

# VAN'S AIRCRAFT, INC.

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## Service Bulletin

Number: SB 99-6-1

Date Issued: June 30, 1999

Applies to: RV-6 and RV-6A with overhead ("suspended") rudder pedals only.

**Synopsis:** There have been several cases of welds breaking on the overhead style rudder pedals (WD-655L and WD-655R) used in the RV-6/6A. These breaks usually occur where the upright tubes from the pedal connect to the torque tube that runs across the fuselage. The forward side of the torque tube fails in compression, allowing the aft side of the torque tube to tear.

Van's Aircraft, Inc. has static tested a set of production pedals and found they exceeded the strength limits specified in FAR Part 23. However, since several operational failures have occurred, corrective action should be taken.

**Required Action:** Immediately inspect the rudder pedal assembly. If your pedal assemblies already have a gusset on the forward side of the rudder pedals/torque tube junction, no further action is necessary.

If your rudder pedals do not have the gusset:

- Inspect your pedals for any sign of failure. Although it is subtle, the forward side of the tube will fail first. Check with an inspection mirror for any signs of distortion (bulging or caving in) on the forward side of the torque tubes. Also, run your fingers along the joint to feel for any distortion -- many times it is easier to feel irregularities than to see them. The pilot's right rudder pedal is the most likely to fail, but please inspect all of them.

Van's Aircraft, Inc. recommends a 10-hour inspection schedule on the rudder pedal torque tube; with an immediate inspection if a takeoff or landing results in high forces on the rudder pedals or if there is any "sponginess" noted in the rudder system. If you find signs of a failure, immediate replacement is required.

- Owners may elect to make a permanent repair and remove the requirement for repetitive inspections. This repair may be accomplished one of two ways:
  1. Van's Aircraft, Inc. will make available, free of charge, a finger patch that may be welded on the pedals. The part number for eight patches and instructions is WD-655 FPKIT.
  2. For those owners not in a big hurry, the pedals may be returned to Van's for modification. Include a note with your name, builder's number, and shipping address. You *must* remove the paint around the tubing intersections (about 4" in all directions from the joint) before sending them in. Mark the outside of the box "RMA-WD-655". We expect repairs to take between two and four weeks but it may take longer.

