Note 43. Mercedes-Benz racing engines, 1924 - 1937



	A	В	С	D	Е	F	G	Н	1	J.	К	ı
	PISTON ENGINE PERFORMANCE			ERC. 1924		,		''			IX.	
2	ENGINE IDENTITY											
3	PEP Serial No.	400	4 400									
4	Data Source Ref. File DASO	468	4,468		4,468	4,468	4 460	1 160	4 460	4 460	4.460	
5	YEAR	1924	1934		1934	1934.6	4,468 1934.7	4,468 1935	4,468 1936	4,468 1937	4,468 1937.5	
	Make	MERC.	MERC.		MERC.	MERC.	MERC.	MERC.	MERC.	MERC.	MERC.	
	Model	M218	M25A		M25A	M25AB	M25B	M25C	ME25	M125	M125	
8	Swept Volume Litres	2			3.4	3.7	4	4.3	4.7	5.7	5.7	
	Induction System	PC/Suctn				PC/Press			PC/Press			
	Class GEOMETRY	RR	RR		RR	RR	RR	RR	RR	RR	RR	
	Configuration	IL8	IL8		IL8	IL8	IL8	IL8	IL8	IL8	IL8	
	No. of Cylinders CN	8			8							
	No.Cyls/Intake CNI	8			8		8	8	8	8	8	
	In. & Ex. Configuration	RSC/CF	RSC/CF		RSC/CF		RSC/CF	RSC/CF	RSC/CF	RSC/CF	RSC/CF	
	Comb. Ch'b'r/Piston Config'n	PR/F	PR/LH				PR/LH	PR/LH	PR/LH	PR/MH	PR/MH	
	Compression Ratio R BORE B mm	5 61.7			7.5				8.2	8.9	8.9	
	BORE B mm STROKE S "	82.8	78 88		78 88	82 88	82 94.5	82 102	86 102	94 102	94 102	
	Valve Opening/Return System	DOHC	DOHC		DOHC	DOHC	DOHC	DOHC	DOHC	DOHC	DOHC	
21	Valve No./CylIn. VNI	2			2	2	2		2	2	2	
22	" " -Ex. VNE	2	2		2	2	2	2	2	2	2	
23	Valve Incl. Angle VIA Deg	60			60	60	60		60	70	70	
	Inlet Valve Lift IVI "		34		34	35.5	35.5		37	39	39	
	Inlet Valve Lift IVL " Inlet Tract Length LIN "		8.5		8.5	8.5	8.5	8.5	8.5	8.5	8.5	
	Timing-In. Open IVO Deg		25		25			20	20	15	15	
28	" " Close IVC "		45		45			40	35	42	42	
29	" Ex Open EVO "		50		50			28	27	30	30	
30	" " Close EVC "		20		20			6	10	3	3	
	In. Open Duration IOD "		250		250	250	250	240	235	237	237	
	Ex. " " EOD " InEx. Overlap OL "		250		250			214	217	213	213	
	Main Journal Dia. MJ mm		45 63		45 63			26 63	30	18 67	18 67	
	Crank Pin Dia. CP "		53		53			59		66	66	
	Gudgeon Pin Dia. GP "		22		22			22		25	25	
37	Con. Rod Length CRL "		161		161			168		167	167	
	Piston Height PH "		94		94			94		96	96	
	Piston Skirt Length PSL "		74		74			74		81	81	
	Equiv. PSL - EPSL "  INFLOW CONDITIONS		74		74			74		81	81	***************************************
	Fuel Type	P/B	P/B									
	, , , , , , , , , , , , , , ,			1	ΑΛΛΛΛ	ΔΛΛΛΛ/	ΔΛΛΛΛ	ΔΛΛΛΛ	ΔΛΛΛΛ/	ΔΛΑΛΑΙ	ΔΛΛΛΛ	
43		1	1		A/WW 1	A/WW 1	A/WW 1	A/WW 1	A/WW 1	A/WW 1	A/WW 1	
	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA								A/WW 1 2	A/WW 1 1.9	1 1.77	
44 45	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR	1	1 1.66		1	1	1	1	1	1	1	
44 45 46	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR CODE	1 1.97 1.5	1 1.66 1.39		1 1.66 1.66	1 1.66 1.66	1 1.66 1.66	2.1 2.1	1 2 2	1 1.9 1.9	1 1.77 1.77	
44 45 46 47	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR CODE Induction Code	1 1.97	1 1.66		1 1.66 1.66	1 1.66 1.66	1 1.66 1.66	2.1 2.1	1 2 2	1 1.9	1 1.77	
44 45 46 47 48	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR CODE Induction Code PERFORMANCE	1 1.97 1.5	1 1.66 1.39		1 1.66 1.66	1 1.66 1.66	1 1.66 1.66	1 2.1 2.1 B	1 2 2	1 1.9 1.9	1 1.77 1.77	
44 45 46 47 48 49	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP	1 1.97 1.5 B	1 1.66 1.39 B		1 1.66 1.66 B	1 1.66 1.66 B	1 1.66 1.66 B	1 2.1 2.1 B	1 2 2 2 B	1 1.9 1.9	1 1.77 1.77 B	
44 45 46 47 48 49 50	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP	1 1.97 1.5	1 1.66 1.39		1 1.66 1.66	1 1.66 1.66	1 1.66 1.66	1 2.1 2.1 B	1 2 2	1 1.9 1.9	1 1.77 1.77	
