VAN'S AIRCRAFT
TOTAL PERFORMANCE

14401 Keil Road NE, Aurora, Oregon, USA 97002
PHONE 503-678-6545 • FAX 503-678-6560
www.vansaircraft.com • info@vansaircraft.com

SERVICE BULLETIN 19-09-09

Date Released: February 26, 2020

Date Effective: February 26, 2020

Subject: Cracking of RV-10 nose gear leg inboard attach lug

Affected Models: RV-10 flying aircraft and/or Finish Kits shipped prior to October 1, 2019

Required Action: Inspect the inboard attachment lugs of the WD-1017 Nose Landing Gear for cracks (see Figure 1). If cracks are discovered, replace the WD-1017 Nose Landing Gear with the WD-1017-1 Nose Landing Gear as described in this document. If no cracks are discovered, annual inspections are required.

NOTE: This gear leg is heat treated. Welding as a method of repair is not approved.

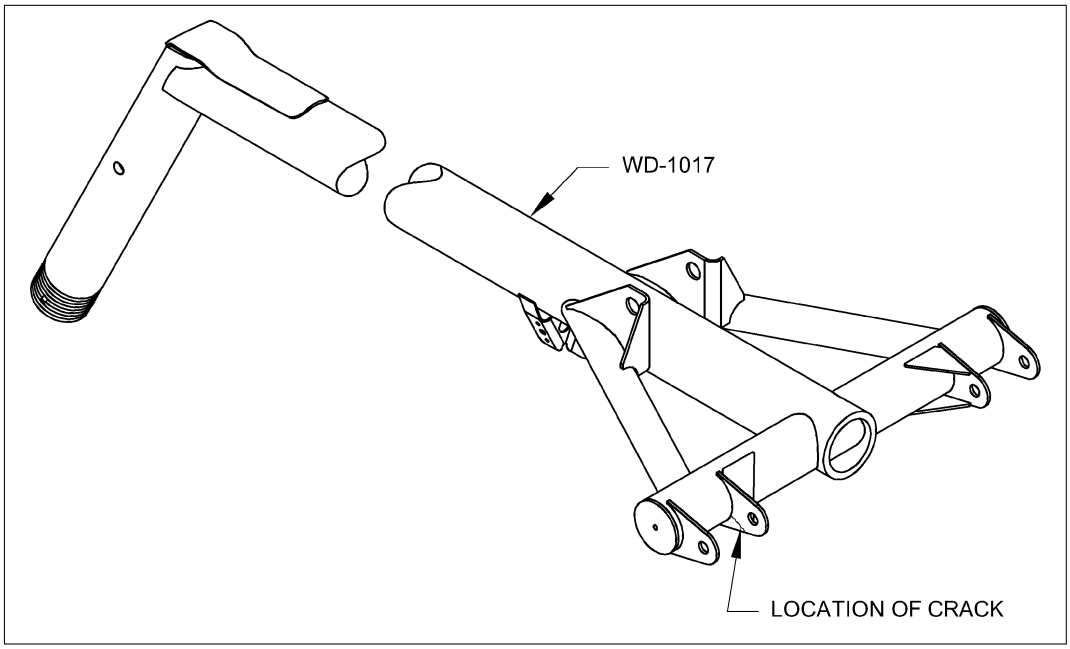

FIGURE 1: INBOARD LUG CRACK LOCATION

Time of Compliance:
Inspect at or before the next annual condition inspection. If no cracks are detected, re-inspect at every annual condition inspection, or until the modification described in this document has been completed.

Synopsis:
A crack was discovered in the inboard attachment lug of the nose landing gear on an aircraft that operates from a grass field and which had acquired more than 1700 hours of flight time. Only a single instance has been reported.

Parts shipped after October 1, 2019 are not affected by this service bulletin.

Materials Required:
The following materials are required to complete the steps necessary to achieve compliance with this Service Bulletin:

For RV-10 Finish Kits shipped prior to October 1, 2019, purchase from Van's Aircraft: Part Number SB 19-09-09

Method of Compliance:

Step 1: Remove the cowling.

Step 2: Remove the nose wheel fairing and nose leg fairing.

Step 3: Chock the wheels, then use an engine hoist strapped to the engine mount to lift the nose wheel off the ground. Alternatively, the aft fuselage can be weighted down and secured.

Step 4: Remove the nose wheel/fork assembly from the nose gear leg.

Step 5: Remove the WD-1031 Axle Flange (see KAI Page 46-06) from the nose gear leg.

Step 6: Remove the bolt securing the WD-1016 Nose Gear Link Assembly to the nose gear leg. See KAI Page 46-06.

Step 7: Remove the two bolts securing the nose gear leg to the engine mount and remove the VA-144 Bushings. See KAI Page 46-05.

