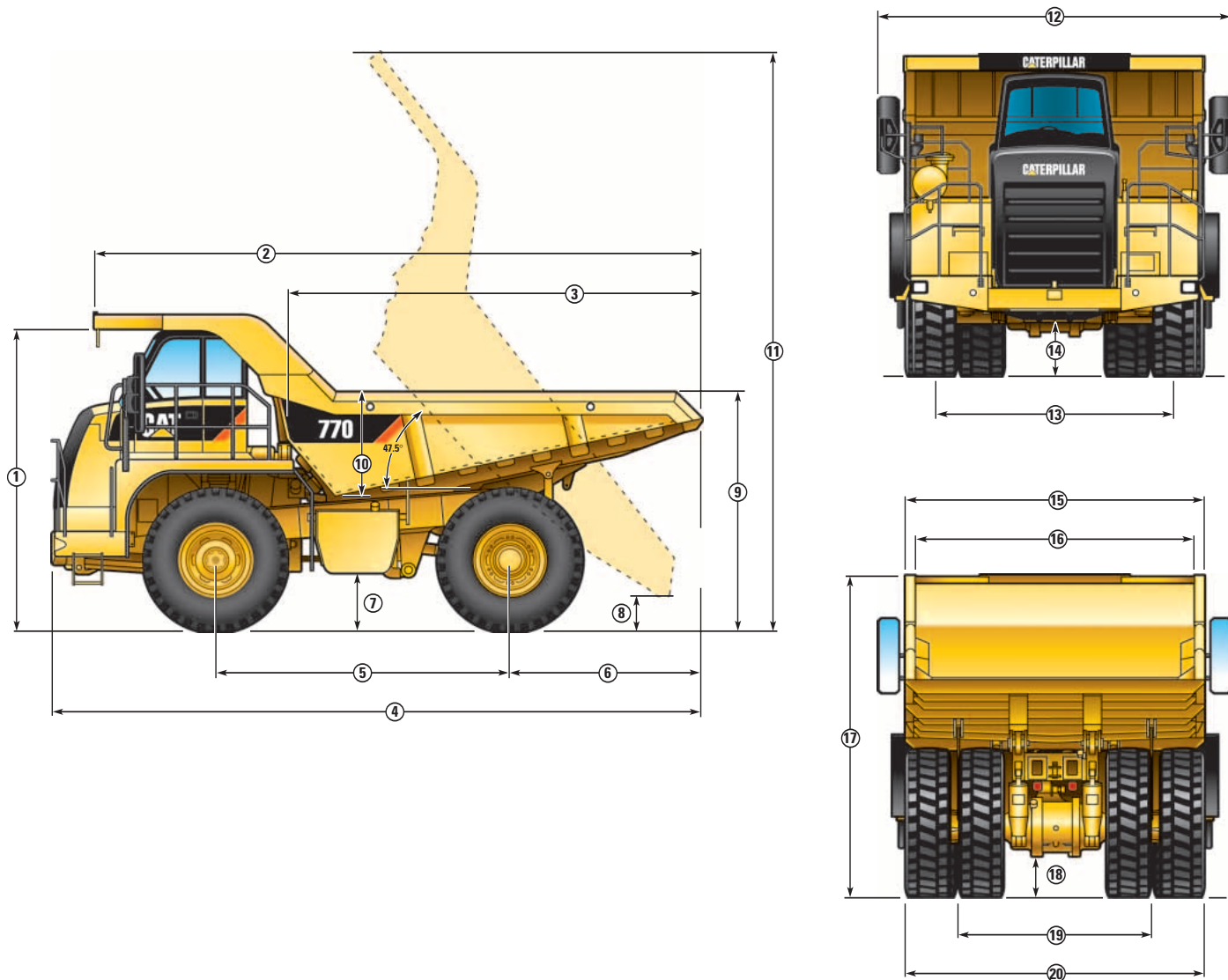


770 Off-Highway Truck

Dimensions

All dimensions are approximate.