44 45 46 47 48 49 50	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP	1 1.97 1.5 B	1 1.66 1.39 B		1 1.66 1.66 B	1 1.66 1.66 B	1 1.66 1.66 B	1 2.1 2.1 B	1 2 2 2 B	1 1.9 1.9	1 1.77 1.77 B	
44 45 46 47 48 49 50 51 52	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR CODE Induction Code PERFORMANCE Peak (Rated) POWER PP HP Crank RPM @ PP NP Peak Torque TP LbFt	1 1.97 1.5 B	1 1.66 1.39 B		1 1.66 1.66 B	1 1.66 1.66 B	1 1.66 1.66 B	1 2.1 2.1 B	1 2 2 2 B	1 1.9 1.9	1 1.77 1.77 B	
44 45 46 47 48 49 50 51 52 53 54	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S	1 1.97 1.5 B 168 7000 0.745	1 1.66 1.39 B 310 5800 0.886		1 1.66 1.66 B 349 5800 0.886	1 1.66 1.66 B 393 5800 0.932	1 1.66 1.66 B 424 5800 0.868	1 2.1 2.1 B 456 5800 Ö.804	1 2 2 2 B 487 5800 0.843	1 1.9 1.9 8 574 5800	1 1.77 1.77 B 580 5800	
44 45 46 47 48 49 50 51 52 53 54 55	Fuel Adj. to Petrol AA  Press. @ In. Valve IVP ATA  Manifold Density Ratio = MDR  CODE  Induction Code  PERFORMANCE  Peak (Rated) Power PP HP  Crank RPM @ PP NP  Peak Torque TP LbFt  Crank RPM @ TP NT  GEOMETRIC ANALYSIS  B/S  PA SqCm	1 1.97 1.5 B 168 7000 0.745 239.19	1 1.66 1.39 B 310 5800 0.886 382.27		1 1.66 1.66 B 349 5800 0.886 382.27	1 1.66 1.66 B 393 5800 0.932 422.48	1 1.66 1.66 B 424 5800 0.868 422.48	1 2.1 2.1 B 456 5800 Š.804 422.48	B 487 5800 0.843 464.70	1 1.9 1.9 8 574 5800	1 1.77 1.77 B 580 5800 0.922 555.18	
44 45 46 47 48 49 50 51 52 53 54 55 56	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP Crank RPM @ PP NP Peak Torque TP Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder	1 1.97 1.5 B 168 7000 0.745 239.19 247.6	1 1.66 1.39 B 310 5800 0.886 382.27 420.5		1 1.66 1.66 B 349 5800 0.886 382.27 420.5	1 1.66 1.66 B 393 5800 0.932 422.48 464.7	1 1.66 1.66 B 424 5800 0.868 422.48 499.1	1 2.1 2.1 B 456 5800	1 2 2 2 B 487 5800 0.843 464.70 592.5	1 1.9 1.9 1.9 8 574 5800 0.922 555.18 707.9	1 1.77 1.77 B 580 5800 0.922 555.18 707.9	
44 45 46 47 48 49 50 51 52 53 54 55 56 57	Fuel Adj. to Petrol AA Press. @ In. Valve   VP	1 1.97 1.5 B 168 7000 0.745 239.19	1 1.66 1.39 B 310 5800 0.886 382.27 420.5 3364.0		1 1.66 1.66 B 349 5800 0.886 382.27 420.5 3364.0	1 1.66 1.66 B 393 5800 0.932 422.48 464.7 3717.8	1 1.66 1.66 B 424 5800 0.868 422.48 499.1 3992.4	1 2.1 2.1 B 456 5800	1 2 2 8 8 487 5800 0.843 464.70 592.5 4740.0	1 1.9 1.9 8 574 5800 0.922 555.18 707.9 5662.9	1 1.77 1.77 1.77 B 580 5800 5800 0.922 555.18 707.9 5662.9	
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA SqCm	1 1.97 1.5 B 168 7000 0.745 239.19 247.6	1 1.66 1.39 B 310 5800 0.886 382.27 420.5 3364.0 145.3		1 1.66 1.66 B 349 5800 0.886 382.27 420.5 3364.0 145.3	1 1.66 1.66 B 393 5800 0.932 422.48 464.7 3717.8 158.4	1 1.66 1.66 B 424 5800 0.868 422.48 499.1 3992.4 158.4	1 2.1 2.1 2.1 8 456 5800	1 2 2 8 487 5800 0.843 464.70 592.5 4740.0 172.0	1 1.9 1.9 B 574 5800 0.922 555.18 707.9 5662.9 191.1	1 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.	
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	Fuel Adj. to Petrol AA Press. @ In. Valve   VP	1 1.97 1.5 B 168 7000 0.745 239.19 247.6	1 1.66 1.39 B 310 5800 0.886 382.27 420.5 3364.0		1 1.66 1.66 B 349 5800 0.886 382.27 420.5 3364.0	1 1.66 1.66 B 393 5800 0.932 422.48 464.7 3717.8	1 1.66 1.66 B 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375	1 2.1 2.1 B 456 5800	1 2 2 2 8 487 5800 0.843 464.70 592.5 4740.0 172.0 0.370	1 1.9 1.9 1.9 B 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344	1 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.	
