



Document Title	Evolution Fuel Vent Replacement
Document Number	SB06-0008A
Date	January 30, 2013

Subject: Lancair Evolution Fuel Vent Installation

Affected Aircraft: Lancair Evolution Aircraft serial numbers: EVO 001- EVO-XXX

Status: Mandatory Service Bulletin

Importance: High – Compliance required prior to flight

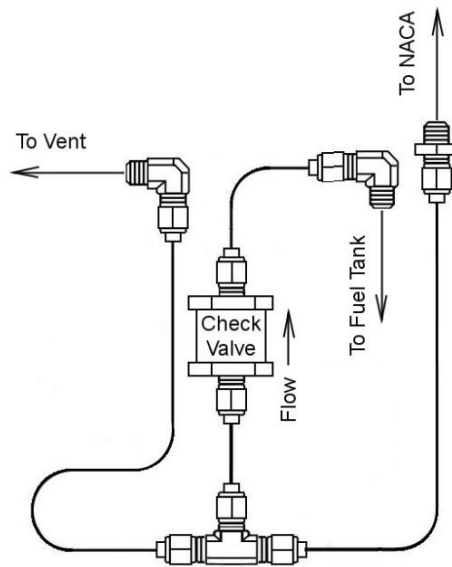
!!Serious damage to the aircraft may occur if this Service Bulletin is not complied with!!

Background: A potential service issue with the main fuel tank venting system has been encountered on some Lancair Evolution aircraft.

Lancair has conducted engineering analyses and tests that have led to the redesign of this vent system. In order to prevent future occurrences, a very specific vent arrangement has been specified in this Service Bulletin and the Evolution Build Manual.

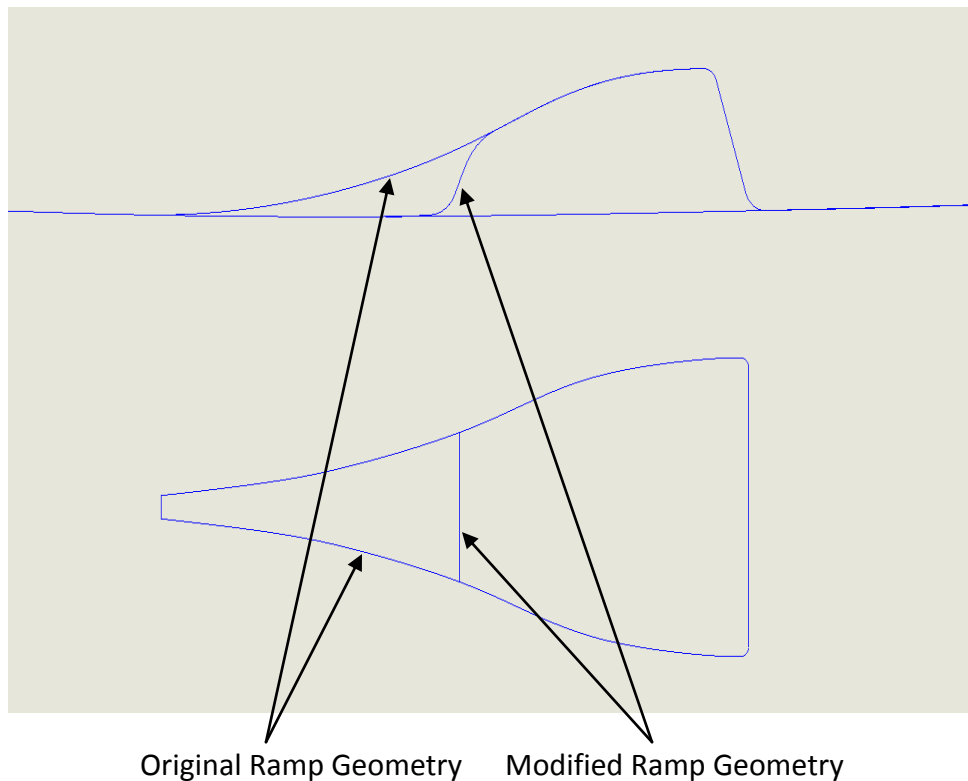
Lancair strongly recommends using hard aluminum lines for all fuel tank ventilation plumbing. Rubber tubing, as has been seen in some installations may become kinked, which will result in very serious issues including fuel starvation or tank over pressurization. Any rubber tubing should be replaced with hard aluminum lines. Braided hose can also become kinked, although it is less likely. It is the responsibility of the builder to ensure that the fuel vent arrangement meets the requirements of this Service Bulletin.

Action: A fuel vent arrangement, as shown in the illustration below should be installed in all Lancair Evolution aircraft.



NACA Vent Configuration

Action: The NACA vent geometry must conform to the configuration shown in Figure 2 below.



This can be accomplished by filling the forward ramp of the duct with a mixture of epoxy resin/micro/flox and shaping until the illustrated geometry is obtained.

Acceptable Venting Materials

Action: The fuel vent must be plumbed as defined in and using the materials listed in the Evolution build manual. If there are any questions, please contact Lancair customer support.