

SECTION **5B**

**ARTICULATED  
DUMP TRUCKS**

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- **All wheel drive increases gradeability and allows such equipment to handle much more severe slopes comfortably and reduce length of haul roads(and cycle times), particularly in quarrying applications.**
- **Improved tractability allowing machinery to work over much rougher terrain and poorer quality haul roads. The latter in itself can produce additional savings due to less ancillary equipment being required to maintain a proper surface and allowing a longer working season.**
- **Lower body height which facilitates fast and easy loading is suitable for a variety of equipment, including wheeled loaders, hydraulic excavators and crawler loaders.**
- **Articulated hydraulic steering which increases maneuverability and, when combined with narrow body widths, is specially advantageous in confined areas.**
- **Oscillating frame permitting movement of both sections of the unit relative to each other and almost eliminating torsional stress in the main frame components. This greatly reduces wear and tear and prolongs useful machine life.**
- **Wide base tires which reduce rolling resistance and, when added to the high flotation characteristics, produce a marked reduction in horsepower requirements and ultimately fuel consumption over difficult terrain.**



Specifications

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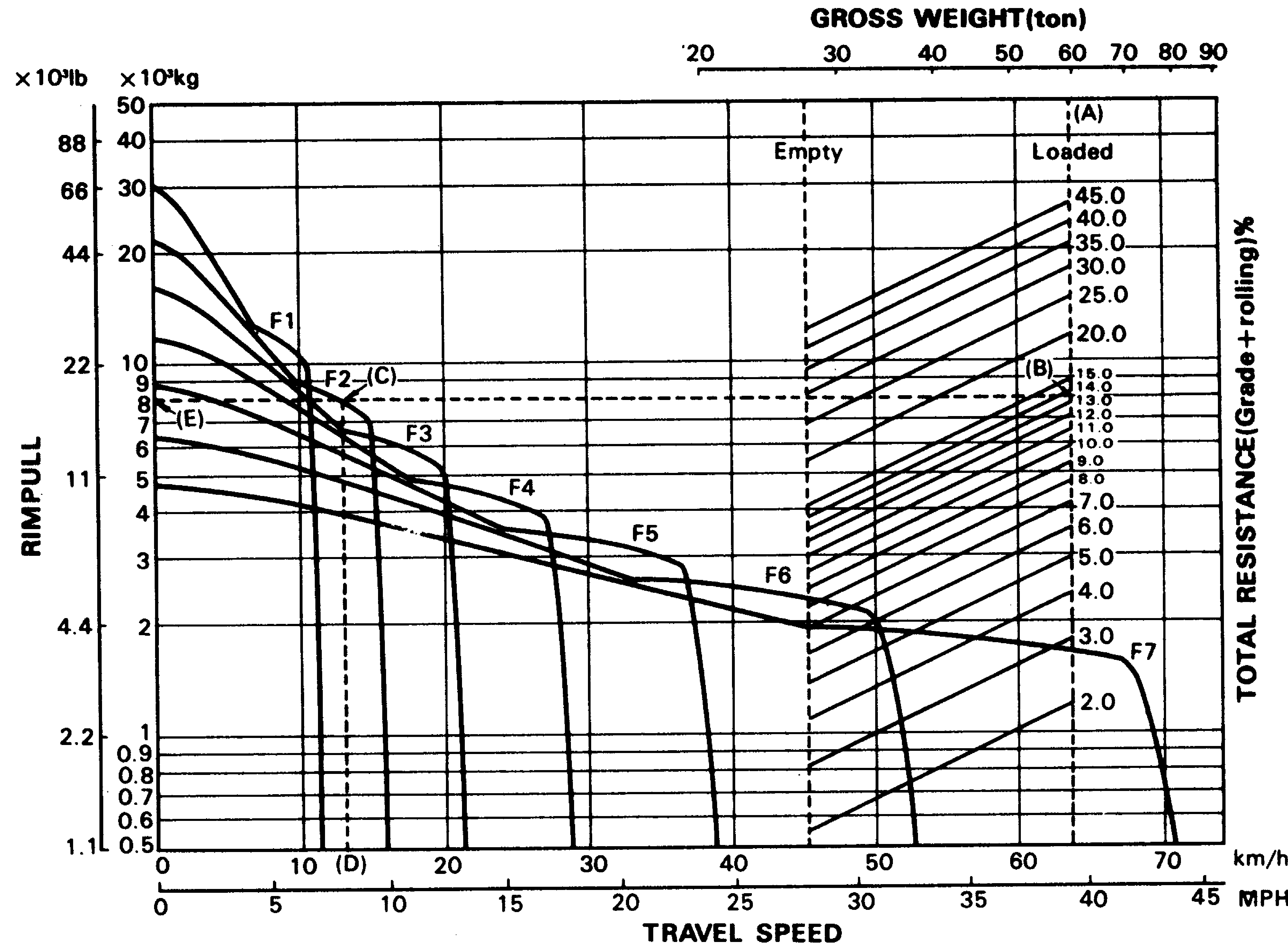
Model		HA250-1	HA270-1
Item			
WEIGHT:	kg(lb)		
Empty vehicle weight		15130 ( 33,360 )	16065 ( 35,420 )