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA SqCm IVA/PA IVL/IVD ISA SqCm SqCm SqCm SqCm SqCm SqCm SqCm SqCm	1 1.97 1.5 B 168 7000 0.745 239.19 247.6	1 1.66 1.39 B 310 5800 0.886 382.27 420.5 3364.0 145.3 0.380 0.255 145.3		1 1.66 1.66 B 349 5800 0.886 382.27 426.0 145.3 0.380 0.380 145.3 145.3 145.3	1 1.66 1.66 B 393 5800 0.932 422.48 464.7 3717.8 158.4 0.375 0.935 151.7	1 1.66 1.66 B 424 5800 0.868 422.48 499.1 158.4 0.375 0.375 0.375	1 2.1 2.1 2.1 B 456 5800	1 2 2 2 8 487 5800 0.843 464.70 592.5 4740.0 172.0 0.370 0.230 158.1	1 1.9 1.9 B 574 5800 0.922 555.18 707.9 5662.9 191.1	1 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.	
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA/PA IVA/PA IVA/PA ISA/PA ISA/PA  ADRIA ATA  ATA  ATA  ATA  ATA  ATA  ATA  AT	1 1.97 1.5 B 168 7000 0.745 239.19 247.6	1 1.66 1.39 B 310 5800 382.27 420.5 3364.0 1.453 0.380 0.25 1.453 0.380 3.363 0.380 0.25 1.453 0.380 0		1 1.66 1.66 B 349 5800 0.886 382.27 420.5 3364.0 145.3 0.380 0.25 145.3 0.380	1 1.66 1.66 B 393 5800 0.932 422.48 464.7 3717.8 158.4 0.375 0.239 151.7 0.359	1 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.239 151.7 0.359	1 2.1 2.1 B 456 5800	1 2 2 2 B 487 5800	1 1.9 1.9 1.9 8 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300	1 1.77 1.77 B 580 5800 5800 1911 1 0.344 0.218 1666 0.300	
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT  GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA SqCm IVA/PA IVL/IVD ISA SqCm ISA/PA MJ/S %	1 1.97 1.5 B 168 7000 0.745 239.19 247.6	1 1.66 1.39 B 310 5800 5800 0.25 145.3 0.380 0.25 145.3 0.380 71.6		1 1.66 1.66 B 349 5800 0.886 382.27 420.5 3364.0 145.3 0.380 0.25 145.3 0,71.6	1 1.66 B 393 5800 0.932 422.48 464.7 3717.8 158.4 0.375 0.239 151.7 0.300	1 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.239 151.7 0.239 0.50	1 2.1 2.1 B 456 5800	B 487 5800  0.843 464.70 592.5 4740.0 172.0 0.230 158.1 0.340 0.0	1 1.9 1.9 1.9 B 574 5800   0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7	1 1.77 1.77 B 580 5800 5800 5800 1922 191.1 0.344 0.218 166.6 16.6 16.6 16.6 16.6 16.6 16.6 1	
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 60 61 62 63 64	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA SqCm IVA/PA IVL/IVD ISA SqCm ISA/PA MJ/S % CP/S %	1 1.97 1.5 B 168 7000 0.745 239.19 247.6	1 1.66 1.39 B 310 5800		1 1.66 1.66 B 349 5800 0.886 362.27 420.5 364.0 145.3 0.380 0.25 145.3 0.380 71.6	1 1 1.66 1.66 1.66 8 393 5800 0.932 422.48 464.7 3717.8 158.4 0.375 0.359 0.00	1 1.66 1.66 B 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.239 151.7 0.359 0.0	1 2.1 2.1 B 456 5800	1 2 2 2 B 487 5800	1 1.9 1.9 1.9 8 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.230 65.7 64.7	1 1.77 1.77 1.77 B 580 5800 0.922 555.18 707.9 566.9 191.1 0.344 0.218 166.6 0.300 65.7	
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 60 61 62 63 64 65	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA/PA IVA/PA IVA/PA IVA/PA ISA/PA MJ/S % GP/S % GP/S %	1 1.97 1.5 B 168 7000 0.745 239.19 247.6	1 1.66 1.39 B 310 5800 382.27 420.5 3364.0 0.25 145.3 0.380 71.6 60.2 25.0	***************************************	1 1 1.66 1.66 B 349 5800 0.886 382.27 420.5 3364.0 145.3 0.380 0.25 145.3 145.3 145.3 0.380 71.6	1 1.66 1.66 B 393 5800 0.932 422.48 464.7 3717.8 158.4 0.375 0.239 151.7 0.359 0.0	1 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.239 151.7 10.359 0.0	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	1 1.9 1.9 1.9 8 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 64.7 24.5	1 1.77 1.77 B 580 5800 5800 191.1 0.344 0.218 166.6 0.300 65.7 64.7 24.5 54.77 24.5 55.18 1.77 24.5 55.18 1.77 24.5 55.18 1.77 24.5 55.18 1.77 24.5 56.7 24.5 56.7 1.77 24.5 1.77 24.	
