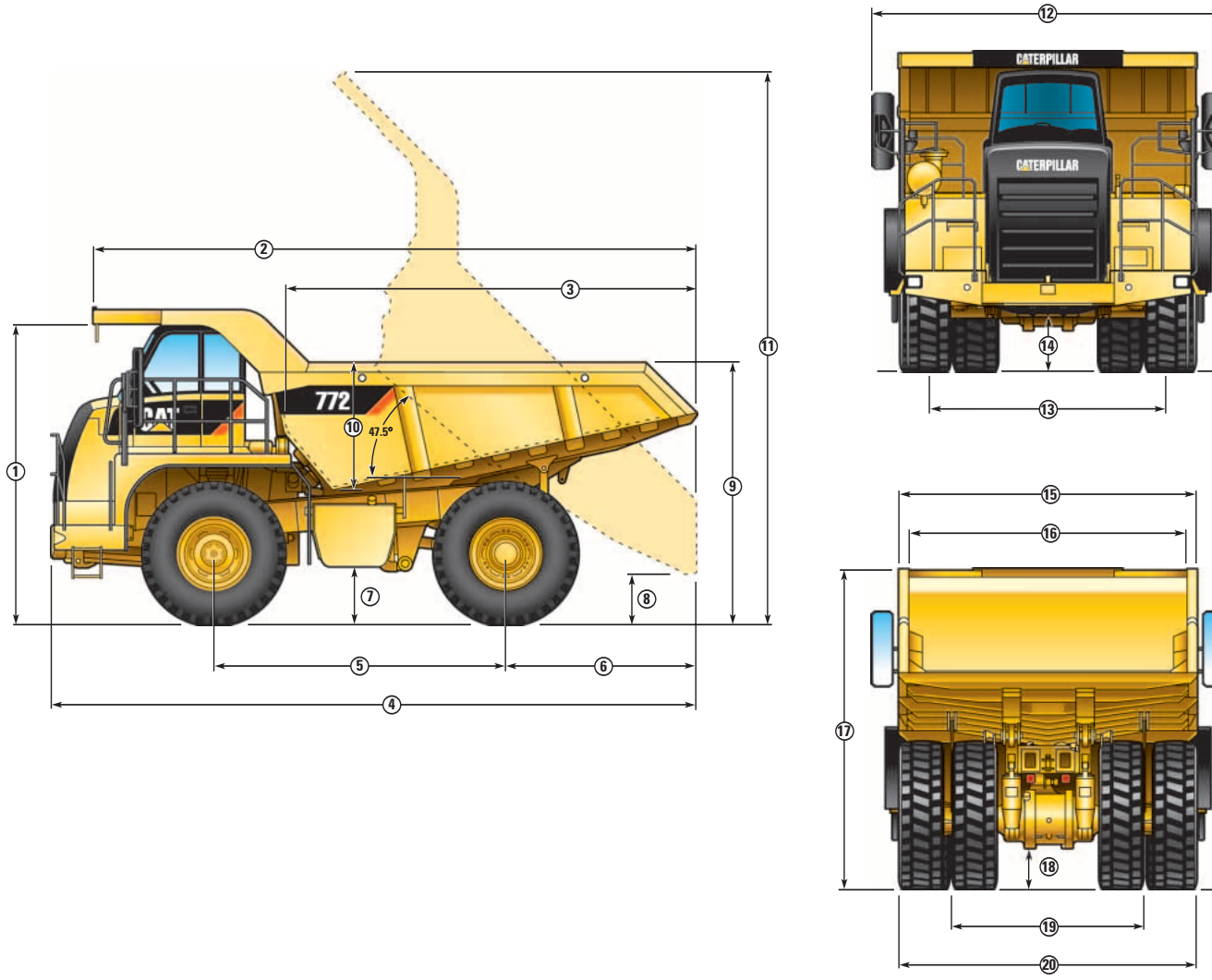
772 Off-Highway Truck

Dimensions

All dimensions are approximate.



