

Boeing 737 Series Aeroplanes

AD/B737/104

Rudder Power Control Unit Inspection

6/97

Applicability: Main rudder power control units (PCU) that are to be fitted to Model 737 airplanes and which are identified in Boeing Service Letter 737-SL-27-112-B, dated February 6, 1997.

Requirement: To identify, inspect and repair suspect main rudder PCUs prior to fitment to Model 737 aircraft in accordance with the requirements of Boeing Service Letter 737-SL-27-112-B dated February 6, 1997.

Note: FAA AD 97-05-10 refers.

Compliance: After 90 days of the effective date of this Directive, the requirement is to be completed prior to fitment of a replacement main rudder PCU to an aircraft.

This Airworthiness Directive becomes effective on 22 May 1997.

Background: The FAA has received a report of cracking of the internal summing lever of the main rudder PCU on a model 737 airplane. Investigation showed that a Hi-Lock bolt had been installed in the lever assembly by a repair station instead of the correct specification bolt (Boeing Part No. 66-22749-1). The larger bolt radius of the Hi Lock bolt in the shoulder to shank transition area was such as to create an interference fit with the bearing that caused the inner race of the bearing to crack. Such cracking, if not detected and corrected could lead to seizure of the bearing and possible uncommanded rudder movement. This Directive requires that all replacement main rudder PCUs are inspected before fitment to ascertain if they are suspect and if so to ensure that they have been subject to the corrective action detailed in US FAA AD 97-05-10.