1	Height to Top of ROPS	3911 mm	12 ft 10 in
2	Overall Body Length	8185 mm	26 ft 10 in
3	Inside Body Length	5549 mm	18 ft 3 in
4	Overall Length	9020 mm	29 ft 7 in
5	Wheelbase	3960 mm	13 ft
6	Rear Axle to Tail	2595 mm	8 ft 6 in
7	Ground Clearance	680 mm	2 ft 3 in
8	Dump Clearance	498 mm	1 ft 7 in
9	Loading Height – Empty	3158 mm	10 ft 4 in
10	Inside Body Depth – Max.	1326 mm	4 ft 5 in

11	Overall Height – Body Raised	8280 mm	27 ft 2 in
12	Operating Width	4780 mm	15 ft 8 in
13	Centerline Front Tire Width	3110 mm	10 ft 3 in
14	Engine Guard Clearance	673 mm	2 ft 3 in
15	Outside Body Width	3932 mm	12 ft 10 in
16	Inside Body Width	3698 mm	12 ft 2 in
17	Front Canopy Height	4195 mm	13 ft 9 in
18	Rear Axle Clearance	508 mm	1 ft 9 in
19	Centerline Rear Dual Tire Width	2536 mm	8 ft 4 in
20	Overall Tire Width	3693 mm	12 ft 2 in

770 Off-Highway Truck

Weight/Payload Calculation

(Example)

		Flat Floor					
		Low Impact Steel Body System 8 mm (0.315 in)	Medium Impact Steel Body System 16 mm (0.630 in)	High Impact Steel Body System 20 mm (0.787 in)	Heavy Duty Steel Body System 25 mm (1.0 in)	High Impact Rubber Body System 102 mm (4.0 in)	Heavy Duty Rubber Body System 102 mm (4.0 in)
Target Gross Machine Weight*	kg (lb)	71 214 (157,000)	71 214 (157,000)	71 214 (157,000)	71 214 (157,000)	71 214 (157,000)	71 214 (157,000)
Empty Chassis Weight*	kg (lb)	24 213 (53,380)	24 213 (53,380)	24 213 (53,380)	24 213 (53,380)	24 213 (53,380)	24 213 (53,380)
Body System Weight	kg (lb)	8367 (18,446)	10 029 (22,110)	10 524 (23,202)	11 474 (25,296)	10 757 (23,714)	11 113 (24,499)
Empty Machine Weight	kg (lb)	32 579 (71,826)	34 242 (75,490)	34 737 (76,582)	35 687 (78,676)	34 969 (77,094)	35 325 (77,879)
Attachments							
Fuel Tank Size	L (gal)	529 (140)	529 (140)	529 (140)	529 (140)	529 (140)	529 (140)
Fuel Tank – 100% fill	kg (lb)	446 (983)	446 (983)	446 (983)	446 (983)	446 (983)	446 (983)
Empty Operating Weight**	kg (lb)	33 026 (72,809)	34 688 (76,473)	35 183 (77,565)	36 133 (79,659)	35 415 (78,077)	35 771 (78,862)
Target Payload*	kg (lb)	38 190 (84,191)	36 526 (80,527)	36 031 (79,435)	35 081 (77,341)	35 799 (78,923)	35 443 (78,138)
Target Payload*	tonnes (tons)	38.2 (42.1)	36.6 (40.3)	36.0 (39.7)	35.1 (38.7)	35.8 (39.5)	35.4 (39.1)
Dual Slope							
		Low Impact Steel Body System 8 mm (0.315 in)	Medium Impact Steel Body System 16 mm (0.630 in)	High Impact Steel Body System 20 mm (0.787 in)	Heavy Duty Steel Body System 25 mm (1.0 in)	High Impact Rubber Body System 102 mm (4.0 in)	Heavy Duty Rubber Body System 102 mm (4.0 in)
Target Gross Machine Weight*	kg (lb)	71 214 (157,000)	71 214 (157,000)	71 214 (157,000)	71 214 (157,000)	71 214 (157,000)	71 214 (157,000)
Empty Chassis Weight*	kg (lb)	24 213 (53,380)	24 213 (53,380)	24 213 (53,380)	24 213 (53,380)	24 213 (53,380)	24 213 (53,380)
Body System Weight	kg (lb)	8362 (18,436)	10 019 (22,088)	10 518 (23,188)	11 474 (25,295)	10 836 (23,889)	11 159 (24,602)
Empty Machine Weight	kg (lb)	32 930 (71,816)	34 232 (75,468)	34 731 (76,568)	35 686 (78,675)	35 049 (77,269)	35 372 (77,982)
Attachments							
Fuel Tank Size	L (gal)	529 (140)	529 (140)	529 (140)	529 (140)	529 (140)	529 (140)
Fuel Tank – 100% fill	kg (lb)	445 (983)	445 (983)	445 (983)	445 (983)	445 (983)	445 (983)
Empty Operating Weight**	kg (lb)	33 021 (72,799)	34 688 (76,451)	35 177 (77,551)	36 132 (79,658)	35 495 (78,252)	35 817 (78,965)
Target Payload*	kg (lb)	38 193 (84,201)	36 536 (80,549)	36 038 (79,449)	35 082 (77,342)	35 720 (78,748)	35 396 (78,035)
Target Payload*	tonnes (tons)	38.2 (42.1)	36.6 (40.3)	36.0 (39.7)	35.1 (38.7)	35.7 (39.4)	35.4 (39.0)

