

COSWORTH YBM SIERRA ENGINE INFORMATION

ENGINE TYPE: IN-LINE 4 CYLINDER, BASED ON THE FORD 2 LITER EAO SPORTS 2000 TYPE IRON CYLINDER BLOCK WHICH INCORPORATES COSWORTH 16 VALVE CYLINDER HEAD, DUAL OVERHEAD CAMS AND INTERNAL COMPONENTS.

CYLINDER NUMBERING: FRONT 1 - 2 - 3 - 4 REAR

ENGINE WEIGHT: 260 LBS.

CAPACITY: 121.70 CI / 1994.24 CC ENGINE
COMPONENTS ARE AVAILABLE TO PRODUCE A 140.35 CI / 2299.84 CC
ENGINE COMPRESSION RATIO: 12.0-14.0 TO 1

BORE SIZE: 3.576 IN / 90.82 MM

STROKE: 3.030 IN / 76.96 MM

HORSEPOWER: 270 BHP @ 8500 RPM

TORQUE: 180 FT LBS @ 7200 RPM

MAXIMUM RECOMENDED R.P.M.: 8750 RPM

CARBURETORS: 2 EA. 48 DCOE WEBER (SIDEDRAFT)
42 MM CHOKES, 180 AIR JET, 165 MAIN JET
(CONVERSION TO 50 DCOE CARBS AVAILABLE ON REQUEST)

CYLINDER HEAD: SPECIALLY MANUFACTURED FACTORY HEAD FOR NORMALLY ASPIRATED APPLICATION. BASED ON YBG.

THIS PRODUCT IS STRICTLY FOR RACING AND OFF HIGHWAY USE ONLY!

DECEMBER 1, 1995

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CONNECTING RODS:

- * T BEAM TYPE FORGED STEEL ROD
- * LENGTH (CENTER TO CENTER) -- 5.059" / 128.5 MM
- * WIDTH BIG END -- 1.018" - 1.019" / 25.86 MM - 25.88 MM
- * WIDTH SMALL END -- 1.018" - 1.019" / 25.86 MM - 25.88 MM
- * BORE DIAMETER BIG END -- 2.1653" - 2.1661" / 55.00 MM - 55.02 MM
- * BORE DIAMETER SMALL END -- .9452" - .9454" / 24.007 MM - 24.013 MM
- * B.E. BEARING TO SHAFT CLEARANCE - .0005" - .0026" / .013 MM - .067 MM
- * B.E. SIDE CLEARANCE -- .0035" - .0098" / .09 MM - .25 MM
- * WEIGHT (WITH BOLTS) -- 675.9 GRAMS

CRANKSHAFT:

- * NON TWIST FORGED STEEL CRANK
- * MAIN BEARING JOURNAL DIA. - 2.2424" - 2.2431" / 56.959 MM - 56.975 MM
- * ROD JOURNAL DIA. -- 2.0463" - 2.0469" / 51.977 MM - 51.993 MM
- * MAIN BEARING TO SHAFT CLEARANCE - .0009" - .0031" / .025 MM - .079 MM
- * END FLOAT -- .0039" - .010" / .1 MM - .274 MM
- * WEIGHT -- 32.5 LBS

CYLINDER BLOCK:

- * MAIN BEARING BORE DIA. -- 2.386" - 2.387" / 60.620 MM - 60.640 MM
- * BLOCK WEIGHT -- 98 LBS
- * BORE DIAMETER -- 3.7008" - 3.7016" / 94.000 MM - 94.020 MM

THE CYLINDER BLOCK IS SUPPLIED BORED AND FINISH HONED AND SHOULD ONLY REQUIRE NORMAL PREPARATION SUCH AS: DEBURRING, CLEANING AND PAINTING.

WE HAVE FOUND THAT IN ORDER TO ACHIEVE OPTIMUM FLAME PROPAGATION YOU SHOULD CLOSE UP THE QUENCH (PISTON TO HEAD CLEARANCE) BY LEAVING THE PISTON .020" PROUD OF THE BLOCK DECK. THE DECK OF THE BLOCK MAY REQUIRE GRINDING AS MUCH AS .012" TO OBTAIN THIS PISTON TO DECK HEIGHT. NO MACHINING OF THE PISTONS SHOULD BE REQUIRED, HOWEVER CHECK ALL CLEARANCES AS DURING ANY NORMAL ENGINE ASSEMBLY. THE ABOVE DIMENSIONS HAVE BEEN BASED UPON THE USE OF PART NUMBER YB0611 HEAD GASKET.

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