

## Airworthiness Directive

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**DCA/750XL/12A      S-Tec X 55 Autopilot System – Disconnect, Inspection and Modification**

**Applicability:** Model PAC 750XL aircraft, S/Ns 125, 126 and 127.

**Requirement:** To prevent failure of the Autopilot System Computer resulting in the possibility of an out of trim condition, which may lead to loss of aircraft control, accomplish the following:

1.    **Disconnect Autopilot**

Disconnect the autopilot, and install a placard per Pacific Aerospace Limited 750XL Alert Service Bulletin PACASB/XL/001.

DO NOT USE

**Note 1:** Requirement 1 of this AD is a temporary measure until requirement 2 is accomplished.

2.    **Pitch Servo Inspection**

Locate the Pitch Servo which is installed in the rear fuselage behind the rear cabin bulkhead on the starboard side of the fuselage.

Inspect the Pitch Servo identification plate to confirm that the Pitch Servo P/N is 108-15-P1. If not, replace it with P/N 108-15-P1 Pitch Servo, per instructions 2.c in Pacific Aerospace Limited 750XL Mandatory Service Bulletin PACSB/XL/025, dated 5 March 2007.

Reconnect the autopilot by removing the cable tie on the autopilot circuit breaker. Accomplish a functional check of the autopilot system and remove the "DO NOT USE" placard.

**Note 2:** A replacement Pitch Servo P/N 108-15-P1 can be sourced from an authorized S-Tec dealer.

3.    **Modification**

Locate the pitch trim reversing relay. Install capacitor between terminals A2 and B2, wire codes of wires attached to these terminals are C7B22 and C7A22.

Splice the SA30A transient suppressor to the power supply wire feeding the 28VDC trim connector on the S-TEC System 55 computer. Wire code CA14A22 is feeding this connector. Find a suitable point on the earth bus to wire the other end of the suppressor to earth.

Fit a 1N4007 diode to the pitch trim reversing relay coil to protect against voltage spikes when the relay turns off. Relay pins are X1 and X2 as on drawing 11-1639 Issue C.

Accomplishment this modification per instructions 2.b in PACSB/XL/025 and PAC Drawing No. 11-81639 issue C.

(PACASB/XL/001 and PACSB/XL/025 refers)

- Compliance:**
1. From the effective date of this AD.
  2. Before returning the autopilot system to service.
  3. Within the next 150 hours TIS.

**Effective Date:** 29 March 2007