Federal Aviation Administration, DOT  

§ 33.57 General conduct of block tests.  

(a) The applicant may, in conducting the block tests, use separate engines of identical design and construction in the vibration, calibration, detonation, endurance, and operation tests, except that, if a separate engine is used for the endurance test it must be subjected to a calibration check before starting the endurance test.  

(b) The applicant may service and make minor repairs to the engine during the block tests in accordance with the service and maintenance instructions submitted in compliance with §33.4. If the frequency of the service is excessive, or the number of stops due to engine malfunction is excessive, or a major repair, or replacement of a part is found necessary during the block tests or as the result of findings from the teardown inspection, the engine or its parts may be subjected to any additional test the Administrator finds necessary.  

(c) Each applicant must furnish all testing facilities, including equipment and competent personnel, to conduct the block tests.  


§ 33.55 Teardown inspection.  

After completing the endurance test—  

(a) Each engine must be completely disassembled;  

(b) Each component having an adjustment setting and a functioning characteristic that can be established independent of installation on the engine must retain each setting and functioning characteristic within the limits that were established and recorded at the beginning of the test; and  

(c) Each engine component must conform to the type design and be eligible for incorporation into an engine for continued operation, in accordance with information submitted in compliance with §33.4.  

[Doc. No. 3025, 29 FR 7453, June 10, 1964, as amended by Amdt. 33–9, 45 FR 60181, Sept. 11, 1980]

§ 33.53 Engine system and component tests.  

(a) For those systems and components that cannot be adequately substantiated in accordance with endurance testing of §33.49, the applicant must conduct additional tests to demonstrate that systems or components are able to perform the intended functions in all declared environmental and operating conditions.  

(b) Temperature limits must be established for each component that requires temperature controlling provisions in the aircraft installation to assure satisfactory functioning, reliability, and durability.  

[Docket No. 3025, 29 FR 7453, June 10, 1964, as amended by Amdt. 33–9, 45 FR 60181, Sept. 11, 1980]