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 60 61 62 63 64	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA SqCm IVA/PA IVL/IVD ISA SqCm ISA/PA MJ/S % CP/S %	1 1.97 1.5 B 168 7000 0.745 239.19 247.6	1 1.66 1.39 B 310 5800 0.886 382.27 420.5 3364.0 145.3 0.380 0.25 145.3 0.380 71.6 60.2 25.0 1.83		1 1.66 B 349 5800  0.886 382.27 420.5 3364.0 145.3 0.380 0.25 145.3 0.380 71.6 60.2 25.0 1.83	1 1 1.66 1.66 1.66 8 393 5800 0.932 422.48 464.7 3717.8 158.4 0.375 0.359 0.00	1 1.66 1.66 B 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.239 151.7 0.359 0.0	1 2.1 2.1 B 456 5800	1 2 2 2 B 487 5800	1 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.	1 1.77 1.77 B 580 5800 5800 5800 1911 10.34 10.218 166.6 0.300 65.7 64.7 24.5 1.64	
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA SqCm IVA/PA IVL/IVD ISA SqCm ISA/PA MJ/S % CP/S % GP/S % GR/S	1 1.97 1.5 B 168 7000 0.745 239.19 247.6	1 1.66 1.39 B 310 5800 382.27 420.5 3364.0 0.25 145.3 0.380 71.6 60.2 25.0		1 1 1.66 1.66 B 349 5800 0.886 382.27 420.5 3364.0 145.3 0.380 0.25 145.3 145.3 145.3 0.380 71.6	1 1.66 1.66 B 393 5800 0.932 422.48 464.7 3717.8 158.4 0.375 0.239 151.7 0.359 0.0	1 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.239 151.7 10.359 0.0	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	1 1.9 1.9 1.9 8 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 64.7 24.5	1 1.77 1.77 B 580 5800 5800 191.1 0.344 0.218 166.6 0.300 65.7 64.7 24.5 54.77 24.5 55.18 1.77 24.5 55.18 1.77 24.5 55.18 1.77 24.5 55.18 1.77 24.5 56.7 24.5 56.7 1.77 24.5 1.77 24.	
44 45 46 47 48 49 50 51 52 53 54 55 56 67 62 63 64 65 66 67 68 69	Fuel Adj. to Petrol AA  Press. @ In. Valve IVP ATA  Manifold Density Ratio = MDR  CODE  Induction Code  PERFORMANCE  Peak (Rated) Power PP HP  Crank RPM @ PP NP  Peak Torque TP LbFt  Crank RPM @ TP NT  GEOMETRIC ANALYSIS  B/S  PA SqCm  V/CN cc per cylinder  V cc  IVA SqCm  IVA/PA  IVL/IVD  ISA SqCm  ISA/PA  MJ/S %  GP/S %  GP/S %  CPI/S %  GP/S %  CRL/S  B/PH  100/Smm	1 1.97 1.5 B 168 7000	1 1.66 1.39 B 310 5800 382.27 420.5 3364.0 1.45.3 0.380 71.6 60.2.2 25.0 0.83 1.136 30.83 1.136 1.36 1.36 1.36 1.36 1.36 1.36 1.		1 1.66 1.66 1.66 8 349 5800 0.886 382.27 420.5 3364.0 145.3 0.380 0.325 145.3 0.380 60.2 25.0 1.0 60.2 25.0 1.0 60.2 25.0	1 1 1.66 1.66 1.66 1.66 8 393 5800 0.932 422.48 464.7 3717.8 158.4 0.375 0.239 0.0 0.0 0.00	1 1.66 1.66 B 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.239 0.0 0.0 0.00	1 2.1 2.1 B 456 5800	1 2 2 2 B 487 5800	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.230 65.7 64.7 24.5 1.84	1 1.77 1.77 1.77 8 580 5800 0.922 555.18 707.9 566.9 191.1 0.344 0.218 166.6 0.300 65.7 64.7 24.5 1.64	
44 45 46 47 48 49 50 51 52 53 54 55 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA SqCm IVA/PA IVL/IVD ISA SqCm ISA/PA MJ/S % CP/S % GP/S % CRL/S B/PH 100/Smm R*VIA PERFORMANCE ANALYSIS	1 1.97 1.5 B 168 7000	1 1.66 1.39 B 310 5800   0.886 362.27 420.5 3364.0 145.3 0.380 0.255 145.3 0.380 1.36 60.2 25.0		1 1.66 1.66 1.66 8 349 5800 0.886 382.27 420.5 3364.0 0.255 145.3 0.380 0.255 145.3 0.380 60.2 25.0 1.136 450.0	1 1.66 1.66 1.66 1.66 8 393 5800 0.932 422.48 464.7 3717.8 158.4 0.375 0.0359 0.00 0.00 0.00 1.136 450.0	1 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.239 0.0 0.0 0.0 0.0 1.058 439.8	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800 4447.0 592.5 4740.0 0.0 0.0 0.0 0.0 0.0 0.980 492.0	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 64.7 24.5 1.0,98 0.990 623.0	1 1.77 1.77 1.77 1.77 8 580 5800 0.922 555.18 707.9 566.9 191.1 0.344 0.248 0.507 65.7 64.7 24.5 1.66.6 0.980 0.980 623.0	
