

5/21/2026

FOR YOUR INFORMATION

2026-176/3-14

To: Van's Aircraft Co, Rotax Aircraft Engines, FAA (AFS-800)

2353681

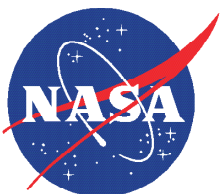
Info: FAA (AFS-200, AFS-260, MKC-AEG, AFS-300, AIR-360, AFS-100), ATSG,
AMFA, AOPA, EAA, GAMA, GAPAA, IAM, ICASS, NTSB, PAMA, TWU

From: Becky L. Hooey, Director
NASA Aviation Safety Reporting System

Re: RV12 Rotax 912is Exhaust Header Issues

We recently received ASRS reports describing a safety concern that may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the enclosed deidentified report.

To properly assess the usefulness of our alert message service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Dr. Becky Hooey at (408) 541-2854 or email at becky.l.hooey@nasa.gov.



Aviation Safety Reporting System
P.O. Box 189 | Moffett Field, CA | 94035-0189



ACN 2353681**DATE / TIME**

Date of Occurrence	202604
Local Time Of Day	1201 to 1800

PLACE

Locale	ZZZ.Airport
State	US
Altitude - MSL	400

ENVIRONMENT

Flight Conditions	VMC
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AIRCRAFT / EQUIPMENT X

ATC / Advisory - Tower	ZZZ
Make Model Name	RV-12
Operating Under FAR Part	91

COMPONENT 1

Aircraft Component	Exhaust Manifold
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PERSON 1

Function - Flight Crew	Pilot Flying
Function - Flight Crew	Single Pilot
ASRS Report Number	2353681

EVENTS

Anomaly	Aircraft Equipment Problem - Critical
Detector - Person	Flight Crew
Detector - Person	Maintenance
Result - General	Maintenance Action
Result - Flight Crew	Landed As Precaution
Result - Flight Crew	Returned To Departure Airport

NARRATIVE 1

The aircraft is used for flight training, but I am the owner and not a student pilot. We had a report of a CO alert in the aircraft and so the PIC made a precautionary landing at ZZZ on the Day 0. When our mechanic was available, we went out to the aircraft on the Day 2 and I assisted in his repair of the issue, which was an exhaust manifold separating from the header due to the bolts coming off. We inspected the remainder of our fleet and discovered that the other aircraft also had loose or missing bolts also on the rear exhaust headers; these were accordingly tightened and will be routinely checked.

After the repair, I performed a run-up and, satisfied that the engine was operating normally, obtained clearances to taxi out and depart Runway XX. Just after takeoff, I heard a noise from the engine, and almost immediately started seeing the CO numbers climb and an alert warning (as the aircraft is equipped with a monitoring system). As the numbers were quickly approaching 100ppm (and did pass them before landing), I opted to return to the field immediately. I had been assigned a straight-out heading, and was unable to reach Tower due to communication congestion, but given the situation started my turn anyways, at which point Tower contacted me and asked the situation. I explained that we were having engine problems, as we did not yet know what they were, and he cleared me to land. I landed and taxied in without further incident.

Upon examining the engine, we determined that the exhaust springs had stretched, allowing the muffler to separate from the right side exhaust headers when full power was applied quickly for takeoff (we believe the more gradual application of power in the run-up had not done this). The following day, our mechanic replaced all exhaust springs and re-sealed the system, we performed extensive run-up testing, and I flew the aircraft home without incident and returned it to service.

Due to the occurrence of loose exhaust header bolts across all the RV12 aircraft, which we believe is being exacerbated by an existing gearbox issue impacting the Rotax 912is motor, we are implementing a regular inspection interval of 50 hours on all exhaust header nuts. I believe this should be expanded via an SB (Service Bulletin) or AD, as applicable, to all 912is-equipped RV12 aircraft, until the situation is better understood. The RV12 has an exhaust system manufactured by/for Van's Aircraft, and not the stock Rotax exhaust, so we have no reason to believe that this issue necessarily affects other models using the same engine.

SYNOPSIS

RV-12 pilot reported a mechanical issue with the engine exhaust manifold separating from the header.