



TRIUMPH CRANKSHAFT JOURNAL SIZES



The crankshaft is the cornerstone of any great engine. The journal size and roundness will affect oil pressure and flow. Great care should be used when bolting connecting rods to the crank. Below are the sizes for the different twin journals, and the acceptable wear limits.

1946-1954 Pre Unit 500cc & 650cc (with babbitt rods)

Most pre unit cranks were a three piece design held together by six 1/4" ground bolts. The connecting rod bearings were babbitt material, and not replaceable.

STANDARD 1.4365" to 1.4360"
-.010" 1.4265" to 1.4260"
-.020" 1.4165" to 1.4160"

1959-1974 Unit 500cc (with insert bearings)

Triumph introduced the Unit construction 500 in 1959. It had a plain bushing for the timing side instead of a ball bearing. Because the oil feed is through the bushing, the clearance and fit of the timing side journal must be checked and corrected if necessary. To make things easier, Triumph used the same size for the bearing journal as the rod journal. Timing side bushings can be bought in .010" increment undersizes, in both metal backed and solid bronze.

STANDARD 1.4380" to 1.4375"
-.010" 1.4280" to 1.4275"
-.020" 1.4180" to 1.4175"
-.030" 1.4080" to 1.4075"
-.040" 1.3980" to 1.3975"

1955-1978 Unit 650cc and 750cc (with insert bearings)

From 1955 to 1972 Triumph maintained the same crankshaft journal size. Mid 1950's Pre Unit 650 cranks were still a three piece design, but had a new larger journal size. When the two piece cranks were introduced, the same E6304 connecting rods with the same journal diameter remained.

STANDARD 1.6240" to 1.6235"
-.010" 1.6140" to 1.6135"
-.020" 1.6040" to 1.6035"
-.030" 1.5940" to 1.5935"
-.040" 1.5840" to 1.5835"