

TECHNICAL DATA

Dimensions are in inches unless otherwise stated

PETROL ENGINES

| | 2½ litre | 2.6 litre |
|---|--|-------------------|
| Bore and stroke | 90.47 x 88.8 mm | 77.8 x 92.075 mm |
| Compression ratio | 7:1 or 8:1 | 7:1 or 7.8:1 |
| Crankshaft: | | |
| Main journal diameter | 2.4995 to 2.50 | 2.6240 to 2.6245 |
| Main bearing clearance | .001 to .0025 | .0006 to .002 |
| Main journal minimum regrind diameter | 2.460 | 2.584 |
| End float | .002 to .006 | .002 to .006 |
| Crankpin diameter | Early models 2.126 Late models 2.312 | All models 1.875 |
| Crankpin minimum regrind diameter | 2.272 | 1.835 |
| | <i>(Early models may not be ground)</i> | |
| Connecting rods: | | |
| Bearing fit on crankpin | .001 to .0025 | .001 to .002 |
| End float at big-end | .007 to .011 | .006 to .015 |
| Gudgeon pin bush, fit in rod, interference | .001 to .003 | .001 to .003 |
| Gudgeon pin bush internal diameter | 1.000 + .0003 | .8755— .0005 |
| Gudgeon pin fit in bush, clearance | .0003 to .0005 | .0002 to .0006 |
| Pistons: | | |
| Type | Light alloy tin plated, both engines | |
| Clearance top of skirt | .003 to .004 | .003 to .0035 |
| Clearance bottom of skirt: Series II and IIA | .0019 to .0023 | .002 to .0025 |
| Series III | .0023 to .0027 | .0019 to .0024 |
| Rings | Two compression, one oil control, both engines | |
| Compression rings: | | |
| Type | Taper periphery, both engines | |
| Gap | .015 to .020 both engines | |
| Clearance in groove | .0018 to .0038 both engines | |
| Oil control ring: | | |
| Type | Slotted, square edge | Duaflex 61 |
| Gap | .015 to .020 | .015 to .033 |
| Clearance in groove | .0015 to .0035 | .002 to .004 |
| Fit of gudgeon pin in piston, interference | 0 to .0002 | Push fit at 60°F |
| Camshaft: | | |
| Journal diameter | 1.842 to .001 | .999 |
| End float | .0025 to .0055 | .0045 to .0065 |
| Clearance in bearings | .001 to .002 | .001 to .0025 |
| Cam lift, inlet | .257 | .374 |
| Cam lift, exhaust | .257 | .403 |
| Tappet clearance: | | |
| Inlet | .010 hot or cold | .006 hot |
| Exhaust | .010 hot or cold | .010 hot or cold |
| Valves: | | |
| Seat angle inlet | 30 deg. | 30 deg. |
| Seat angle exhaust | 45 deg. | 45 deg. |
| Stem diameter inlet | .3112 | .3425 |
| Stem diameter exhaust | .3415 | .3425 |
| Valve springs: | | |
| Inner inlet: | | |
| Free length | 1.68 | 1.703 |
| Length under 17.7 lb load | 1.462 | |
| Length under 21.5 lb load | | 1.437 |
| Outer inlet: | | |
| Free length | 1.822 | 1.960 |
| Length under 46 lb load | 1.587 | |
| Length under 69.5 lb load | | 1.625 |
| <i>Exhaust valve springs on 2½ litre models are the same as the inlet</i> | | |
| Inner exhaust: | | |
| Free length | | 1.703 |
| Length under 16.4 lb load | | 1.500 |
| Outer exhaust: | | |
| Free length | | 1.861 |
| Length under 41.8 lb load | | 1.625 |
| Valve timing: | | |
| Inlet opens | 6 deg. BTDC | 12 deg. BTDC |
| Inlet closes | 52 deg. ABDC | 46 deg. ABDC |
| Exhaust opens | 34 deg. BBDC | 47 deg. BBDC |
| Exhaust closes | 24 deg. ATDC | 17 deg. ATDC |
| Oil pump: | | |
| Type | Skew gear | Spur gear |
| Gear end float: | | |
| Steel gear | .002 to .005 | .002 to .005 |
| Aluminium gear | .003 to .006 | .003 to .006 |
| Radial clearance of gears | .001 to .004 | .001 to .004 |
| Backlash | .006 to .012 | .006 to .012 |
| Oil pressure, engine warm, 2000 rev/min | 45 to 65 lb/sq in | 40 to 50 lb/sq in |