* Refer to Caterpillar® 10/10/20 overload policy

** Includes weight of all attachments

770 Off-Highway Truck

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

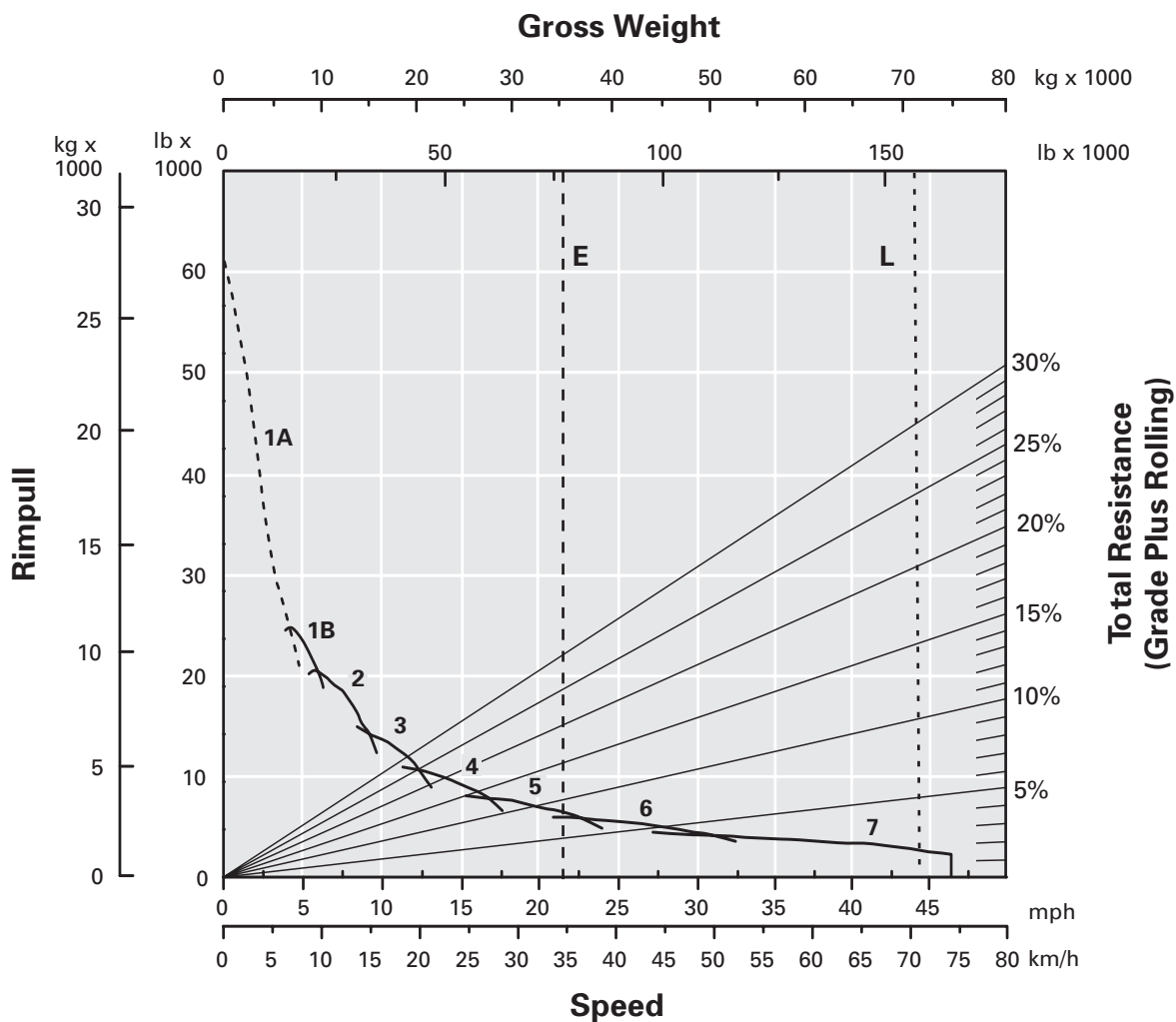
horizontally to the curve with the highest obtainable gear, then down to maximum speed. Usable rimpull will depend upon traction available and weight on drive wheels.

