

Metric Mechanic

BMW 2 LITER RACE ENGINE

(GT-3 Racing)

Phone: (573) 765-1269

Fax: (573) 765-4216

Email: metricmechanicinc@mac.com

PO Box: 1136, Richland MO 65556

Ship: 505 East Main,

Richland, MO 65556

1

BMW 2 Liter Race Engine

Horsepower... 228 HP @ 7750 rpm

Torque... 155 ft. lbs. @ 5000 rpm

Bore... 90mm

Stroke... 80mm

Compression Ratio... 14.0:1

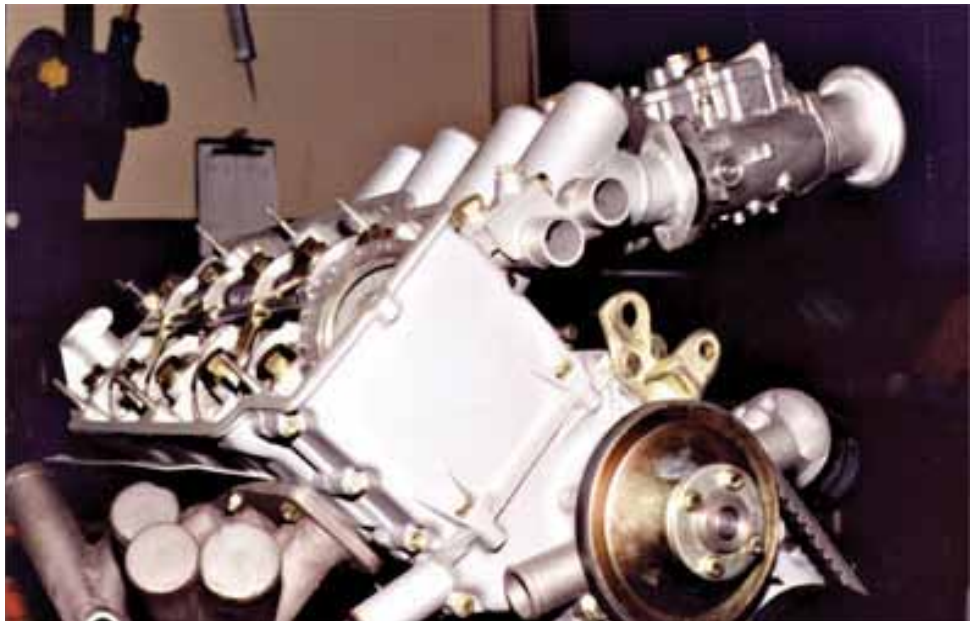
Carbs... 50 DCOE Weber

Intake... MM Pulse Chamber

Intake Manifold (23 ft. lb. of Torque gain at 5000 rpm over conventional manifolds)

Exhaust... MM Pulse Chamber

Exhaust Header (worth 25 HP and 1500 Extra rpm over conventional 4 to 1 Header)



2

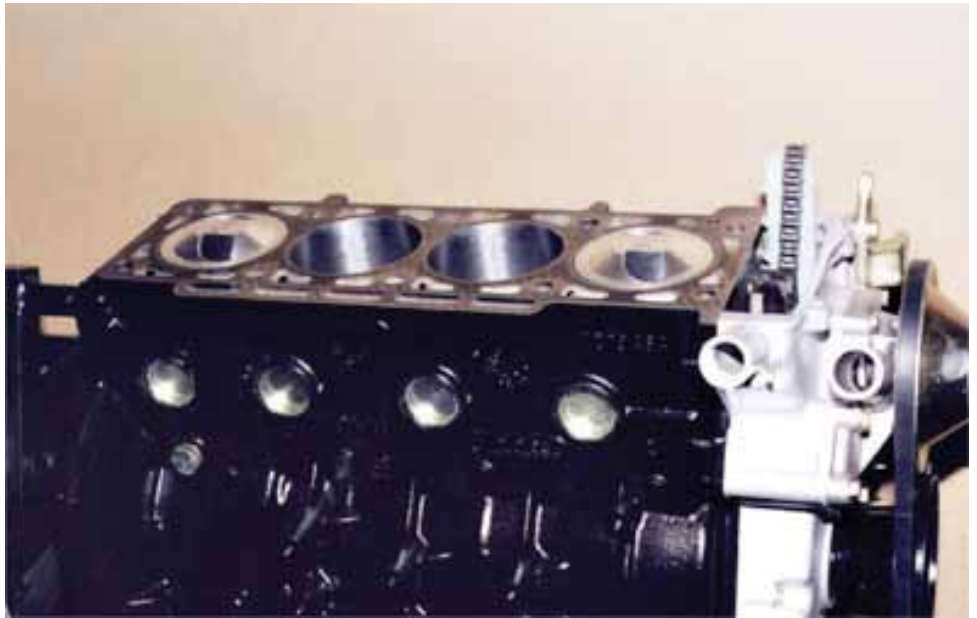
Intake Side View



3

Block

- Block... 318i Ribbed Block
(18 lbs. lighter than a 2002 block)
- Crank... 2 Liter 80mm stroke
- Rod Length... 145mm long, 10mm longer than stock
- Rod Weight... 500 gram billet
... 600 gram forged
... stock in 710 grams
- Rod Ratio... 1.81
- Piston... High Compression Slipper Skirt Forged Alusil Piston with Surface Turbulenced Dome (concentric grooves)



4

Piston - Continued

- Compression Ratio... 14.0:1
- Weight... 360 Grams
- Weight... 360 grams
- Wrist Pins... 118 grams - 90 grams
- Rings... Top, 1.5mm Moly
... 2nd, 1.5 High Ductile
... Oil Ring, 3mm 3 Piece



5

Bottom End - View 1

- MM Windage Tray Scrapper Bar
- MM 320i Blue Printed Oil Pump
- Rods, 145mm/500 grams
(Stock rod 712 grams)



6

Bottom End - View 2

Note: Direct Water Pump Drive



7

**2002 Oil Pan
with Mini Pick-Up Sump**



8

**Oil Pan Baffling
& Mini Pick-Up Sump**



9

**MM Low Rotational Mass
Clutch & Flywheel Assembly**

14 lbs. Total Weight
Component breakdown



10

**MM Low Rotational Mass
Clutch & Flywheel Assembly
with Throw Out Bearing**

