in.) shoes

Load Point Height	3.1 m (10 ft.)		4.6 m (15 ft.)		6.1 m (20 ft.)		7.6 m (25 ft.)		9.1 m (30 ft.)	
	Over front	Over side	Over front	Over side	Over front	Over side	Over front	Over side	Over front	Over side
7.6 m (25 ft.)							4536 kg (10,000 lb.)	4536 kg (10,000 lb.)		
6.1 m (20 ft.)							6640 kg (14,639 lb.)	6307 kg (13,905 lb.)	4296 kg (9,471 lb.)	4296 kg (9,471 lb.)
4.6 m (15 ft.)							7326 kg (16,151 lb.)	6065 kg (13,371 lb.)	6824 kg (15,044 lb.)	4314 kg (9,511 lb.)
3.1 m (10 ft.)			14 718 kg (32,448 lb.)	12 700 kg (27,999 lb.)	10 254 kg (22,606 lb.)	8225 kg (18,133 lb.)	8318 kg (18,338 lb.)	5733 kg (12,639 lb.)	6894 kg (15,199 lb.)	4154 kg (9,158 lb.)
1.5 m (5 ft.)					12 055 kg (26,577 lb.)	7617 kg (16,793 lb.)	9034 kg (19,917 lb.)	5405 kg (11,916 lb.)	6703 kg (14,778 lb.)	3977 kg (8,768 lb.)
Ground Line			8726 kg (19,238 lb.)	8726 kg (19,238 lb.)	12 518 kg (27,597 lb.)	7243 kg (15,968 lb.)	8760 kg (19,312 lb.)	5158 kg (11,371 lb.)	6549 kg (14,438 lb.)	3836 kg (8,457 lb.)
-1.5 m (-5 ft.)	7794 kg (17,183 lb.)	7794 kg (17,183 lb.)	8498 kg (18,735 lb.)	8498 kg (18,735 lb.)	12 350 kg (27,227 lb.)	7097 kg (15,646 lb.)	8618 kg (18,999 lb.)	5031 kg (11,091 lb.)	6475 kg (14,275 lb.)	3769 kg (8,309 lb.)
-3.1 m (-10 ft.)	10 828 kg (23,872 lb.)	10 828 kg (23,872 lb.)	11 045 kg (24,350 lb.)	11 045 kg (24,350 lb.)	12 374 kg (27,280 lb.)	7118 kg (15,693 lb.)	8617 kg (18,997 lb.)	5030 kg (11,089 lb.)		
-4.6 m (-15 ft.)	8345 kg (18,398 lb.)	8345 kg (18,398 lb.)	13 352 kg (29,436 lb.)	11 622 kg (25,622 lb.)	10 535 kg (23,226 lb.)	7294 kg (16,081 lb.)	7834 kg (17,271 lb.)	5199 kg (11,462 lb.)		

Lift Capacity — 3754D Live Heel with 998-kg (2,200 lb.) grapple and 700-mm (28 in.) shoes