———— Direct Drive

- - - - - Torque Converter Drive

E – Typical Field Empty Weight

L – Target Gross Machine Operating Weight 71 214 kg (157,000 lb)



770 Off-Highway Truck

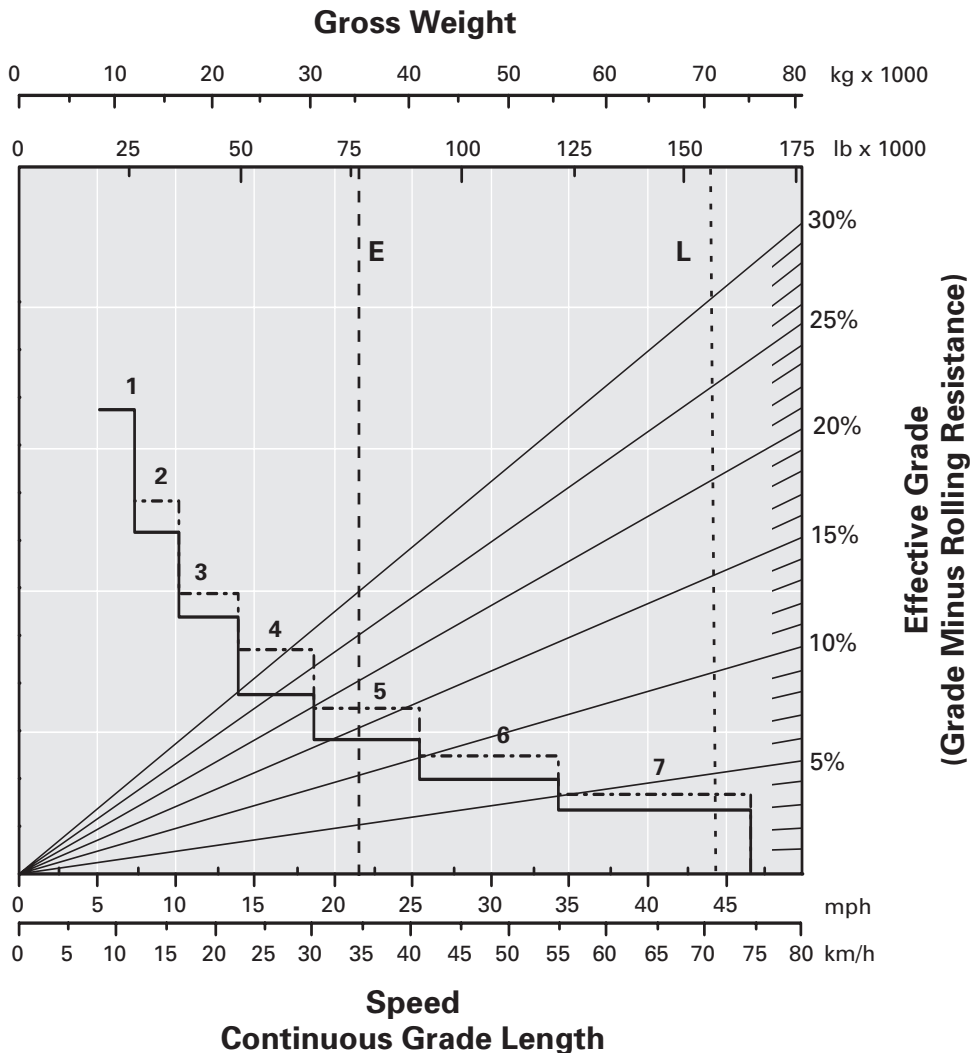
Retarding Performance

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 18.00R33 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.

