

FAILURE ANALYSIS OF OVER HEAD CAMSHAFT BEARING AND IMPROVEMENT IN SI ENGINE

M Tech Dissertation

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ABSTRACT

This Study investigates methods of improving and enveloping cam shaft bearing of overhead camshaft of petrol engine three wheelers four stroke air cooled engine by analysis, field complaints with finding root cause of bearing failure. As the engine running up to certain km problem arises cam shaft bearing fails. After this due to disproportionate play occurs between parts ball bearing and outer race, which breaks outside the alignment at engine head with the tappet of engine head of petrol engine. Aiming at subterranean improvement describing influence with various method and process improvement to sustain ball bearing position w.r.t. cam shaft housing of engine head. Ball bearing pressing tool mandrill modified to maintain bearing position w.r.t. bore depth in main cam shaft on engine head assembly. While adding shield on bearing and pressing references are modified from outer race to inner race of this ball bearing. The impression of expansion imitates on routines and engine plane cam shaft successively.