1	Height to Top of ROPS	4093 mm	13 ft 6 in
2	Overall Body Length	8125 mm	26 ft 8 in
3	Inside Body Length	5549 mm	18 ft 3 in
4	Overall Length	8740 mm	28 ft 9 in
5	Wheelbase	3960 mm	13 ft 0 in
6	Rear Axle to Tail	2605 mm	8 ft 6 in
7	Ground Clearance	720 mm	2 ft 5 in
8	Dump Clearance	560 mm	1 ft 10 in
9	Loading Height – Empty	3550 mm	11 ft 8 in
10	Inside Body Depth – Max	1706 mm	5 ft 8 in

11	Overall Height – Body Raised	8357 mm	27 ft 5 in
12	Operating Width	4780 mm	15 ft 8 in
13	Centerline Front Tire Width	3165 mm	10 ft 5 in
14	Engine Guard Clearance	714 mm	2 ft 5 in
15	Outside Body Width	3952 mm	13 ft 0 in
16	Inside Body Width	3698 mm	12 ft 2 in
17	Front Canopy Height	4265 mm	14 ft 0 in
18	Rear Axle Clearance	560 mm	1 ft 11 in
19	Centerline Rear Dual Tire Width	2652 mm	8 ft 9 in
20	Overall Tire Width	3927 mm	12 ft 11 in

772 Off-Highway Truck

Weight/Payload Calculation

(Example)

772 Weight Payload Calculations

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)	82 100 (181,000)	82 100 (181,000)	82 100 (181,000)	82 100 (181,000)	82 100 (181,000)	82 100 (181,000)
Empty Chassis Weight* kg (lb)	25 025 (55,171)	25 025 (55,171)	25 025 (55,171)	25 025 (55,171)	25 025 (55,171)	25 025 (55,171)
Body System Weight kg (lb)	8564 (18,881)	10 439 (23,013)	10 910 (24,053)	11 982 (26,415)	11 164 (24,612)	11 617 (25,612)
Empty Machine Weight kg (lb)	33 589 (74,052)	35 463 (78,184)	35 935 (79,224)	36 208 (81,586)	36 189 (79,783)	36 643 (80,783)
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)	34 035 (75,035)	35 910 (79,167)	36 381 (80,207)	37 453 (82,569)	36 635 (80,766)	37 088 (81,766)
Target Payload* kg (lb)	48 064 (105,965)	46 191 (101,833)	45 719 (100,793)	44 648 (98,431)	45 465 (100,234)	45 012 (99,234)
Target Payload* tonnes (tons)	48.1 (53.0)	46.2 (50.9)	45.7 (50.4)	44.6 (49.2)	45.5 (50.1)	45.0 (49.6)

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)	82 100 (181,000)	82 100 (181,000)	82 100 (181,000)	82 100 (181,000)	82 100 (181,000)	82 100 (181,000)
Empty Chassis Weight* kg (lb)	25 025 (55,171)	25 025 (55,171)	25 025 (55,171)	25 025 (55,171)	25 025 (55,171)	25 025 (55,171)
Body System Weight kg (lb)	8564 (18,880)	10 413 (22,956)	10 913 (24,059)	11 969 (26,386)	11 226 (24,749)	11 643 (25,669)
Empty Machine Weight kg (lb)	33 589 (74,051)	35 438 (78,127)	35 938 (79,230)	36 994 (81,557)	36 251 (79,920)	36 668 (80,840)
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)	34 035 (75,034)	35 884 (79,110)	36 384 (80,213)	37 440 (82,540)	36 697 (80,903)	36 869 (81,823)
Target Payload* kg (lb)	48 064 (105,966)	46 217 (101,890)	45 716 (100,787)	44 661 (98,460)	45 403 (100,097)	44 986 (99,177)
Target Payload* tonnes (tons)	48.1 (53.0)	46.2 (50.9)	45.7 (50.4)	44.6 (49.2)	45.4 (50.0)	45.0 (49.6)