44 45 46 47 48 49 50 51 52 53 54 55 55 56 67 62 63 64 65 66 67 68 69 70 71	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA SqCm IVA/PA IVL/IVD ISA SqCm ISA/PA MJ/S % CP/S % GP/S % GP/S % CRL/S B/PH 100/Smm R*VIA PERFORMANCE ANALYSIS PPA-SP HP/Litre	1 1.97 1.5 B 168 7000 247.6 1980.5	1 1.66 1.39 B 310 5800 382.27 420.5 3364.0 1.45.3 0.380 71.6 60.2.2 25.0 0.83 1.136 30.83 1.136 1.36 1.36 1.36 1.36 1.36 1.36 1.		1 1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 382.27 420.5 3364.0 145.3 0.380 71.6 60.2.2 25.0 1.83 0.83 1.136	1 1.66 1.66 1.66 8 393 5800 0.932 422.48 464.7 3717.8 158.4 0.375 0.239 151.7 0.359 0.0 0.0 0.00	1 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.239 151.7 0.359 0.0 0.0 0.00	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 64.7, 24.5 1.64 0.988	1 1.77 1.77 B 580 5800 5800 5800 65.7 64.7 24.5 1.64 0.980 0.980 0.980	
44 45 46 47 48 49 50 51 52 53 54 55 56 67 68 69 67 68 69 70 71 72	Fuel Adj. to Petrol AA  Press. @ In. Valve IVP ATA  Manifold Density Ratio = MDR  CODE  Induction Code  PERFORMANCE  Peak (Rated) Power PP HP  Crank RPM @ PP NP  Peak Torque TP LbFt  Crank RPM @ TP NT  GEOMETRIC ANALYSIS  B/S  PA SqCm  V/CN cc per cylinder  V cc  IVA SqCm  IVA/PA  IVA/PA  IVA/PA  IVA/PA  IVA/PA  ISA/PA  MJ/S %  GP/S %  GP/S %  CP/S %  GP/S %  CP/S %  IVO/Smm  R*VIA  PERFORMANCE ANALYSIS  PP/V=SP HP/Litre  F= (NP-NT/NP)  MDD  ADD  TORD	1 1.97 1.5 B 168 7000 0.745 239.19 247.6 1980.5	1 1.66 1.39 B 310 5800 5800 0.886 382.27 420.5 3364.0 145.3 0.380 71.6 60.2 25.0 1.83 0.83 1.136 450.0 92.2		1 1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1	1 1.66 1.66 B 393 5800 0.932 422.48 464.7 3717.8 1518.4 0.375 0.239 151.7 0.359 0.0 0.0 0.00 1.136 450.0	1 1.66 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 5892.4 158.4 0.375 0.239 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	1 2.1 2.1 B 456 5800	1 2 2 2 B 487 5800	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 64.7 24.5 1.64 0.98 0.980 623.0	1 1.77 1.77 B 580 5800 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 64.7 24.5 1.64 0.98 0.980 623.0 102.4	
44 45 46 47 48 49 50 51 52 53 54 55 56 67 68 69 70 71 72 73	Fuel Adj. to Petrol AA  Press. @ In. Valve IVP ATA  Manifold Density Ratio = MDR  CODE  Induction Code  PERFORMANCE  Peak (Rated) Power PP HP  Crank RPM @ PP NP  Peak Torque TP LbFt  Crank RPM @ TP NT  GEOMETRIC ANALYSIS  B/S  PA SqCm  V/CN cc per cylinder  V cc  IVA SqCm  IVA/PA  IVA/PA  IVA/PA  IVA/PA  IVA/PA  ISA/PA  MJ/S %  CP/S %  GP/S %  CRL/S  B/PH  100/Smm  R*VIA  PERFORMANCE ANALYSIS  B/PN-SP HP/Litre  F= (NP-NT)/NP %  MPSP = 2*S*NP m/s	1 1.97 1.5 B 168 7000 1 1.208 300.0 84.8 19.32	1 1.66 1.39 B 310 5800		1 1.66 1.66 B 349 5800 0.886 362.27 420.5 3364.0 345.3 0.380 0.255 145.3 0.380 1.136 60.2 25.0 1.83 1.136 450.0	1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 0.375 0.339 0.00 0.00 1.058 439.8 106.2	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800 172.0 172.0 0.370 0.230 158.1 0.340 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7, 64.7 24.5 1.0.98 0.990 623.0	1 1.77 1.77 1.77 1.77 8 580 5800 0.922 555.18 707.9 5662.9 10.344 0.348 166.6 0.300 6.50,7 64.7 24.5 1.048 0.980 623.0	
44 45 46 47 48 49 50 51 52 53 54 55 56 67 68 69 70 71 72 73	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA SqCm IVA/PA IVL/IVD ISA SqCm ISA/PA MJ/S % CP/S % GP/S % CRL/S B/PH 100/Smm R*VIA PERFORMANCE ANALYSIS PP/V=SP HP/Litre F= (NP-NT)/NP % BMPS P 2*S*NP MZ	1 1.97 1.5 B 168 7000 0.745 239.19 247.6 1980.5	1 1.66 1.39 B 310 5800		1 1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1	1 1.66 1.66 B 393 5800 0.932 422.48 464.7 3717.8 1518.4 0.375 0.239 151.7 0.359 0.0 0.0 0.00 1.136 450.0	1 1.66 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 5892.4 158.4 0.375 0.239 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	1 2.1 2.1 B 456 5800	1 2 2 2 B 487 5800	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 64.7 24.5 1.64 0.98 0.980 623.0	1 1.77 1.77 B 580 5800 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 64.7 24.5 1.64 0.98 0.980 623.0 102.4	
