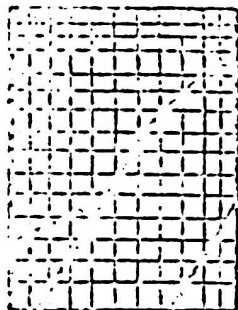


PRIN PART LTD.

**RACING ENGINE DESIGN DEVELOPMENT
& OVERHAUL**



4, SOUTH PLACE, TEMPLE FIELDS,
HARLOW, ESSEX.

TELEPHONE: HARLOW 32627

YOUR REF.

OUR REF.

DATE

'72 SPECIFICATION

TYPE 416 'C' - 160 b.h.p. MINIMUM TWIN-CAM WET SUMP RACING ENGINE

160 b.h.p. Minimum at 7,500+ r.p.m.
Maximum torque 125 lbs/ft. at 6,000+ r.p.m.

CYLINDER BLOCK

Cast capped - thick wall block bored 83.5 m/m.
3.2880" diameter. Main bearing bolt torque 65 lbs/ft.
3.2885" diameter.

CRANKSHAFT

Standard cast iron tufftrided, running in standard
size bearings no. 4477. Standard thrust washers.

CONNECTING RODS

Standard tufftrided steel rods (1250 special bolts
big end bolts, torque 45 lbs/ft. oil threads).
Bearing no. 4082.

PISTONS

Special forged Mahle racing piston - 2 plain
compression, 1 oil scraper ring.

CYLINDER HEAD

Modified Lotus. Compression ratio 12-1 maximum.
Head bolt torque 55 lbs/ft. minimum. Special
re-inforced head gasket fitted.

VALVES

Inlet - 1.56" dia.
Exhaust - 1.32" dia.

SPRINGS

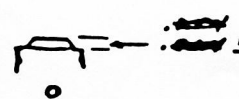
Special selected - fitted length 1.35" ± 0.005"

RETAINERS

Special modified, and must be used with above springs.

IN 24116 1.440
EX 241 1.460
HEAD CC = 376cc

→ 

 .009


-694

CAMSHAFTS

ZL.1 - special steel tappets also used.

Valve timing:

Inlet valve fully open 102° A.T.D.C.

Exhaust " " " 102° B.T.D.C.

Tappet clearances - inlet & exhaust .007" - .008"
measured cold.

CARBURETTORS

Twin 40 DCOE Weber carburettors

36 m/m. Chokes)
130 Air corrector) This can vary
180 Main jet) per engine
F16 Emulsion)
45 Pumps)

CLUTCH & FLYWHEEL ASSY

Standard Borg & Beck, Lotus flywheel double dowelled
Flywheel torque 50 lbs/ft. Clutch bolts 13-15 lbs/ft.

DISTRIBUTOR

Lucas racing type - special points. Ignition set at
33° B.T.D.C. total advance @ 7,500 min.
Contact breaker gap .015"

SPARKING PLUGS

Autolite AG.701 or AG.501
Champion N55T

OIL PUMP

High pressure Ford unit
Minimum 50 p.s.i. at 85°C

SUMP

6 pints to baffle, suggest over fill by 2 pints
(3/8" above baffle).

4.6075

HEAD
THICKNESS

Maximum continuous revs 7500
Maximum revs 7800

special R.H. Cam Bearing/seal
RAE Bearings (company)
55NP sub 2-9-R8ND