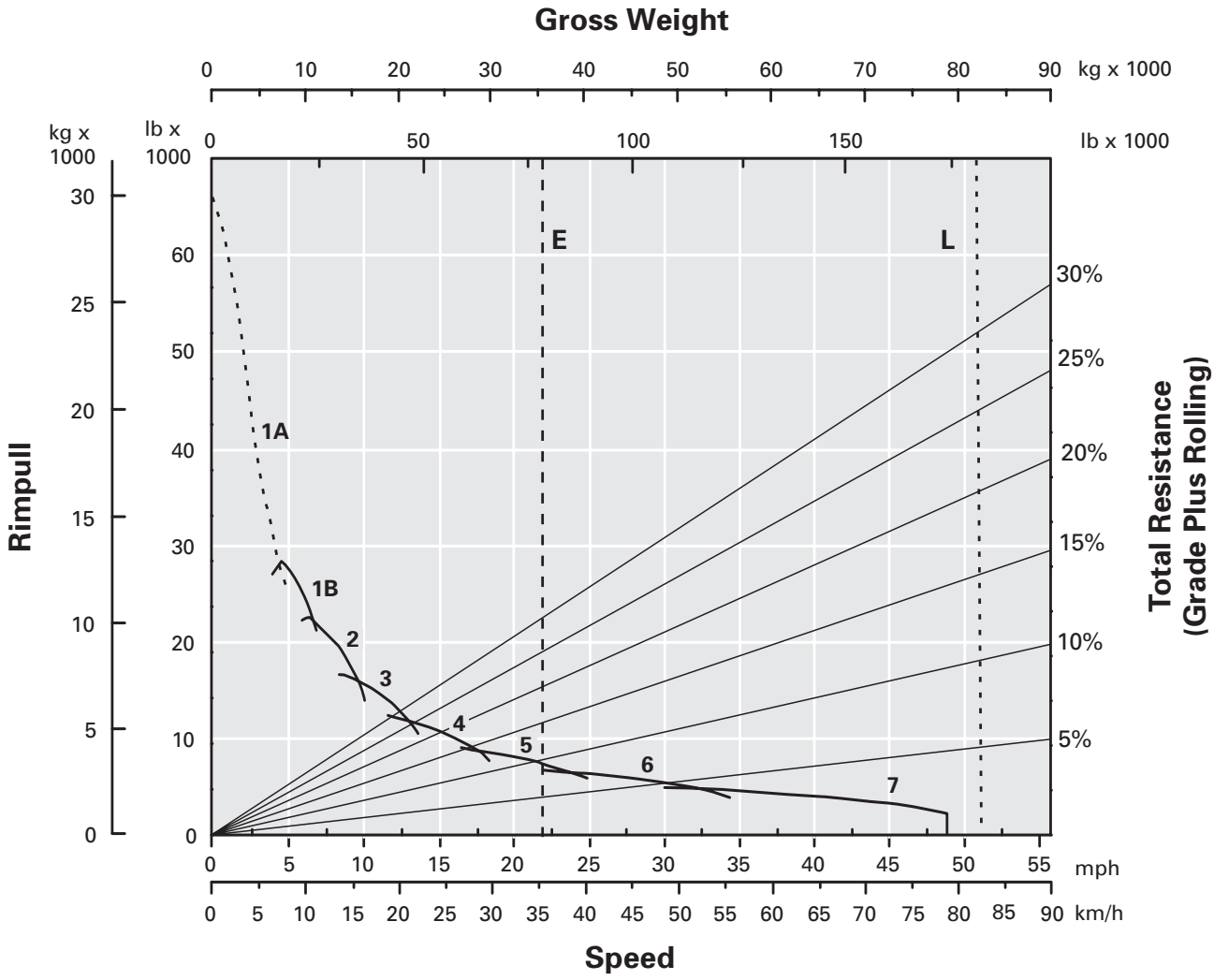
* Refer to Caterpillar 10/10/20 overload policy

** 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
Torque Converter Drive
E – Typical Field Empty Weight
L – Target Gross Machine Operating Weight 82 100 kg (181,000 lb)