Step 8: On the new WD-1017-1 Nose Gear Leg, countersink the #40 nutplate rivets holes in the two brackets used to attach the nose leg fairing. See KAI Page 48-22. Rivet the four nutplates to the attach brackets.

Step 9: Coat the new bushings with wheel bearing grease, slide them into the engine mount, then attach the WD-1017-1 Nose Gear Leg to the engine mount as shown in Figure 2.

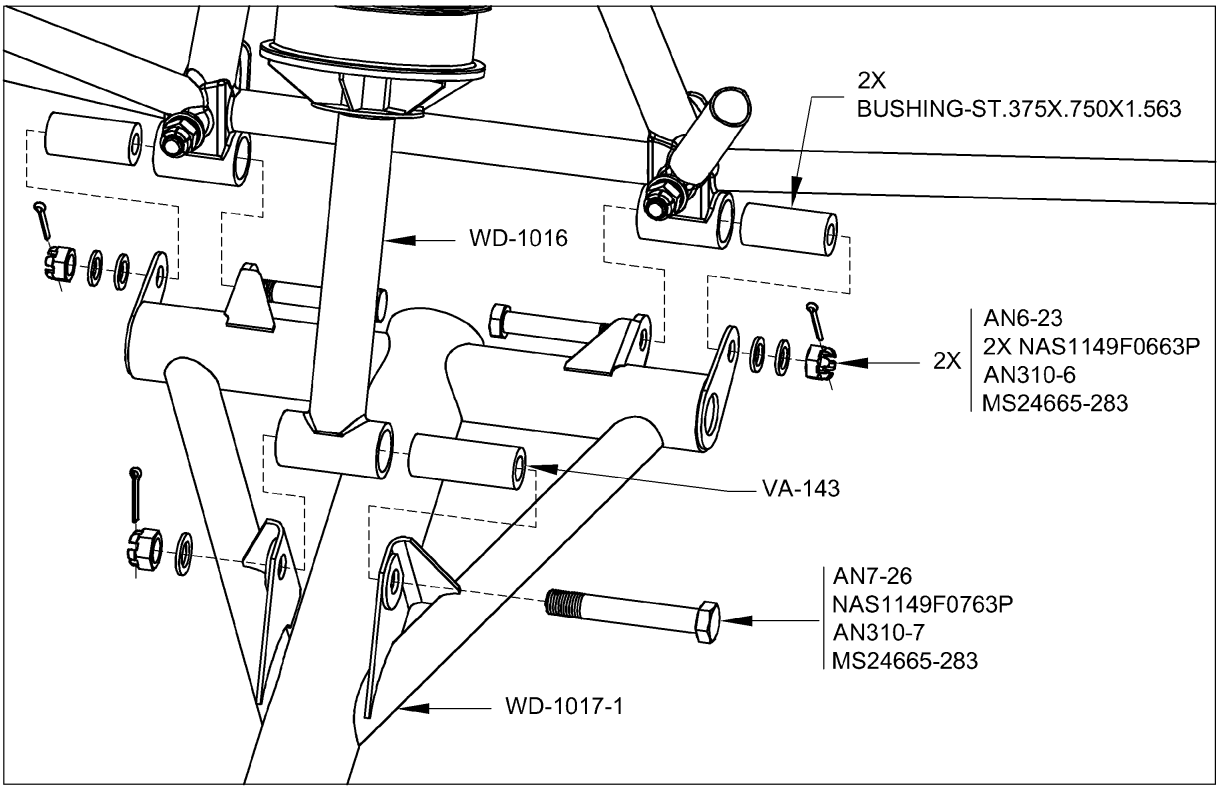

FIGURE 2: NOSE GEAR ATTACHMENT

Step 10: Grease the VA-143 Bushing, slide it back into the WD-1016 Nose Gear Link Assembly, then attach the link assembly to the nose gear leg using the original hardware (two of the original NAS1149F0763P washers are no longer used). See Figure 2.

Step 11: Attach the WD-1031 Axle Flange to the nose gear leg as shown on KAI Page 46-06.

Step 12: Install the nose wheel/fork assembly on the nose gear leg as shown on KAI Page 46-06.

Step 13: Lower the front of the aircraft to rest on the nose wheel.

Step 14: Reinstall the nose wheel fairing and nose leg fairing. The screw holes in the nose leg fairing may be enlarged slightly to allow for misalignment with the holes in the attachment brackets of the gear leg.

Step 15: Check for proper clearance between the nose wheel fairing and nose leg faring (see KAI Page 48-20).

Step 16: Reinstall the cowling.

Step 17: Flying Airplanes: Make a logbook entry indicating compliance with SB 09-09-19.