44 45 46 47 48 49 50 51 52 53 54 55 66 67 68 69 70 71 72 73 74 75	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S V/CN cc per cylinder V cc IVA SqCm IVA/PA IVL/IVD ISA SqCm ISA/PA MJ/S % GP/S %	1 1.97 1.5 B 168 7000 1 1.208 300.0 84.8 19.32	1 1.66 1.39 B 310 5800		1 1.66 1.66 B 349 5800 0.886 362.27 420.5 3364.0 345.3 0.380 0.255 145.3 0.380 1.136 60.2 25.0 1.83 1.136 450.0	1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 0.375 0.339 0.00 0.00 1.058 439.8 106.2	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800 172.0 172.0 0.370 0.230 158.1 0.340 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7, 64.7 24.5 1.0.98 0.990 623.0	1 1.77 1.77 1.77 1.77 8 580 5800 0.922 555.18 707.9 5662.9 10.344 0.348 166.6 0.300 6.50,7 64.7 24.5 1.048 0.980 623.0	
44 45 46 47 48 49 50 51 52 53 54 55 66 67 68 69 70 71 72 73 74 75	Fuel Adj. to Petrol AA  Press. @ In. Valve IVP ATA  Manifold Density Ratio = MDR  CODE  Induction Code  PERFORMANCE  Peak (Rated) Power PP HP  Crank RPM @ PP NP  Peak Torque TP LbFt  Crank RPM @ TP NT  GEOMETRIC ANALYSIS  B/S  PA SqCm  V/CN cc per cylinder  V cc  IVA SqCm  IVA/PA  IVA/PA  IVA/PA  IVA/PA  IVA/PA  ISA/PA  MJ/S %  GP/S %  GP/S %  CP/S %  GP/S %  CP/S %  GP/S HP/Litre  FE (NP-NT)/NP %  MPSP = 2*S*NP M/S  BAD  MDST MDR	1 1.97 1.5 B 168 7000 1 1.208 300.0 84.8 19.32	1 1.66 1.39 B 310 5800		1 1.66 1.66 B 349 5800 0.886 362.27 420.5 3364.0 345.3 0.380 0.255 145.3 0.380 1.136 60.2 25.0 1.83 1.136 450.0	1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 0.375 0.339 0.00 0.00 1.058 439.8 106.2	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800 172.0 172.0 0.370 0.230 158.1 0.340 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7, 64.7 24.5 1.0.98 0.990 623.0	1 1.77 1.77 1.77 1.77 8 580 5800 0.922 555.18 707.9 5662.9 10.344 0.348 166.6 0.300 6.50,7 64.7 24.5 1.048 0.980 623.0	
44 45 46 47 48 49 50 51 52 53 55 55 55 60 61 62 63 64 65 66 66 67 70 71 72 77 77 78	Fuel Adj. to Petrol AA  Press. @ In. Valve IVP ATA  Manifold Density Ratio = MDR  CODE  Induction Code  PERFORMANCE  Peak (Rated) Power PP HP  Crank RPM @ PP NP  Peak Torque TP LbFt  Crank RPM @ TP NT  GEOMETRIC ANALYSIS  B/S  PA SqCm  V/CN cc per cylinder  V cc  IVA SqCm  IVA/PA  IVA/PA  IVA/PA  IVA/PA  IVA/PA  IVA/PA  IVA/PA  ISA/PA  MJ/S %  GP/S %  CP/S %  GP/S %  CP/S %  GP/S %  CP/S %  MCRL/S  B/PH  100/Smm  R*VIA  PERFORMANCE ANALYSIS  PP/V=SP HP/Litre  F= (NP-NT)/NP %  MPSP = 2*S*NP m/s  BMPP Bar  MPST m/s  BMTP Bar  RA = 0.63/(1-1/R*O.4)  PPA = PP*RA/AA HP	1 1.97 1.5 B 168 7000 1 1.208 300.0 84.8 19.32 10.84	1 1.66 1.39 B 310 5800   0.886 362.27 420.5 3364.0 145.3 0.380 0.255 145.3 0.380 1.136 60.2 25.0 1.136 450.0 92.2 17.01 14.22		1 1.66 1.66 B 349 5800 0.886 382.27 420.5 3349 0.380 0.255 145.3 0.380 0.255 145.3 0.380 1.136 60.2 25.0 1.330 1.136 1.136 1.136 1.136 1.136	1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 1.66 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.239 151.7 0.359 0.0 0.0 0.0 0.0 1.058 439.8 106.2	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800 444.70 592.5 4740.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 24.5 1.64.7 24.5 1.098 0.980 623.0	1 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.7	