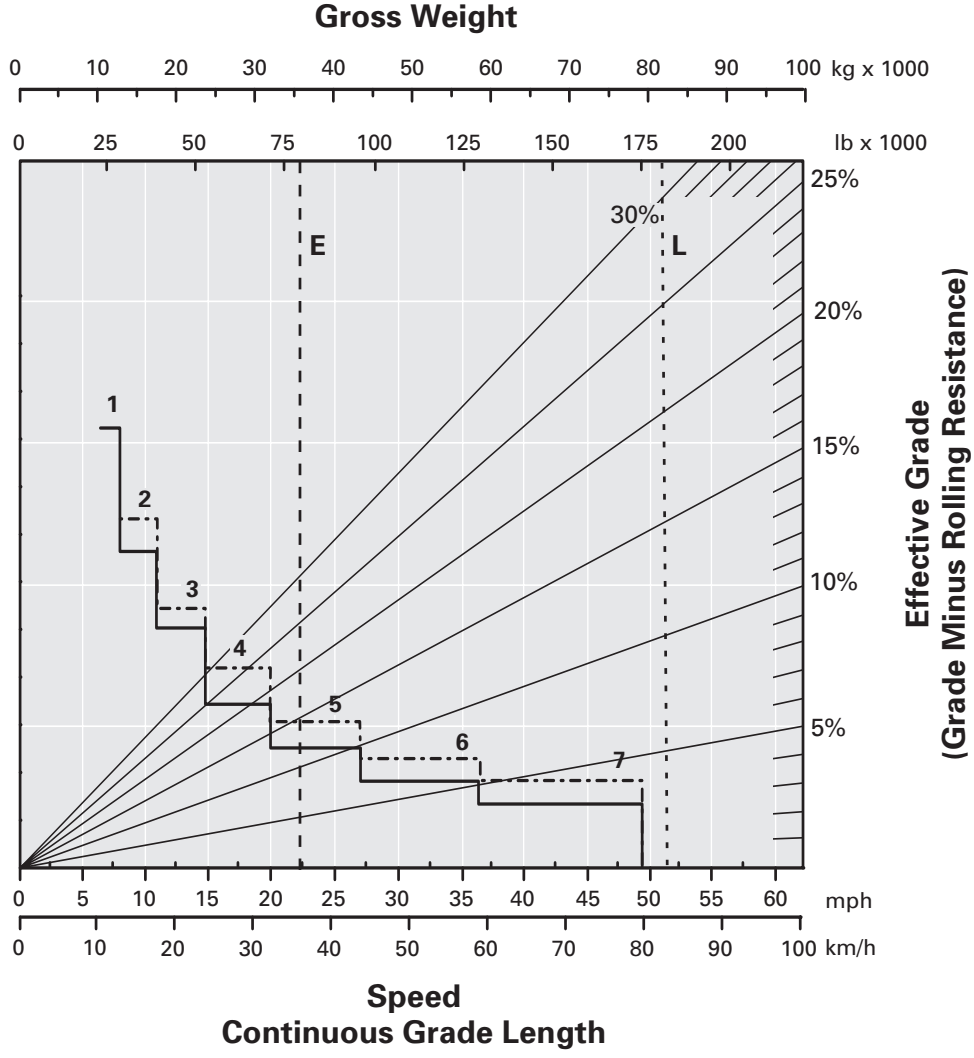


Retarding Performance

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 21.00 R33 tires.

