

(SOURCE OF INFORMATION - B.M.W)

ENGINE (AS R16/S)

BORER X STROKE 83 x 68
 C.C.M. 736
 COMP RATIO 6.7 (6.5 FOR 74 OCTANE FUEL)
 MAX RPM 5000
 H.P. (DIN) 33 @ 4500 RPM
 ENGINE OIL CAPACITY 2.5 LITRES SUMMER SAE 50 WINTER SAE 30

CARBS

FISCHER AMAL 76/424 1" (25.4mm)
 MAIN JET 140
 SLIDE 6/4
 NEEDLE 2.67 2ND GROOVE FROM TOP (ANOTHER SOURCE GIVES 3RD)

GEARBOX (AS R12)

RATIOS 1ST 3.18
 2ND 2.06
 3RD 1.42
 4TH 1.09

OIL CAPACITY 0.75 LITRES SUMMER SAE 50 WINTER SAE 30

REAR DRIVE (AS R12)

RATIO 4.07:1 SOLO - GIVES 4.44:1 TOP GEAR
 CROWN WHEEL 57 TEETH
 PINION 14 TEETH

RATIO 4.75:1 SIDECAR - GIVES 5.18:1 TOP GEAR
 CROWN WHEEL 57 TEETH
 PINION 12 TEETH

OIL CAPACITY 0.4 LITRES ANOTHER SOURCE GIVES MOBIL OIL EPW1
 SUMMER SAE 50 WINTER SAE 30

BRAKES

DRUM DIAMETER 200mm

LINING DIMENSIONS 170mm x 25mm x 4mm

WHEELS

TYRES FRONT 3.50 x 19 PRESSURE 1.4 ATMOS. (1.75 SIDECAR)
 (RIM 3 x 19)
 REAR 3.50 x 19 PRESSURE 1.9 ATMOS. (2.6 SIDECAR)
 (RIM 3 x 19)

SUSPENSION (AS R12)

FRONT 2 x 0.125 LITRES SHOCK ABSORBER OIL

ANOTHER SOURCE GIVES MOBIL OIL AF

ELECTRICAL

DYNAMO BOSCH B245 RS108
 IGNITION BATTERY & COIL
 PLUGS M175 T1 (BOSCH)
 PLUG GAP 0.6 - 0.7 mm

MAIN DIMENSIONS

WHEEL BASE 1380 mm.
GROUND CLEAR. 120 mm.
LENGTH 2100 mm.
WIDTH 900 mm.
HEIGHT 940 mm.

WEIGHT

UNLADEN 188 kg.
MAX. LADEN 300 kg.

PERFORMANCE

SOLO CONTINUOUS 115 km/hr.
SOLO MAX. 140 km/hr.
SIDE CAR CONTINUOUS 95 km/hr.
SIDE CAR MAX. 120 km/hr.
FUEL CAPACITY 14 LITRES TOTAL 1.5 LITRES RESERVE
FUEL CONSUMPTION (FROM ANOTHER SOURCE) 4 LITRES/100 km @ 75 km/hr
OIL CONSUMPTION 0.1 LITRES/100 km. } 4.5 LITRES/100 km @ 90 km/hr
HP/LITRE (DIN) 44 } OR IS IT 7.5 L/100 km ?
(IT'S A LOUSY COPY!)

ENGINE REPAIR DATA

PISTONS CLEARANCE 0.06-0.07 mm

GROOVE CLEARANCES TOP 0.05-0.07 mm
MIDDLE 0.04-0.06 mm

RING GAP BOTTOM 0.03-0.05 mm
0.20-0.35 mm COMP. RINGS?
0.25-0.40 mm SCRAPER RING?

VALUES ~~TAPPET~~ ROCKER DIAMETRAL
CLEARANCE 0.03-0.05 mm

RUNNING (DIAMETRAL) CLEARANCE 0.05-0.10 mm

SEAT OUTER DIAM. 38 mm.

TAPPET CLEARANCE COLD INLET 0.15 mm

EXHAUST 0.15 mm

VALVE SPRING LENGTH OUTER 37 mm
INNER 35 mm

CRANKSHAFT MAX. RUNOUT 0.1 mm

MAX. JOURNAL OVALITY 0.03 mm

MAX. END FLOAT 0.4-1.0 mm

BIG END DIAMETRAL CLEARANCE NONE

SIDE CLEARANCE 0.05-0.10 mm

ROLLER CAGE SIDE CLEARANCE 0.1-0.15 mm

SMALL END GUDGEON PIN RUNNING CLEARANCE 0.01-0.03 mm

MAIN BEARINGS

HOUSING DIAMETER FRONT 77mm -0.013 mm
 -0.035 mm
 REAR 77mm -0.013 mm
 -0.035 mm
 BEARING DIAMETER FRONT 77mm $+0$
 -0.02 mm
 REAR 77mm $+0$
 -0.02 mm
 INTERFERENCE FRONT 0.01-0.03 mm
 REAR 0.01-0.03 mm
 SIDE CLEARANCE BEARING TO FLYWHEEL 1.0 mm MINIMUM
 SIDE CLEARANCE CRANKSHAFT WEBS OR OIL FLINGER RING
 & HOUSING. FRONT 0.6-0.8 mm
 REAR 0.8-1.0 mm