44 45 46 47 48 49 50 51 52 53 54 55 56 67 68 69 69 70 71 72 73 74 75 76 77 78 79	Fuel Adj. to Petrol AA  Press. @ In. Valve IVP ATA  Manifold Density Ratio = MDR  CODE  Induction Code  PERFORMANCE  Peak (Rated) Power PP HP  Crank RPM @ PP NP  Peak Torque TP LbFt  Crank RPM @ TP NT  GEOMETRIC ANALYSIS  B/S  PA SqCm  V/CN cc per cylinder  V cc  IVA SqCm  IVA/PA  IVL/IVD  ISA SqCm  IVA/PA  IVL/IVD  ISA SqCm  ISA/PA  MJ/S %  CP/S %  GP/S %  CPL/S  B/PH  100/Smm  R*VIA  PERFORMANCE ANALYSIS  PPV—SP HP/Litre  F= (NP-NT)/NP %  MPSP = 2*S*NP m/s  BMPP Bar  MPST m/s  BMTP Bar  MPST m/s  BMTP Bar  RA = 0.63/(1-1/R^0.4)  PPA = PP*RA/AA HP  BMPA = BMPP*RA/AA Bar	1 1.97 1.5 B 168 7000 1745 239.19 247.6 1980.5 19.32 10.84 19.32 10.84 1.327 222.9 14.39	1 1.66 1.39 B 310 5800   0.886 382.27 420.5 3364.0 145.3 0.380 0.255 145.3 0.380 1.136 60.2 25.0 1.833 0.83 1.136 450.0 92.2 17.01 14.22   1.138 352.9 16.18		1 1.66 1.66 B 349 5800 0.886 382.27 420.5 330.380 0.255 145.3 0.380 7.366 60.2 25.0 1.136 450.0 103.7 17.01 16.01	1 1.66 1.66 B 393 5800 0.932 422.48 464.7 3717.8 31718.4 0.375 0.359 0.00 0.00 1.136 450.0 105.7 17.01 16.31	1 1.66 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.375 0.359 0.00 0.00 0.00 1.058 439.8 106.2 18.27 16.39	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800 444.70 592.5 4740.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7, 64.7 24.5 1.644 0.98 0.980 623.0	1 1.77 1.77 1.77 1.77 8 580 5800 0.922 555.18 707.9 5662.9 19.11 0.344 0.218 166.6 0.300 65.7 64.7 24.5 1.64.7 24.7 24.7 24.7 24.7 24.7 24.7 24.7 2	
444 456 477 488 499 551 552 553 554 555 566 667 668 669 700 771 775 777 788 80	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA SqCm IVA/PA IVI/IVD ISA SqCm IVA/PA IVI/IVD ISA SqCm IVA/PA IVI/IVD ISA SqCm ISA/PA MJ/S % CRL/S B/PH 00/Smm R*VIA PERFORMANCE ANALYSIS PP/V=SP HP/Litre F= (NP-NT)/NP % MPSP = 2*S*NP m/s BMPP Bar MPST m/s BMPA BMPP*RA/AA BAR BMPA/MAICE ANALYA BIPPA BARP*RA/AA BIPPAMPA BAR BMPA BARP*RA/AA BAR BMPA BARP*RA/AA BAR BMPABMPP*RA/AA BAR BMPA/BMPS Adj, Bar BMPA/BMPS Adj, Bar BMPA/BMPS Adj, Bar	1 1.97 1.5 B 168 7000 169 169 169 169 169 169 169 169 169 169	1 1.66 1.39 B 310 5800   0.886 382.27 420.5 3364.0 145.3 0.380 0.255 145.3 0.380 1.136 60.2 25.0 1.833 0.83 1.136 450.0 92.2 17.01 14.22   1.138 352.9 16.18		1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 1.66 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.239 151.7 10.359 0.0 0.0 0.0 0.0 1.058 439.8 106.2 18.27 16.39	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 24.5 1.64 0.98 0.980 0.290 101.4 19.72 15.64	1 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.7	
44 45 46 47 48 49 50 51 52 53 54 55 56 65 57 68 69 70 71 72 73 74 75 77 78 80 81	Fuel Adj. to Petrol AA  Press. @ In. Valve IVP ATA  Manifold Density Ratio = MDR  CODE  Induction Code  PERFORMANCE  Peak (Rated) Power PP HP  Crank RPM @ PP NP  Peak Torque TP LbFt  Crank RPM @ TP NT  GEOMETRIC ANALYSIS  B/S  PA SqCm  V/CN cc per cylinder  V cc  IVA SqCm  IVA/PA  IVA/	1 1.97 1.5 B 168 7000 1745 239.19 247.6 1980.5 19.32 10.84 19.32 10.84 1.327 222.9 14.39	1 1.66 1.39 B 310 5800   0.886 382.27 420.5 3364.0 145.3 0.380 0.255 145.3 0.380 1.136 60.2 25.0 1.833 0.83 1.136 450.0 92.2 17.01 14.22   1.138 352.9 16.18		1 1.66 1.66 B 349 5800 0.886 382.27 420.5 330.380 0.255 145.3 0.380 7.366 60.2 25.0 1.136 450.0 103.7 17.01 16.01	1 1.66 1.66 B 393 5800 0.932 422.48 464.7 3717.8 31718.4 0.375 0.359 0.00 0.00 1.136 450.0 105.7 17.01 16.31	1 1.66 1.66 1.66 1.66 8 424 5800 0.868 422.48 499.1 3992.4 158.4 0.375 0.375 0.359 0.00 0.00 0.00 1.058 439.8 106.2 18.27 16.39	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800 444.70 592.5 4740.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7, 64.7 24.5 1.644 0.98 0.980 623.0	1 1.77 1.77 1.77 1.77 8 580 5800 0.922 555.18 707.9 5662.9 19.11 0.344 0.218 166.6 0.300 65.7 64.7 24.5 1.64.7 24.5 1.64.7 1.980 10.24 11.80 11.	