Distributed weight (front)		7810 ( 17,220 )	8020 ( 17,680 )
(rear)		7320 ( 16,140 )	8045 ( 17,740 )
Gross vehicle weight		40410 ( 89,090 )	43340 ( 95,550 )
Distributed gross weight			
(front)		13410 ( 29,570 )	14340 ( 31,620 )
(rear)		27000 ( 59,520 )	29000 ( 63,930 )
Gross horsepower	HP(kW)/RPM	248(185)/2200	248(185)/2200
Flywheel horsepower	HP(kW)/RPM	240(179)/2200	240(179)/2200
HAULING CAPACITY:			
Maximum load	kg(U.S.ton)	25000 ( 27.6 )	27000 ( 29.8 )
Heaped capacity(2:1)	m <sup>3</sup> (cu.yd)	13.6 ( 17.8 )	14.2 ( 18.6 )
PERFORMANCE:			
Maximum speed	km/h(MPH)	48 (29.8)	52 (32.3)
Turning radius	m(ft.in)	7.62 (25')	7.62 (25')
ENGINE:		KOMATSU	KOMATSU
Model		S6D125	S6D125
No.of cylinders		6 – 125 × 150	6 – 125 × 150
Bore × Stroke	mm(in)	(4.9" × 5.9")	(4.9" × 5.9")
Displacement	ltr.(cu.in)	11.0 (674)	11.0 (674)
DIMENSION:	mm(ft.in)		
Overall length		9250 ( 30' 4" )	9250 ( 30' 4" )
Overall width		2500 ( 8' 2" )	2650 ( 8' 8" )
Overall height		3250 ( 10' 8" )	3310 ( 10' 10" )
Ground clearance		433 ( 1' 5" )	590 ( 1' 11" )
Loading height		2611 ( 8' 7" )	2856 ( 9' 4" )
Height of body top		6000 ( 19' 8" )	6280 ( 20' 7" )
(when dumped)			
Wheelbase, first/secondary		4002 ( 13' 2" )	3982 ( 13' 1" )
secondary/third		1612 ( 5' 4" )	1652 ( 5' 5" )
Tread (front)		1960 ( 6' 5" )	2040 ( 6' 8" )
(rear)		1960 ( 6' 5" )	2040 ( 6' 8" )
Tires:			
Front tire		20.50 – 25 × 2	20.50 – 25 × 2
Rear tire		20.50 – 25 × 4	20.50 – 25 × 4
CAPACITY:	ltr.(U.S.Gal)		
Fuel tank		300 (79.3)	300 (79.3)

Use of Travel Performance  
Curve

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Use of travel performance curve

