777F Off-Highway Truck



1	Height to top of ROPS	4715 mm	15 ft 6 in
2	Overall Body Length	9830 mm	32 ft 3 in
3	Inside Body Length	6580 mm	21 ft 7 in
4	Overall Length	10 535 mm	34 ft 7 in
5	Wheelbase	4560 mm	15 ft
6	Rear Axle to Tail	3062 mm	10 ft 1 in
7	Ground Clearance	896 mm	2 ft 11 in
8	Dump Clearance	965 mm	3 ft 2 in
9	Loading Height – Empty	4380 mm	14 ft 4 in
10	Inside Body Depth – Max	1895 mm	6 ft 3 in
11	Overall Height – Body Raised	10 325 mm	33 ft 11 in

12	Operating Width	6494 mm	21 ft 4 in
13	Centerline Front Tire Width	4050 mm	13 ft 3 in
14	Engine Guard Clearance	864 mm	2 ft 10 in
15	Overall Canopy Width	6050 mm	19 ft 10 in
16	Outside Body Width	5524 mm	18 ft 2 in
17	Inside Body Width	5200 mm	17 ft 1 in
18	Front Canopy Height	5170 mm	17 ft
19	Rear Axle Clearance	880 mm	2 ft 11 in
20	Centerline Rear Dual Tire Width	3576 mm	11 ft 9 in
21	Overall Tire Width	5223 mm	17 ft 2 in

Weight/Payload Calculation

(Example)

	Dual Slope						
			Steel Liner		Rubber Liner		
	No Liner		(16 i	(16 mm)		(102 mm)	
Target Gross Machine Weight*	163 293 kg	360,000 lb	163 293 kg	360,000 lb	163 293 kg	360,000 lb	
Empty Chassis Weight*	48 008 kg	105,839 lb	48 008 kg	105,839 lb	48 008 kg	105,839 lb	
Body Weight	16 420 kg	36,200 lb	16 420 kg	36,200 lb	16 420 kg	36,200 lb	
Body Liner		_	5767 kg	12,714 lb	6766 kg	14,914 lb	
Empty Machine Weight	64 428 kg	142,039 lb	70 195 kg	154,753 lb	71 194 kg	156,953 lb	
Attachments**	_	_	_		_	_	
Fuel Tank Size	1136 L	300 gal	1136 L	300 gal	1136 L	300 gal	
Fuel Tank – 90% fill	861 kg	1,898 lb	861 kg	1,898 lb	861 kg	1,898 lb	
Debris Allowance	1921 kg	4,234 lb	1921 kg	4,234 lb	1921 kg	4,234 lb	
Empty Operating Weight**	67 210 kg	148,173 lb	72 977 kg	160,885 lb	73 976 kg	163,085 lb	
Target Payload*	96 083 kg	211,827 lb	90 316 kg	199,115 lb	89 317 kg	196,915 lb	
Target Payload*	96.1 tonnes	105.9 tons	90.3 tonnes	99.5 tons	89.3 tonnes	98.5 tons	

* Refer to Caterpillar Mining Trucks Payload Guidelines ** Includes weight of all attachments

Gradeability/Speed/Rimpull

To determine gradeability performance: Read from gross weight down to the percent of total resistance. Total resistance equals actual percent grade plus 1% for each 10 kg/t (20 lb/ton) of rolling resistance. From this weight-resistance point, read horizontally to the curve with the highest obtainable gear, then down to maximum speed. Usable rimpull will depend upon traction available and weight on drive wheels.

Direct Drive

E – Typical Field Empty Weight

L – Target Gross Machine Operating Weight 163 293 kg (360,000 lb)



To determine retarding performance: Add lengths of all downhill segments and, using this total, refer to proper retarding chart. Read from gross weight down to the percent effective grade. Effective grade equals actual % grade minus 1% for each 10 kg/t (20 lb/ton) of rolling resistance. From this weight-effective grade point, read horizontally to the curve with the highest obtainable gear, then down to maximum descent speed brakes can properly handle without exceeding cooling capacity. The following charts are based on these conditions: 32° C (90° F) ambient temperature, at sea level, with 27.00 R49 tires.

NOTE: Select the proper gear to maintain engine rpm at the highest possible level, without overspeeding the engine. If cooling oil overheats, reduce ground speed to allow transmission to shift to the next lower speed range.

With ARC Only

ARC and Engine Brake

E – Typical Field Empty Weight

L – Target Gross Machine Operating Weight 163 293 kg (360,000 lb)



Retarding Performance

With ARC Only

----- ARC and Engine Brake

E – Typical Field Empty Weight

L – Target Gross Machine Operating Weight 163 293 kg (360,000 lb)



With ARC Only

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