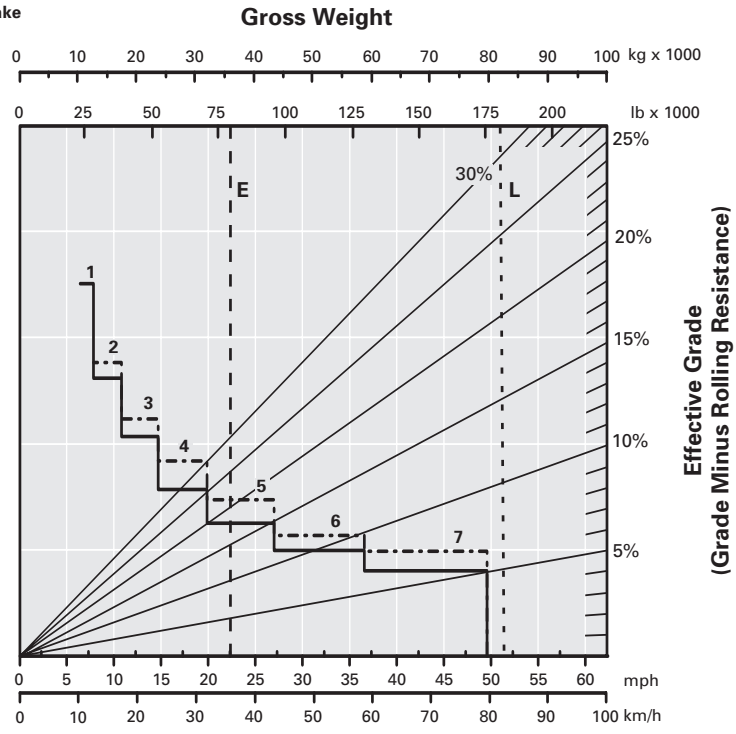
NOTE: Select the proper gear to maintain engine rpm at the highest possible level, without overspeeding the engine. If cooling oil overheats, reduce ground speed to allow transmission to shift to the next lower speed range.

With ARC Only
ARC and Engine Brake
E – Typical Field Empty Weight
L – Target Gross Machine Operating Weight 82 100 kg (181,000 lb)



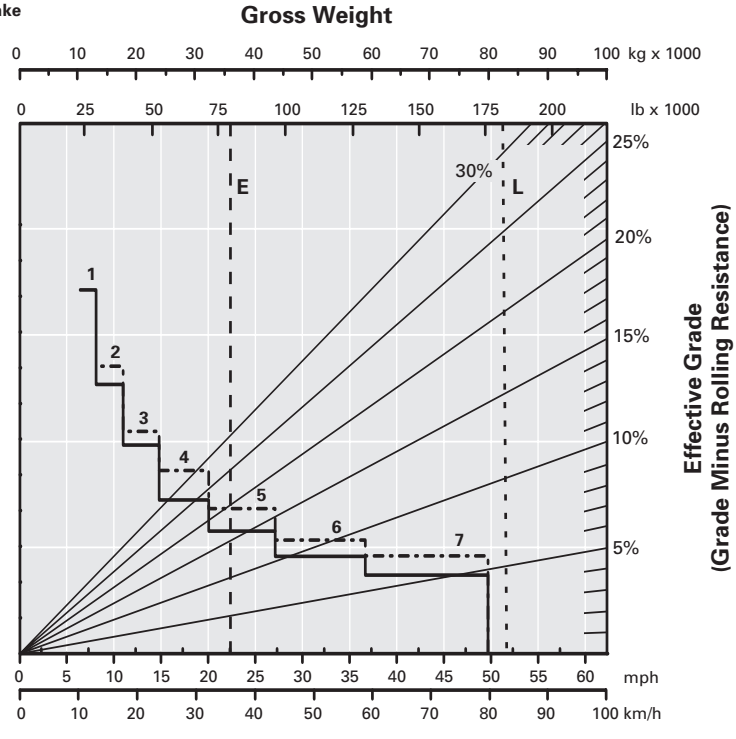
Retarding Performance

With ARC Only
ARC and Engine Brake
E – Typical Field Empty Weight
L – Target Gross Machine Operating Weight 82 100 kg (181,000 lb)



Grade Distance – 450 m (1,500 ft)

