



OREGON ENGINE REBUILDERS

TECHNICAL BULLETIN

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Metric Conversion Chart

The AERA Technical Committee offers the following information regarding common metric conversion factors. It is suggested photocopies of this information be made and placed throughout the shop.

Quantity	Metric Unit	Symbol	Approximate Conversion Factor	
Length	millimeter	mm	1 mm = 0.039 in	1 in = 25.4 mm
	centimeter	cm	1 cm = 0.03 ft	1 ft = 30.5 cm
	meter	m	1 m = 1.09 yd	1 yd = 0.91m
	kilometer	km	1 km = 0.62 mile	1 mile = 1.61 km
Mass	gram	g	1 g = 0.035 oz.	1 oz = 28.4 g
	kilogram	kg	1 kg = 2.2l lb.	1 lb. = 0.45 kg
Area	square millimeter	mm ²	1 mm ² = 0.002 in ²	1 in = 645 mm ²
	sq. centimeter	cm ²	1 cm ² = 0.15 in ²	1 in = 6.45 cm ²
	square meter	m ²	1 m ² = 10.76 ft ²	1 ft = 0.09 m ²
Volume	cubic centimeter	cm ³	1 cm ³ = 0.06 in ³	1 in = 16.4 cm ³
	cubic meter	m ³	1 m ³ = 35.3 ft ³ =1.3 yd ³	1 ft = 0.03 m ³ 1 yd = 0.77 m ³
Volume (Liquids)	milliliter	ml	1ml = 0.035 fl. Oz	1 fl. oz. = 28.4 ml
	liter	l	1ml = 0.2642 gal or = 1.76 pt.	1 gal = 3.785 l 1 pt. = 0.57l
	cubic inch	in ³	1 in ³ = .01639 liter	1 liter = 61.2545 in ³
Flow	liter/sec	l/s	1 l/s = 0.22 gal/sec	1 gal/sec = 4.55 l/s
Force	newton	N=lbs/force	1 N = 0.23 lbf	1 lbf = 4.4482 N
Moment of force (Torque)	Newton meter	Nm	1 Nm = 8.85 lb. In = 0.74 lb. Ft	1 lb. In = 0.11 Nm 1 lb. ft = 1.36 Nm
	Pressure	kilopascal	kPa	1 kPa = 0.15 lb/in
Vacuum	kilopascal	kPa	1 kPa = 0.30 in.	Hg 1 in/Hg = 3.39 kPa
Spring Rate	newton/millimeter	N/mm	1 N/mm = 5.7 lb. in	lb.in = 0.10 N/mm
Temperature	Celsius	°C	°C = 5/9 (°F-32)	°F = 9/5 °C +32

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