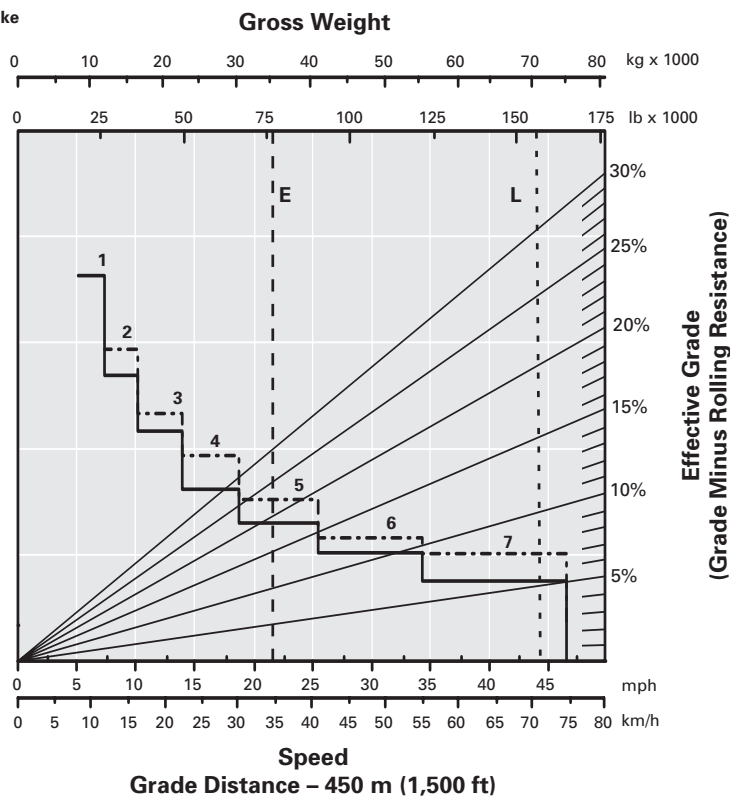
———— With ARC Only
- - - - - ARC and Engine Brake
E – Typical Field Empty Weight
L – Target Gross Machine Operating Weight 71 214 kg (157,000 lb)



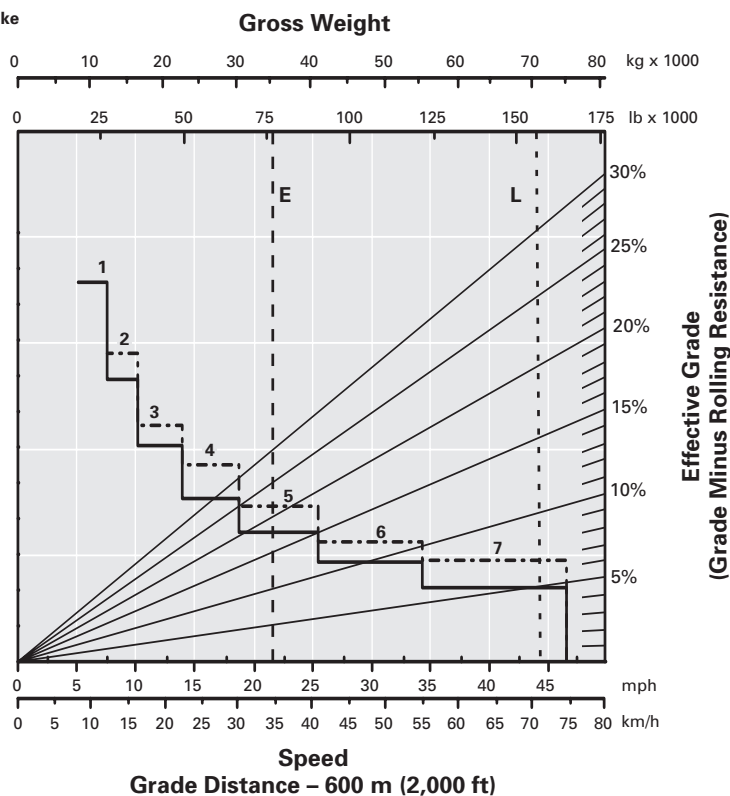
770 Off-Highway Truck

Retarding Performance

———— With ARC Only
- - - - - ARC and Engine Brake
E – Typical Field Empty Weight
L – Target Gross Machine Operating
Weight 71 214 kg (157,000 lb)



———— With ARC Only
- - - - - ARC and Engine Brake
E – Typical Field Empty Weight
L – Target Gross Machine Operating
Weight 71 214 kg (157,000 lb)



770 Off-Highway Truck

Retarding Performance

