

Finding the main control tube corroded but intact. The control horn for pitch control right side tang bent in towards the left side. Seemed to be no deformation of holes that would contain the bolt for the rod end bearing for pitch control. The pitch and roll cable system consist of an inner push/pull cable in a braided sheath with an outer 'plastic' housing, brick red in color. Threaded ends machine crimped to the inner braided cable. Commonly known as telflex. The rotor head side of these push/pull cables was found to be connected. The cockpit side was not found to be intact. The cable end (threaded portion) and rod end bearing for pitch control were found to be separated from the cable. Braided cable end for pitch did not appear as corroded as rest of cable. The outer braided sheath for pitch control was separate from inner cable. The rod end bearing for pitch was not attached to the control horn. The bolt and nut were not found.

Roll control inner and outer portions were found to be attached to the rotor head. The cockpit side of roll control rod end bearing was found to be attached to what was left of the aluminum roll control bell crank. The rod end bearing was found broken off from the push/pull cable end. The cable end, both inner and outer pieces, was found not attached to the inner cable.

The anchor points (cockpit side and rotor head side) for the outer sheath of both pitch and roll were found to be connected to their respective places.

Cavalon build instruction #1.1000.4 details the initial pitch control horn to rod end assembly.

'Shell Check' (this is a phase inspection) instruction #1.2000 details an assembly inspection of the push/pull system from control stick to rotor head and the rudder control system.

25/100 inspection list calls for inspection of control system.

Maintenance Manual instruction 67-00-00 6-1 details how inspect the flight control push/pull cables.

Pilot operator's handbook – preflight inspection of control connections.

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