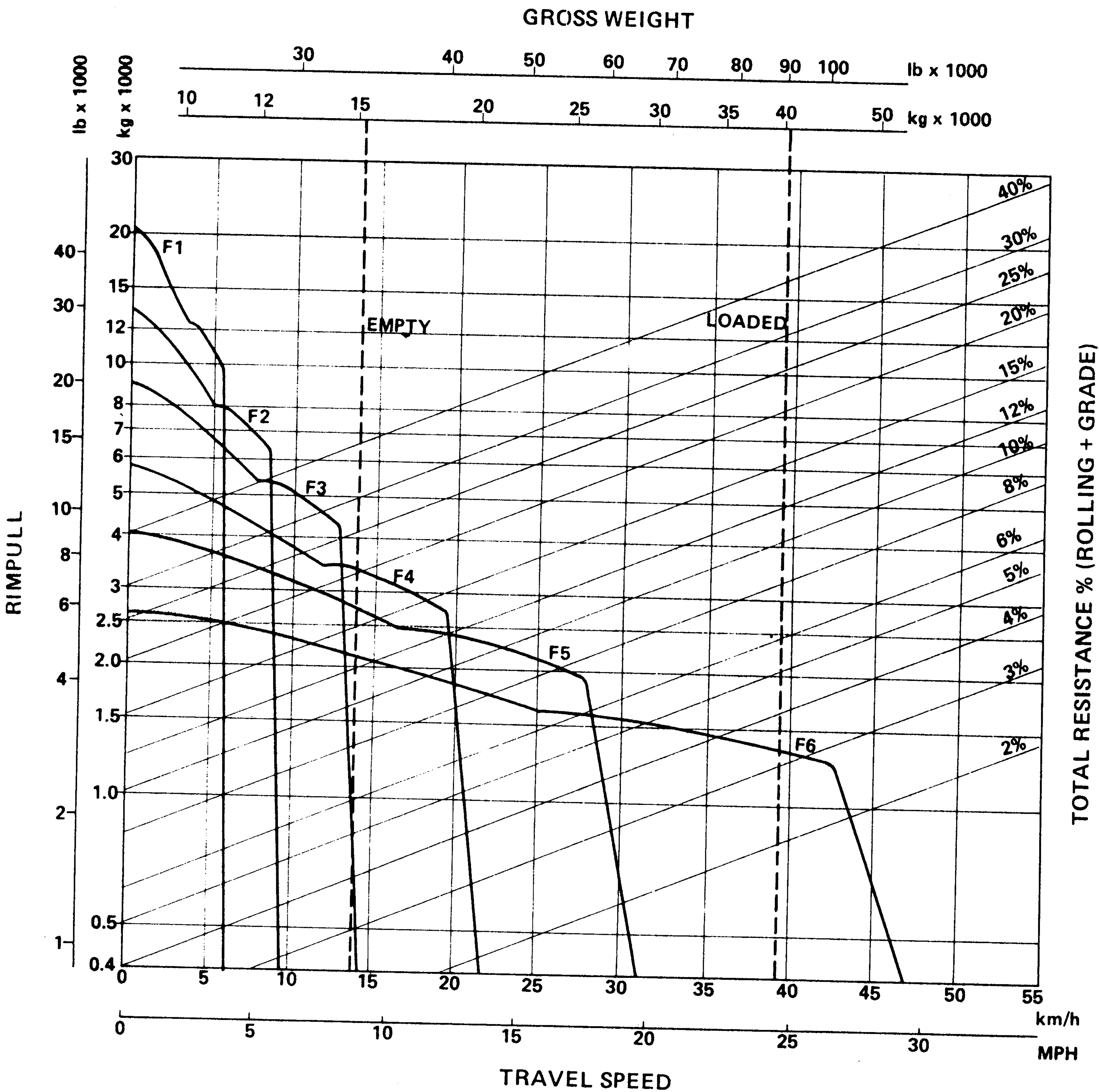
For assessing a vehicle's gradeability, travel speed, rimpull, etc. First, draw a vertical line according to the vehicle's weight (A) and mark the point (B) corresponding to total resistance (the sum of rolling resistance and grade resistance). Next, draw a horizontal line from (B), then mark (C) where the line intersects the rimpull curve and read (E) for the rimpull. For travel speed (D), draw a vertical line downward from (C). For instance, when traveling an 8% gradient and encountering a 5% rolling resistance, a vehicle with a 32-ton (35-U.S. ton) payload should have a rimpull of 8 tons (17,640 lb) and travel at a speed of 13 km/h (8.1 MPH) in forward 2nd gear.





HA250-1  
Travel Performance

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# HA270-1 Travel Performance

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