Metric Mechanic M42 & M44 Engine Series

2200 Sport, 2300 Rally & 2400 Rally

M42: E30 (90-91) E36 (92-95) Z3 '95 M44: E36/5 318ti (96-98) E36 18i (96-98) Z3 96-98

MM Engine	Displace- ment	HP RPM	Torque RPM	Head	Cam Duration & Lift	Piston Weight	Pin Weight	CR	Rod, Length & Weight	Stroke & Crank
2000 Sport M42	1985 cc	<u>160</u> 6800	<u>150</u> 4500	*ST 6% Flow Increase	Intake 262°/11.15mm Lift Exhaust 228°/9.0mm Lift	87mm Forged Alusil 310 grams	22mm 89 grams	11.0:1	Stock Rod 140mm 610 or 540 grams	83.5mm Cast with 4 Counterweights
2100 Rally M42	2091 cc	<u>205</u> 7500	<u>160</u> 5250	*ST 6% Flow Increase	Intake 272°/11.4mm Lift Exhaust 250°/10.9mm Lift	87mm Forged Alusil 295 grams	21mm 80 grams	11.5:1	H Beam Rod 138mm 525 grams	88mm Forged with 8 Counterweights
2000 Sport M44	1985 cc	<u>170</u> 6800	<u>150</u> 4500	*ST 6% Flow Increase	Intake 262°/11.15mm Lift Exhaust 228°/9.0mm Lift	87mm Forged Alusil 310 grams	22mm 89 grams	11.0:1	Stock Rod 140mm 610 or 540 grams	83.5mm Cast with 4 Counterweights
2100 Rally M44	2091 cc	<u>190</u> 7250	<u>160</u> 4500	*ST 6% Flow Increase	Intake 271°/11.5mm Lift Exhaust 253°/11.5mm Lift	87mm Forged Alusil 295 grams	21mm 80 grams	11.5:1	H Beam Rod 138mm 525 grams	88mm Forged with 8 Counterweights

M42 & M44 Forced Induction Engine Series

1900 & 2100 FI for M42 plus 2000 & 2100 FI for the M44

M42: E30 (90-91) E36 (92-95) Z3 '95 M44: E36/5 318ti (96-98) E36 18i (96-98) Z3 96-98

1900 FI M42	1881 cc	<u>200 - 250</u> 7200	<u>200 - 250</u> 4200	*ST 6% Flow Increase	Intake 228°/9.0mm Lift Exhaust 228°/9.0mm Lift	86mm Forged Alusil / Ceramic Coated Crown 340 grams	21mm 105 grams	8.6:1	Premium H Beam Rod 138mm 525 grams	81mm Forged with 8 Counterweights
2100 FI M42	2043 cc	<u>250 - 325</u> 7400	<u>250 - 325</u> 4500	*ST 6% Flow Increase	Intake 245°/10.9mm Lift Exhaust 245°/10.9mm Lift	86mm Forged Alusil / Ceramic Coated Crown 340 grams	21mm 105 grams	8.6:1	Premium H Beam Rod 138mm 515 grams	88mm Forged with 8 Counterweights
2100 FI M44	2043 cc	<u>250 - 325</u> 7400	<u>250 - 325</u> 4500	*ST 6% Flow Increase	Intake 245°/10.9mm Lift Exhaust 245°/10.9mm Lift	86mm Forged Alusil / Ceramic Coated Crown 340 grams	21mm 105 grams	8.6:1	Premium H Beam Rod 138mm 515 grams	88mm Forged with 8 Counterweights

^{*} ST means Surface Turbulence: Metric Mechanic Patented Machined Grooves on backside of the Intake Valves, Head of Intake and Exhaust Valves for the purpose of increasing fuel efficiency, minimizes tuning problems, reduces detonation in the motor, allows higher compression, and alleviates head cracking problems.