Load Point Height	4.6 m (15 ft.)		6.1 m (20 ft.)		7.6 m (25 ft.)		9.1 m (30 ft.)		10.7 m (35 ft.)		12.2 m (40 ft.)	
	Over front	Over side	Over front	Over side	Over front	Over side	Over front	Over side	Over front	Over side	Over front	Over side
12.2 m (40 ft.)			14 601 kg (32,190 lb.)	13 708 kg (30,220 lb.)	11 639 kg (25,660 lb.)	9643 kg (21,260 lb.)						
10.7 m (35 ft.)			13 254 kg (29,220 lb.)	13 254 kg (29,220 lb.)	11 948 kg (26,340 lb.)	9535 kg (21,020 lb.)	9689 kg (21,360 lb.)	6917 kg (15,250 lb.)				
9.1 m (30 ft.)			12 959 kg (28,570 lb.)	12 959 kg (28,570 lb.)	11 576 kg (25,520 lb.)	9870 kg (21,760 lb.)	9562 kg (21,080 lb.)	6795 kg (14,980 lb.)	7498 kg (16,530 lb.)	5298 kg (11,680 lb.)		
7.6 m (25 ft.)			12 982 kg (28,620 lb.)	12 982 kg (28,620 lb.)	11 803 kg (26,020 lb.)	9902 kg (21,830 lb.)	9712 kg (21,410 lb.)	6940 kg (15,300 lb.)	7103 kg (15,660 lb.)	4922 kg (10,850 lb.)		
6.1 m (20 ft.)			13 281 kg (29,280 lb.)	13 281 kg (29,280 lb.)	12 383 kg (27,300 lb.)	9766 kg (21,530 lb.)	9689 kg (21,360 lb.)	6913 kg (15,240 lb.)	7208 kg (15,890 lb.)	5026 kg (11,080 lb.)	5788 kg (12,760 lb.)	3983 kg (8,780 lb.)
4.6 m (15 ft.)			16 134 kg (35,570 lb.)	14 152 kg (31,200 lb.)	13 168 kg (29,030 lb.)	9489 kg (20,920 lb.)	9566 kg (21,090 lb.)	6799 kg (14,990 lb.)	7289 kg (16,070 lb.)	5103 kg (11,250 lb.)	5797 kg (12,780 lb.)	3992 kg (8,800 lb.)
3.1 m (10 ft.)			13 431 kg (29,610 lb.)	13 431 kg (29,610 lb.)	12 850 kg (28,330 lb.)	9135 kg (20,140 lb.)	9362 kg (20,640 lb.)	6609 kg (14,570 lb.)	7303 kg (16,100 lb.)	5112 kg (11,270 lb.)	5724 kg (12,620 lb.)	3919 kg (8,640 lb.)
1.5 m (5 ft.)			18 239 kg (40,210 lb.)	12 828 kg (28,280 lb.)	12 433 kg (27,410 lb.)	8754 kg (19,300 lb.)	9281 kg (20,460 lb.)	6532 kg (14,400 lb.)	7176 kg (15,820 lb.)	4994 kg (11,010 lb.)	5638 kg (12,430 lb.)	3837 kg (8,460 lb.)
Ground Line	25 592 kg (56,420 lb.)	19 119 kg (42,150 lb.)	17 550 kg (38,690 lb.)	12 107 kg (26,690 lb.)	12 215 kg (26,930 lb.)	8550 kg (18,850 lb.)	9076 kg (20,010 lb.)	6341 kg (13,980 lb.)	7008 kg (15,450 lb.)	4835 kg (10,660 lb.)	5566 kg (12,270 lb.)	3769 kg (8,310 lb.)
-1.5 m (-5 ft.)	24 413 kg (53,820 lb.)	18 207 kg (40,140 lb.)	17 092 kg (37,680 lb.)	11 698 kg (25,790 lb.)	11 902 kg (26,240 lb.)	8265 kg (18,220 lb.)	8891 kg (19,600 lb.)	6160 kg (13,580 lb.)	6904 kg (15,220 lb.)	4736 kg (10,440 lb.)	5253 kg (11,580 lb.)	3756 kg (8,280 lb.)
-3.1 m (-10 ft.)	21 215 kg (46,770 lb.)	17 881 kg (39,420 lb.)	14 597 kg (32,180 lb.)	11 576 kg (25,520 lb.)	11 716 kg (25,830 lb.)	8142 kg (17,950 lb.)	8800 kg (19,400 lb.)	6083 kg (13,410 lb.)	6518 kg (14,370 lb.)	4717 kg (10,400 lb.)		
-4.6 m (-15 ft.)	16 125 kg (35,550 lb.)	16 125 kg (35,550 lb.)	12 519 kg (27,600 lb.)	11 263 kg (24,830 lb.)	8609 kg (18,980 lb.)	8178 kg (18,030 lb.)	6346 kg (13,990 lb.)	6124 kg (13,500 lb.)				

Attachment weight is included when calculating the lift capacities.

Boldface type indicates hydraulic-limited capacities with power boost; **lightface** type indicates stability-limited capacities. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine.