44 45 47 48 49 50 51 55 55 55 55 55 60 61 62 63 64 65 66 67 77 77 77 78 79 80 81 82 82 83 84 84 85 86 86 87 87 87 87 87 87 87 87 87 87	Fuel Adj. to Petrol AA  Press. @ In. Valve IVP ATA  Manifold Density Ratio = MDR  CODE  Induction Code  PERFORMANCE  Peak (Rated) Power PP HP  Crank RPM @ PP NP  Peak Torque TP LbFt  Crank RPM @ TP NT  GEOMETRIC ANALYSIS  B/S  PA SqCm  V/CN cc per cylinder  V cc  IVA SqCm  IVA/PA  IVL/IVD  ISA SqCm  IVA/PA  IVL/IVD  ISA SqCm  ISA/PA  MJ/S %  CP/S %  GP/S %  CP/S %  GP/S %  CP/S %  GP/S %  CRL/S  B/PH  100/Smm  R*VIA  PERFORMANCE ANALYSIS  PP/V=SP HP/Litre  F= (NP-NT)/NP %  MPSP = 2*S*NP m/s  BMPP Bar  MPST m/s  BMPP Bar  RA = 0.63/(1-1/R^0.4)  PPA = PP*RA/AA HP  BMPAMEMTP Adj. Bar  BMPA/MDR Adj. Bar  TPA = TP*RA/AA Bar	1 1.97 1.5 B 168 7000 1 1.208 300.0 84.8 19.32 10.84 1.327 222.9 14.39 9.59	1 1.66 1.39 B 310 5800   0.886 382.27 420.5 3364.0 145.3 0.380 0.255 145.3 0.380 1.83 3.83 0.83 1.136 450.0 92.2 17.01 14.22   1.138 352.9 16.18 11.64		1 1.66 1.66 B 349 5800 0.886 382.27 420.5 3364.0 3364.0 0.255 145.3 0.380 0.255 145.3 0.380 1.136 60.2 25.0 1.833 0.83 1.136 450.0 103.7 17.01 16.01	1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 2.1 2.1 B 456 5800	1 2 2 8 8 487 5800	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7, 64.7 24.5 1.081 19.72 15.64	1 1.77 1.77  B 580 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 64.7 24.5 1.644 0.98 0.980 623.0 102.4 19.72 15.80 1.081 1.081	
44 45 47 48 49 50 51 55 55 55 55 55 60 61 62 63 64 65 66 67 77 77 77 78 79 80 81 82 82 83 84 84 85 86 86 87 87 87 87 87 87 87 87 87 87	Fuel Adj. to Petrol AA Press. @ In. Valve IVP ATA Manifold Density Ratio = MDR  CODE Induction Code PERFORMANCE Peak (Rated) Power PP HP Crank RPM @ PP NP Peak Torque TP LbFt Crank RPM @ TP NT GEOMETRIC ANALYSIS B/S PA SqCm V/CN cc per cylinder V cc IVA SqCm IVA/PA IVI/IVD ISA SqCm IVA/PA IVI/IVD ISA SqCm IVA/PA IVI/IVD ISA SqCm ISA/PA MJ/S % CRL/S B/PH 9 BOPS 9 CRL/S B/PH 100/Smm R*VIA PERFORMANCE ANALYSIS PP/V=SP HP/Litre F= (NP-NT)/NP % MPSP = 2*S*NP m/s BMPP Bar MPST m/s BMPP Bar RA = 0.63/(1-1/R*O.4) PPA = TP*RA/AA BAR BMPA/MDR Adj.Bar TPA = TP*RA/AA BAR BMTA = BMPP*RA/AA BAR BMTA = BMPA/AA BAR BMTA = BMPA/AA BAR BMTA = BMPA/AA BAR BMTA = BMTP*RA/AA BMTA = BMTA = BMTP*RA/AA BAR BMTA = BMTP*RA/AA BAR BMTA = BMTP*RA/AA BAR BMTA = BMTA	1 1.97 1.5 B 168 7000 1 1.208 300.0 1 1.208 300.0 1 1.208 1 1.327 222.9 14.39 9.59 0.93	1 1.66 1.39 B 310 5800 S 25.0		1 1.66 1.66 B 349 5800 0.886 382.27 420.5 3364.0 145.3 0.380 71.6 60.2 25.0 1.136 450.0 103.7 17.01 16.01 1.138 397.3 18.22 10.98	1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 2.1 2.1 B 456 5800	1 2 2 2 8 8 487 5800	1 1.9 1.9 1.9 8 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 24.5 1.64 0.980 0.980 623.0 101.4 19.72 15.64 1.081 620.3 16.90 8.69	1 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.7	
44 45 47 48 49 50 51 52 53 54 55 56 67 68 69 70 77 77 78 79 80 81 82 83 83 84 84 85 86 86 87 87 87 87 87 87 87 87 87 87	Fuel Adj. to Petrol AA  Press. @ In. Valve IVP ATA  Manifold Density Ratio = MDR  CODE  Induction Code  PERFORMANCE  Peak (Rated) Power PP HP  Crank RPM @ PP NP  Peak Torque TP LbFt  Crank RPM @ TP NT  GEOMETRIC ANALYSIS  B/S  PA SqCm  V/CN cc per cylinder  V cc  IVA SqCm  IVA/PA  IVL/IVD  ISA SqCm  IVA/PA  IVL/IVD  ISA SqCm  ISA/PA  MJ/S %  CP/S %  GP/S %  CP/S %  GP/S %  CP/S %  GP/S %  CRL/S  B/PH  100/Smm  R*VIA  PERFORMANCE ANALYSIS  PP/V=SP HP/Litre  F= (NP-NT)/NP %  MPSP = 2*S*NP m/s  BMPP Bar  MPST m/s  BMPP Bar  RA = 0.63/(1-1/R^0.4)  PPA = PP*RA/AA HP  BMPAMEMTP Adj. Bar  BMPA/MDR Adj. Bar  TPA = TP*RA/AA Bar	1.208 300.0 1.327 222.9 14.39 9.59	1 1.66 1.39 B 310 5800 S 25.0		1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 1.66 1.66 1.66 1.66 1.66 1.66 1.66 1.6	1 2.1 2.1 B 456 5800	1 2 2 8 8 487 5800	1 1.9 1.9 1.9 574 5800 0.922 555.18 707.9 5662.9 191.1 0.344 0.218 166.6 0.300 65.7 24.5 1.64 0.980 623.0 101.4 19.72 15.64 1.081 1.	1 1.77 1.77 1.77 1.77 1.77 1.77 1.77 1.7	

Continued below.

## Note 43 continurd

