



# LOTUS SOUTHWEST

AREA CODE 214 • RI 8-6091

1230 NO. INDUSTRIAL • DALLAS, TEXAS 75202

## TYPE 84 PHASE III ENGINE INFORMATION FOR THE RUBERY OWEN

### MODIFIED FORD LOTUS CORTINA ENGINES.

The engine is basically Ford series 116E but built by Lotus Cars Ltd to their Cortina specification. In standard form it gives approximately 105 B.H.P. but when modified by the B.R.M. Engine Development Division of Rubery Owen & Co., Ltd. gives 160 b.h.p. It is vital that the engine number is quoted when ordering spares.

#### OVERALL SPECIFICATION

~~97.22~~ 97.2718  
Capacity 1594 cc. (97.4 cu. ins), Bore 83.5 mm. (3.288"),  
Stroke 72.5 mm. (2.864").

Compression Ratio

12:1

BHP

160 at 6750/7000 r.p.m.

Maximum torque

134 lbs. ft. at 5500 r.p.m.

Maximum B.m.e.p.

207 p.s.i. at 5500 r.p.m.

Maximum R.P.M.

7,000 - continuous

7,300 - intermittent

#### CYLINDER HEAD

Cast aluminium twin overhead camshaft, with hemispherical head. Valves set at included angle of 54°. Both inlet and exhaust ports extensively modified and individually air flowed. Valve guides and springs platforms remachined to accommodate high duty valve springs and high lift camshafts. Fire face machined to obtain optimum compression ratio.

#### CRANKCASE

Monobloc type in cast iron - 4 cylinders in line bored and honed at 3.2874"/3.2884". Fire face machined to give .005" squish deck height to pistons.

#### CRANKSHAFT/FLYWHEEL CLUTCH

Cast iron crankshaft and flywheel with diaphragm type clutch. Whole assembly dynamically balanced before assembly.

#### TIMING COVER ASSEMBLY

Cast aluminium timing case and cover mounted on front of cylinder block enclosing camshaft drive system by Reynolds Chain 3/8" pitch; chain tension controlled by spring loaded jockey pulley tensioner unit on one side of engine and rubber damper on opposite side. Timing chain also drives jackshaft incorporating skew gear for distributor and oil pumps.