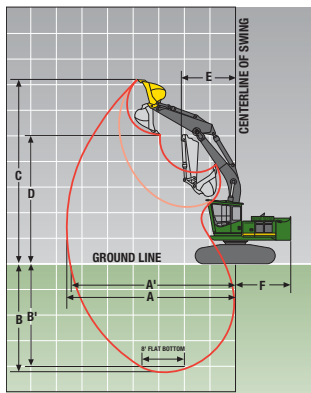
Lift Capacity — 3754D Butt & Top with 2540-kg (5,600 lb.) grapple and 700-mm (28 in.) shoes												
Load Point Height	4.6 m (15 ft.)		6.1 m (20 ft.)		7.6 m (25 ft.)		9.1 m (30 ft.)		10.7 m (35 ft.)		11.7 m (38.3 ft.)	
	Over front	Over side	Over front	Over side	Over front	Over side	Over front	Over side	Over front	Over side		
12.2 m (40 ft.)	16 697 kg (36,810 lb.)	16 697 kg (36,810 lb.)	12 075 kg (26,620 lb.)	12 075 kg (26,620 lb.)								
10.7 m (35 ft.)			13 558 kg (29,890 lb.)	13 558 kg (29,890 lb.)	11 911 kg (26,260 lb.)	9117 kg (20,100 lb.)						
9.1 m (30 ft.)			13 064 kg (28,800 lb.)	13 064 kg (28,800 lb.)	11 621 kg (25,620 lb.)	9367 kg (20,650 lb.)	9140 kg (20,150 lb.)	6387 kg (14,080 lb.)				
7.6 m (25 ft.)			13 349 kg (29,430 lb.)	13 349 kg (29,430 lb.)	11 667 kg (25,720 lb.)	9344 kg (20,600 lb.)	9249 kg (20,390 lb.)	6491 kg (14,310 lb.)				
6.1 m (20 ft.)	13 935 kg (30,720 lb.)	13 935 kg (30,720 lb.)	14 302 kg (31,530 lb.)	13 739 kg (30,290 lb.)	12 125 kg (26,730 lb.)	9149 kg (20,170 lb.)	9167 kg (20,210 lb.)	6414 kg (14,140 lb.)	6736 kg (14,850 lb.)	4563 kg (10,060 lb.)		
4.6 m (15 ft.)	17 459 kg (38,490 lb.)	17 459 kg (38,490 lb.)	15 731 kg (34,680 lb.)	13 141 kg (28,970 lb.)	12 533 kg (27,630 lb.)	8827 kg (19,460 lb.)	8995 kg (19,830 lb.)	6251 kg (13,780 lb.)	6686 kg (14,740 lb.)	4518 kg (9,960 lb.)		
3.1 m (10 ft.)			17 178 kg (37,870 lb.)	12 415 kg (27,370 lb.)	12 116 kg (26,710 lb.)	8441 kg (18,610 lb.)	8768 kg (19,330 lb.)	6037 kg (13,310 lb.)	6586 kg (14,520 lb.)	4423 kg (9,750 lb.)		
1.5 m (5 ft.)			17 155 kg (37,820 lb.)	11 730 kg (25,860 lb.)	11 716 kg (25,830 lb.)	8074 kg (17,800 lb.)	8550 kg (18,850 lb.)	5833 kg (12,860 lb.)	6482 kg (14,290 lb.)	4323 kg (9,530 lb.)	5493 kg (12,110 lb.)	3592 kg (7,920 lb.)
Ground Line	24 231 kg (53,420 lb.)	18 053 kg (39,800 lb.)	16 620 kg (36,640 lb.)	11 249 kg (24,800 lb.)	11 408 kg (25,150 lb.)	7788 kg (17,170 lb.)	8378 kg (18,470 lb.)	5670 kg (12,500 lb.)	6409 kg (14,130 lb.)	4255 kg (9,380 lb.)		
-1.5 m (-5 ft.)	20 974 kg (46,240 lb.)	17 772 kg (39,180 lb.)	15 790 kg (34,810 lb.)	11 009 kg (24,270 lb.)	11 231 kg (24,760 lb.)	7625 kg (16,810 lb.)	8292 kg (18,280 lb.)	5588 kg (12,320 lb.)	5343 kg (11,780 lb.)	4259 kg (9,390 lb.)		
-3.1 m (-10 ft.)	15 894 kg (35,040 lb.)	15 894 kg (35,040 lb.)	12 474 kg (27,500 lb.)	10 982 kg (24,210 lb.)	9344 kg (20,600 lb.)	7611 kg (16,780 lb.)	6201 kg (13,670 lb.)	5616 kg (12,380 lb.)				

Attachment weight is included when calculating the lift capacities.

