

TOTAL PERFORMANCE VAN'S AIRCRAFT

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SERVICE BULLETIN 13-2-6

Date Released: February 6, 2013

Date Effective: February 6, 2013

Subject: Chafing Coolant Hose at Engine Mount

Affected Models: All flying RV-12 aircraft and RV-12 Powerplant Kits shipped prior to **February 18, 2013**

Required Action: Inspect areas where coolant hoses contact the engine mount or other components. Apply high temp RTV in areas that wear is present or probable. Replace hoses if existing wear is excessive.

Time of Compliance: At or before the next Annual Condition Inspection.

Synopsis:

Factory aircraft with approximately 750 hours evidenced vibration induced wear in coolant hoses where in contact with engine mount.

RV-12 Powerplant Kits shipped after **February 18, 2013** are not affected by this service bulletin.

Method of Compliance:

Inspect coolant hoses for damage in areas where they may contact other components in the engine compartment. Apply high temp RTV sealant to areas as noted below and to any other areas exhibiting similar vibrational wear.

NOTE: Vibration induced wear can occur wherever relative movement exists between contacting parts. Due to variations in the routing of hoses, cables, etc. within the engine compartment, unintended contact between components may occur in areas other than specifically called out in this service bulletin. A thorough inspection of the firewall forward installation should be completed during each Annual Condition Inspection with careful attention being given to existing points of contact between components. If damage/wear is present or if it is likely to occur, measures should be taken to prevent future wear. Similar inspections and preventative measures should occur throughout the service life of the aircraft.

Step 1: Remove the upper and lower cowl. See the RV-12 Maintenance Manual(MM).

Step 2: Inspect the FF-1208B Output Radiator Hose where it contacts the WD-1220 Engine Mount Ring as shown in Figure 1.

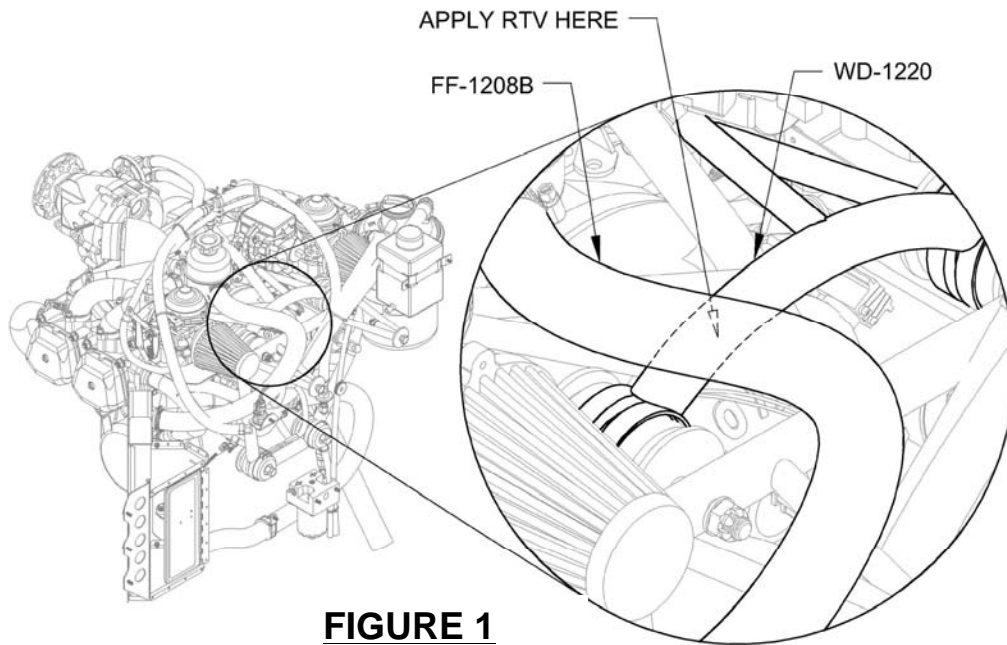


FIGURE 1

Step 3: Inspect the Rotax #2 Cylinder Water Tube (PN: 922362, 280mm) where it contacts the engine mount. See "Rotax Hose" call-out in Figure 2.

