

Teledyne Continental Motors Piston Engines

AD/CON/77

Piston Pin Plug Wear

10/97

Applicability: Teledyne Continental Motors (TCM) new and rebuilt model O-470 and IO-470 series engines with serial numbers as listed in Table 1 of TCM Critical Service Bulletin (CSB) No. CSB97-10; and

TCM model E-165, E-185, E-225, O-470 and IO-470 series engines, regardless of serial number, which have cylinder(s) with a part number and purchase date as listed in Table 2 of TCM CSB No. CSB97-10.

Note 1: Engines released prior to August 1996 and cylinders installed prior to August 1996 are not affected by the requirements of this directive.

Requirement: To prevent extreme side loading of the piston, and subsequent failure of the piston and engine, inspect applicable engines in accordance with TCM CSB No. CSB97-10.

Note 2: FAA Airworthiness Directive 97-15-01 refers.

Compliance: Within 10 hours time in service from 11 September 1997.

This airworthiness directive becomes effective on 11 September 1997.

Background: This directive has been issued to require the inspection of certain cylinders for evidence of abnormal piston pin plug wear. The requirement follows advice of a number of engines fitted with cylinders treated with a manganese phosphate coating have exhibited evidence of accelerated wear of the aluminium piston pin plugs. If not detected by regular oil analysis or inspection, piston pin plug wear may result in an increase in oil consumption and possible piston pin and engine failure.