

SHORT GLOSSARY of Abbreviations

This is given here as an aid to following the text. A full Glossary is given in [Appendix 1 Key](#)
[Appendix 1 Line No.](#)

B = Bore mm ; S = Stroke mm ; V = Total Swept Volume cc (or L).	18,19,57.
VIA = Included Angle between Valve stems if OHV (see below) Degrees .	23
R = Compression Ratio (volumetric).	17
PA = Total Piston Area sq. cm .	55
IVD = Inlet Valve Head Diameter mm .	24
IVA = Total Inlet Valve-Head Area sq. cm .	58
CRL = Connecting-Rod Length between centres mm .	37
OHV = Overhead Valves (PR = Push-Rod actuated).	
OHC = Overhead Camshaft (per bank if Vee or Flat configuration); S = Single; D = Double.	
NA = Normally Aspirated.	
PC = Pressure Charged; MSC = Mechanically Supercharged; TC = TurboCharged.	
IVP = Inlet Charge Pressure at inlet valve ATA (Atmospheres Absolute) (1 ATA = 14.696 psi).	44
MDR = Manifold Density Ratio, relative to ambient density at Standard Temperature and Pressure (15°C & 14.696 psi).	45
PP = Peak Power* HP (BHP wherever this is certain, dividing known CV or PS by 1.01387).	49
NP = Crank rotational speed @ PP RPM .	50
* May unknowingly be a Rated Power @ Rated RPM below NP. Where known shown as PR @ NR.	
TP = Peak Torque lb ft	51
NT = Crank rotational speed @ TP RPM .	52
BMPP = Brake Mean Effective Pressure (BMEP) at PP Bar (1 Bar = 10 ⁵ Newtons/sq. cm = 14.503 psi)	74
BMPPA = BMPP Adjusted to R = 12 by Air Standard Efficiency ratio and to Petrol if fuel is largely Alcohol by dividing by 1.12 for NA only (when MSC alcohol adjustment is within MDR calculation). Bar	79
BMTP = BMEP at NT Bar	76
BMTA = BMTP adjusted as for BMPP to BMPPA Bar .	82
MPSP = Mean Piston Speed @ NP metres/sec = (2 x S x NP)/60,000 (m/s x 196.85 = ft/min).	73
BNP = Bore Speed @ NP m/s = (B x NP)/60,000	96
MVSP = Mean Valve Speed @ NP m/s = (IVL x NP)/(IOD x 83.333) IVL = Inlet Valve Maximum Lift mm IOD = Inlet Valve Open Duration off/on seat Crank Degrees .	97
MGVP = Mean Gas Velocity @ NP m/s = (PA/IVA) x MPSP	94
MPDP = Maximum Piston Deceleration @ NP g .	99
W = Weight (Basic Dry, excluding exhaust system; also excludes intercoolers for TC) (other definitions vary) kg .	124