## VAN'S AIRCRAFT, INC.

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Service letter: September 21, 2006

<u>Subject:</u> U-1023 nose wheel bearing spacers

Affected Models: ONLY RV-10 nose wheel installations

Builders of RV-10 kits have been supplied with two different material types labeled as U-1023 NOSE GEAR AXLE SPACER.

Early RV-10 finish kits included a U-1023 that is made from stainless steel. Finish kits delivered after April 6, 2006 include an aluminum version with the same part number. The use of either is approved by Van's Aircraft for installation; however, the aluminum units provide a slightly larger contact surface on the nose wheel bearings.

Final installation of either type is the same. Correctly installed, the combination of wheel, wheel bearings, and axle spacers should be slightly longer than the main nose gear axle (U-1009) in length. When the axle nut is tightened it should compress the wheel, wheel bearings, and axle spacers sufficiently to make it impossible to rotate the U-1023's with your fingers. This assumes the nose wheel bolt is torqued correctly to 160-190 inch-lbs.

A properly installed nose wheel has noticeable drag when turned by hand. If either or both U-1023's spin after installation, the U-1009 axle is too long and needs to be shortened 1/16" so as to increase the axial pre-load on the bearings. If the wheel is impossible to turn, call Van's for assistance.