



Note 92

Honda: Racing Motor-Cycles

	<u>All NA</u>			
<u>Year</u>	<u>1966</u>	<u>1967</u>	<u>1984</u>	
Type	RC149	RC181	NR500	
Data Sources	14,228,354	14,228,354 357	16,74,228, 354,357,358	
Fuel	All 100 Octane petrol			
Configuration	IL5	IL4	90V4	
Valves per Cylinder	4v/c	4v/c	8v/c	
@ Included Angle (VIA)	56 <sup>o</sup>	75 <sup>o</sup>	40 <sup>o</sup>	
Bore/Stroke (B/S)	35.5mm/25.1 = 1.414	59.4mm/44.9 = 1.323	"75.36"mm/28 = "2.691"	Note (1)
Swept Volume (V) cc	124	498	499	
Compression Ratio (R)	10.7	11.5	12.1	
Peak Power (PP) HP	32.7 Note (2)	95.2 Note (2)	134 Note (3)	
@RPM (NP)	20.000	14,500	19,500	
PP/V HP/L	263	191	268	
Brake Mean Effective Pressure @ NP (BMPP) Bar	11.78	11.80	12.31	
@ Mean Piston Speed (MPSP) m/s	16.73	21.70	18.20	
Mean Gas Velocity at Inlet @PP (MGVP) m/s	58	66	68	
	All Coil-spring Valve Return System (CVRS)			
Mean Valve Speed @ PP (MVSP) m/s	2.9	3.7	4.0	
BNP m/s	11.8	14.4	"24.5"	Note (1)

Note (1):- Equivalent circular Bore with same piston area as "Oval" cylinder.

Note (2):- With exhaust diffusers ("megaphones").

Note (3):- Racing motor-cycles had to have exhaust silencers by this date but the quoted test results may have been un-silenced, although with plain pipes, not megaphones.