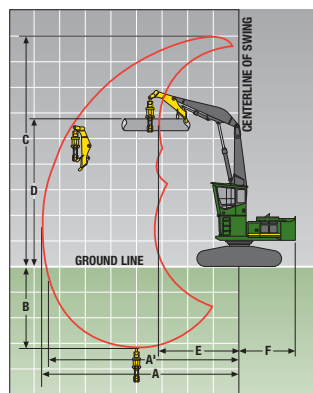
Boldface type indicates hydraulic-limited capacities with power boost; **lightface** type indicates stability-limited capacities. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine.

Operating Dimensions	3754D Road Builder	3754D Live Heel	2954D Butt & Top
Arm Length	3.2 m (10 ft. 6 in.)	N/A	N/A
Arm Force (with 1370-mm [54 in.] heavy-duty bucket and power boost)	169.2 kN (38,028 lb.)	N/A	N/A
Bucket Digging Force (with 1370-mm [54 in.] heavy-duty bucket and power boost)	214.5 kN (48,218 lb.)	N/A	N/A
Lifting Capacity Over Front at Ground Level, 6.1-m (20 ft.) Reach (with power boost) and Attachment	12 518 kg (27,597 lb.)	17 554 kg (38,700 lb.)	16 618 kg (36,636 lb.)
A Maximum Reach	11.10 m (36 ft. 5 in.)	13.12 m (43 ft. 0 in.)	11.70 m (38 ft. 4 in.)
A' Maximum Reach at Ground Level	10.89 m (35 ft. 9 in.)	12.90 m (42 ft. 4 in.)	11.45 m (37 ft. 7 in.)
B Maximum Depth	7.38 m (24 ft. 3 in.)	5.24 m (17 ft. 2 in.)	3.82 m (12 ft. 6 in.)
C Maximum Height	10.36 m (34 ft. 0 in.)	15.21 m (49 ft. 11 in.)	13.78 m (45 ft. 3 in.)
D Maximum Dumping Height	7.24 m (23 ft. 9 in.)	N/A	N/A
Maximum Log-Level Height	N/A	11.35 m (37 ft. 3 in.)	10.91 m (35 ft. 10 in.)
E Minimum Swing Radius	4.46 m (14 ft. 8 in.)	4.80 m (15 ft. 9 in.)	4.76 m (15 ft. 7 in.)
F Tail Swing Radius	3.66 m (12 ft. 0 in.)	3.66 m (12 ft. 0 in.)	3.66 m (12 ft. 0 in.)