CAMSHAFT

BORE DIAMETER IN HOUSING OR COVER
 FRONT 28mm -0.040 mm
 -0.075 mm
 REAR 22 mm -0.040 mm
 -0.075 mm
 BUSH OR BEARING BODY OUTER DIAMETER
 FRONT 28mm $+0$
 -0.15 mm
 REAR 22 mm $+0$
 -0.15 mm
 INTERFERENCE FRONT 0.02-0.07 mm
 REAR 0.02-0.07 mm
 RUNNING CLEARANCE 0.03-0.08 mm
 SIDE CLEARANCE 0.05-0.10 mm
 TAPPET DIAMETRICAL CLEARANCE 0.04-0.07 mm

TIMING

WITH 2mm VALVE (TAPPET) CLEARANCE.
 INLET OPENS 8° AFTER TDC
 CLOSES 32° AFTER BDC
 EXHAUST OPENS 32° BEFORE BDC
 CLOSES 8° BEFORE TDC.
 IGNITION 12-14 mm BEFORE TDC
 OR 42° - 43° BEFORE TDC.

ANOTHER SOURCE
 GIVES
 INLET OPENS 40° AFTER TDC
 CLOSES 50° AFTER BDC
 EX. OPENS 80° BEFORE BDC
 CLOSES 40° BEFORE TDC
 WITH 0.1mm TAPPET
 CLEARANCE.

LUBRICATION

TEST PRESSURE @ 250 RPM 1.5-2 ATMOS MINIMUM
 OIL PUMP SIDE CLEARANCE 0.05-0.1 mm

GEARBOX REPAIR DATA

~~DRIVE SHAFT RUNNING CLEARANCE~~
 MAINSHAFT ~~SLIP~~ CLEARANCE 0.1-0.5 mm
 LAYSHAFT SIDE CLEARANCE 0-0.3 mm
 SHAFT END FLOATS MAXIMUM 0.1 mm

GEARS

1ST	RUNNING CLEARANCE	0.03 - 0.1 mm	} RUN WITH SAME CLEARANCES
	SIDE CLEARANCE	0.1 - 0.3 mm	
2ND	RUNNING CLEARANCE	0.03 - 0.1 mm	
	SIDE CLEARANCE	0.1 - 0.3 mm	
3RD	RUNNING CLEARANCE	0.03 - 0.1 mm	
	SIDE CLEARANCE	0.1 - 0.3 mm	
4TH	RUNNING CLEARANCE	0.03 - 0.1 mm	
	SIDE CLEARANCE	0.1 - 0.3 mm	

KICK STARTER SHAFT RUNNING CLEARANCE 0.02 - 0.07 mm
SIDE CLEARANCE 0.1 - 0.5 mm

KICK STARTER IDLER WHEEL

RUNNING CLEARANCE 0.03 - 0.1 mm
SIDE CLEARANCE 0.1 - 0.3 mm

SELECTOR FORK RUNNING CLEARANCE 0.05 - 0.12 mm

SUSPENSION REPAIR DATA

FRONT FORK

STEERING HEAD BEARINGS 20 OFF 6.5 mm DIA

BUSH RUNNING CLEARANCE TOP 0.025 - 0.1 mm

SPRING WIRE DIAMETER BOTTOM 0.025 - 0.075 mm
SOLC 5.5 mm

SIDECAR 6 mm

REAR WHEEL DRIVE REPAIR DATA

CROWN WHEEL FLOAT UPWARDS 0.1 mm MAX.
SIDEWAYS 0.05 mm MAX.

TOOTH BACKLASH 0.1 - 0.3 mm

PROP. SHAFT END FLOAT 0.5 mm

AXIAL CLEARANCE AT PROP. SHAFT 1 - 3 mm ?

OTHER USEFUL INFORMATION

BSA DI BANTAM SILENCERS LOOK OK

BSA BANTAM BATTERY IS OF CORRECT DIMENSIONS

NSU CAR HEADLAMP RIM & REFLECTOR SUITABLE ?

GREENES BRAKE LININGS SUITABLE ?

~~TOOL BOX GET FROM BMW BUBBLE CAR SUITS~~

~~PAST-SY TOOL VALVE TEE PISTONS FIT SUIT ? 27 mm~~

KNECHT DRGM OIL FILTER MAY FIT.

TIMING CHAIN IS A CAR SIZE

R 80 CENTRE STAND SPRING FITS