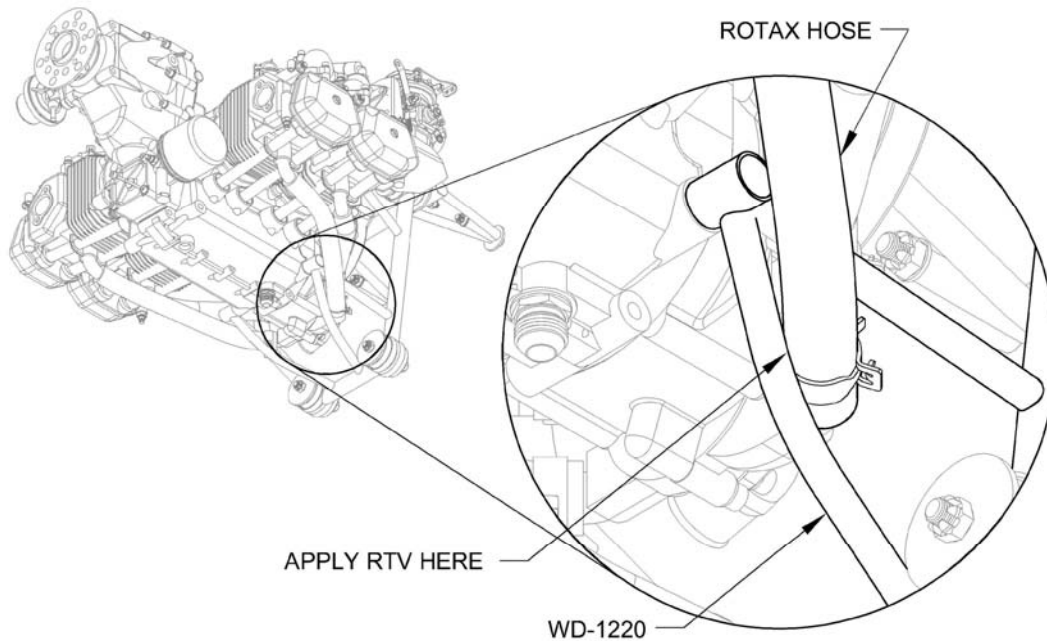


FIGURE 2

Step 4: Replace hose(s) if reinforcing cord is visible. See **COOLING HOSE REPLACEMENT** instructions below.

Step 5: If hose replacement is not necessary but wear is present or likely to occur, clean the contact area of the hose with a mild cleaning agent and apply high temp RTV as described in Step 6.

Step 6: Following manufacturer's instructions, apply approximately 1/2x1/2x1/4 in.[13x13x6 mm] bead of high temp RTV sealant or equivalent to contact area and seat the hose (or other component) into the uncured RTV.

Step 7: Allow sufficient time for RTV to cure prior to returning the aircraft to service.

Step 8: Inspect the remaining engine installation at locations where contact between components exists. In many cases, high temp RTV can be used to isolate these parts and minimize vibration damage. Alternatively, cushion clamps, wire ties, brackets etc can be used to secure components and prevent damage due to vibration.

COOLING HOSE REPLACEMENT

**▲ WARNING: BEFORE PERFORMING ANY INSPECTION OR SERVICE
ALLOW THE ENGINE COMPONENTS TO COOL.**

Tools	3/8 open end wrench, screwdriver, wire cutters
Expendable	Plastic tie-wrap 8in
Replaceable	FF-1208A, FF-1208B, FF-1220
Service Rating	Preventative
Minimum Certification	Owner and SPC, LSA-RM or A&P
Additional References	KAI

REMOVAL

1. Drain cooling system per Rotax Line Maint. Manual.
2. Disconnect cushioned clamps and cut tie wraps from coolant hoses.
3. Loosen hose clamps and slide them away from the component.
4. Disconnect hoses from reservoir, engine, and radiator.
5. Cut new hoses to same length as old ones.
6. Remove springs from old hoses and install in new hoses.

INSTALLATION

1. Installation procedure is reverse of removal procedure.
2. Refer to Rotax Line Maint. Manual to refill coolant.