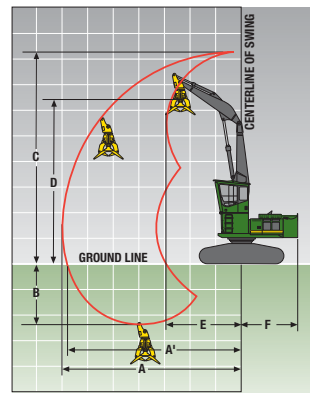
3754D Road-Builder Envelope



3754D Live-Heel Envelope

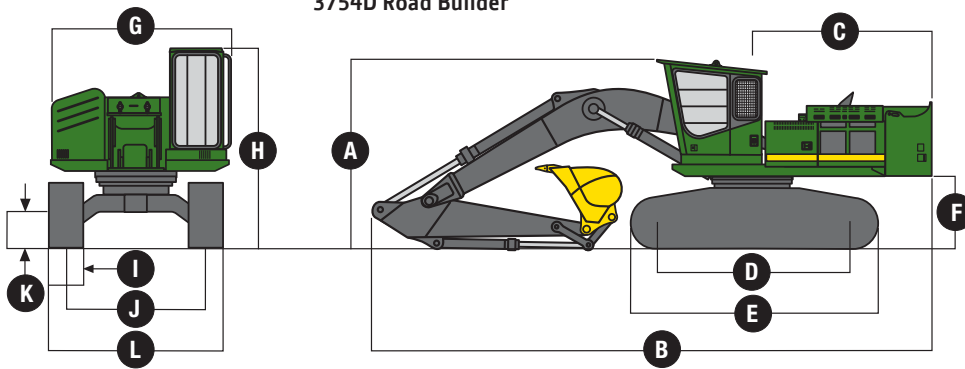


3754D Butt & Top Envelope

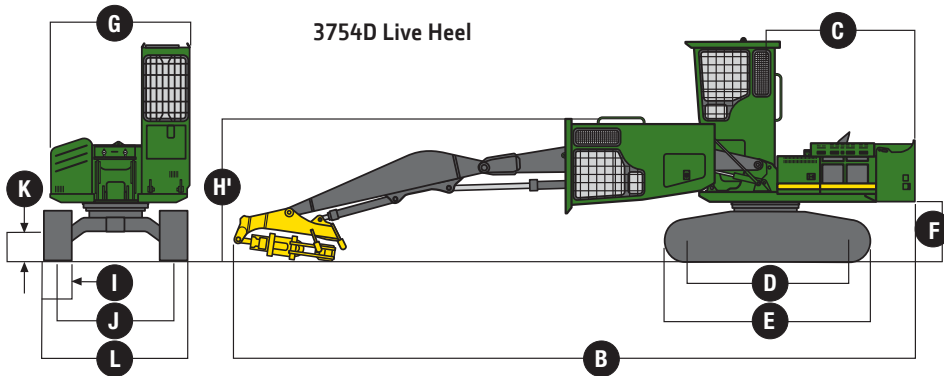


Machine Dimensions	3754D Road Builder	3754D Live Heel	3754D Butt & Top
A Height	3.37 m (11 ft. 1 in.)	N/A	N/A
B Overall Length	11.21 m (36 ft. 9 in.)	16.62 m (54 ft. 6 in.)	15.99 m (52 ft. 6 in.)
C Rear-End Length / Swing Radius	3.66 m (12 ft. 0 in.)	3.66 m (12 ft. 0 in.)	3.66 m (12 ft. 0 in.)
D Distance Between Idler / Sprocket Centerline	4.05 m (13 ft. 3 in.)	4.05 m (13 ft. 3 in.)	4.05 m (13 ft. 3 in.)
E Undercarriage Length	5.10 m (16 ft. 9 in.)	5.10 m (16 ft. 9 in.)	5.10 m (16 ft. 9 in.)
F Counterweight Clearance	1.45 m (4 ft. 9 in.)	1.47 m (4 ft. 10 in.)	1.47 m (4 ft. 10 in.)
G Upperstructure Width	3.49 m (11 ft. 6 in.)	3.70 m (12 ft. 2 in.)	3.70 m (12 ft. 2 in.)
H Cab Height	3.80 m (12 ft. 6 in.)	N/A	N/A
H' Cab Height (transport)	N/A	3.54 m (11 ft. 7 in.)	3.54 m (11 ft. 7 in.)
I Track Width (with 700-mm [28 in.] double-grouser shoes)	0.70 m (2 ft. 4 in.)	0.70 m (2 ft. 4 in.)	0.70 m (2 ft. 4 in.)
J Gauge Width	2.69 m (8 ft. 10 in.)	2.91 m (9 ft. 7 in.)	2.91 m (9 ft. 7 in.)
K Ground Clearance	0.74 m (2 ft. 5 in.)	0.74 m (2 ft. 5 in.)	0.74 m (2 ft. 5 in.)
L Undercarriage Width	3.39 m (11 ft. 1 in.)	3.61 m (11 ft. 10 in.)	3.61 m (11 ft. 10 in.)

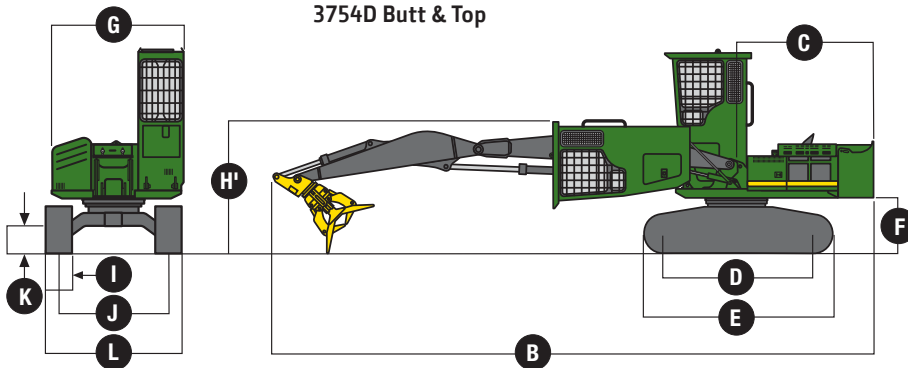
3754D Road Builder



3754D Live Heel



3754D Butt & Top



Machine not exactly as shown. Illustrations for dimensioning purposes only.