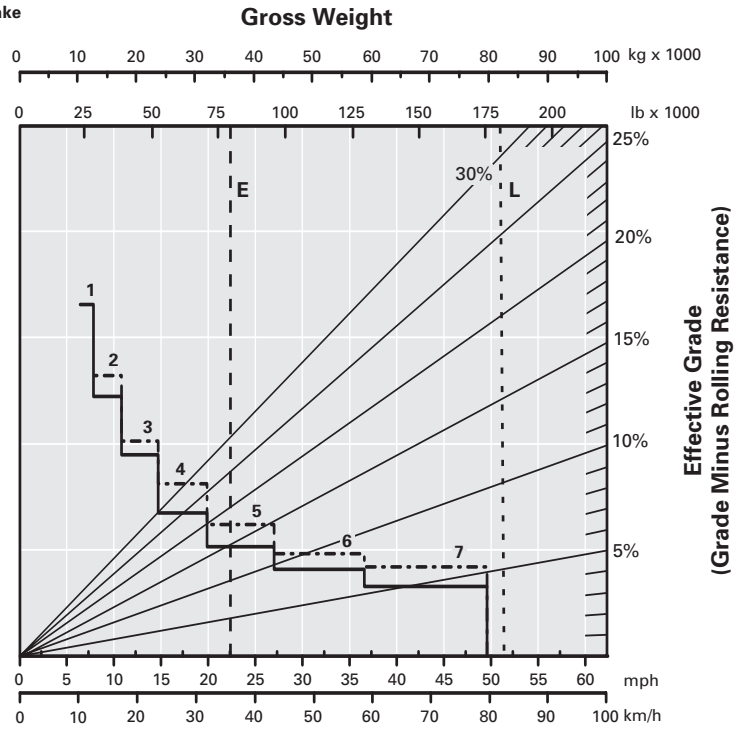
With ARC Only
ARC and Engine Brake
E – Typical Field Empty Weight
L – Target Gross Machine Operating Weight 82 100 kg (181,000 lb)



Grade Distance – 600 m (2,000 ft)

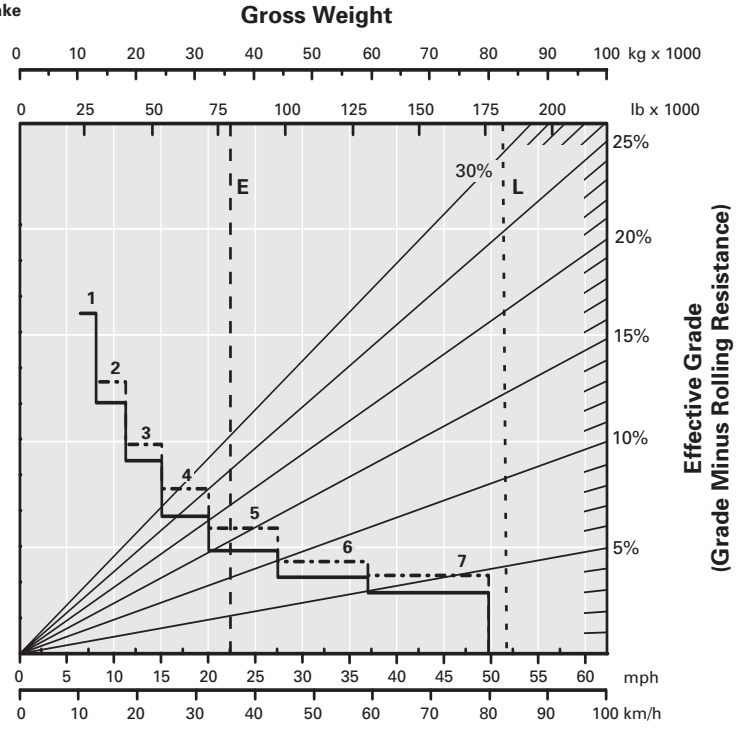
Retarding Performance

With ARC Only
ARC and Engine Brake
E – Typical Field Empty Weight
L – Target Gross Machine Operating Weight 82 100 kg (181,000 lb)



Grade Distance – 900 m (3,000 ft)

With ARC Only
ARC and Engine Brake
E – Typical Field Empty Weight
L – Target Gross Machine Operating Weight 82 100 kg (181,000 lb)



Grade Distance – 1500 m (5,000 ft)