

SERVICE BULLETIN



Service Bulletin No.: DA20-75-01 Rev 0

Date Issued: May 24, 2001

Title: Rotax Airbox Installation DA20-A1/100

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- 1. ATA Code:** 7500
- 2. Effectivity:** Diamond Aircraft Model DA20 A1 aircraft with a Rotax Model 912S3 100hp. engine installed (DA20-A1/100) using a Diamond Aircraft intake airbox Part Number 20-7500-02-00.
This Service Bulletin does not affect aircraft with a Rotax Model 912 A3 or F3 (80hp.) engine installed.
- 3. General:** This Service Bulletin describes the procedure for the installation of a Rotax intake airbox onto the Rotax 912S3 engine installed in a Katana DA20-A1/100. This airbox provides a more uniform flow of air to the carburetors. This installation also requires that the carburetor heat cable, airbox support and coolant overflow bottle shroud be replaced.
- 4. Compliance:** Prior to or at the next 100-Hour inspection.
- 5. Approval:** The engineering data referenced or contained in this service bulletin is approved as part of the type design.
- 6. Labour:** Approximately 2 hours will be required to accomplish this service bulletin.
This estimate is for direct labor performed by a technician and it does not include setup, planning, familiarization, cure time, part fabrication or tool acquisition.

7. Material:	Part Number	Description	Qty
	20-7510-00-00	Rotax Intake Airbox (with couplers)	1
	20-7510-60-01	Airbox Support Bracket	1
	20-7520-60-01	Coolant Overflow Bottle Shroud	1
	SCEET 10	SCEET Hose (air filter)	13 in
	SCEET 10	SCEET Hose (carburetor heat)	18 in
	20-7600-06-00	Carburetor Heat Cable	1
	MS 3367-5-9	Tie Wraps	10
	079-809	Hose clamp	4
	T250M9X2	Tie wrap (coolant bottle)	1
	2N	Spiral Wrap	6 in
	210-248	Barbed Tee Fitting	1
	F5500	Vent hose	6 in

The above material may be ordered as a kit DA20-75-01 AMK0

Material Required but not supplied

PR 812, CS1900 or PS 700	Firewall Sealant, MIL-S-38249, Type I	A/R
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- 8. Special Tools:** No special tools required

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9. References: Diamond Aircraft Maintenance Manual for the DA20 A1 Aircraft (Doc. DA201).

10. Accomplishment Instructions

- 10.1 Remove the airbox from the engine complete with the drain lines and catch pans. Cover all of the openings in the carburetors to prevent contamination.
- 10.2 Remove the airbox support from the engine; retain the hardware for re-use.
- 10.3 Remove the instrument panel cover.
- 10.4 Remove the firewall sealing plates from the bowden cable firewall pass through.
- 10.5 Remove the sealing compound from the attachment point.
- 10.6 Remove the carburetor heat cable completely from the aircraft.
- 10.7 Install the new carburetor heat cable, route the cable through the firewall. Reference figure 1.
- 10.8 Re-install the firewall sealing plates and seal with firewall sealant.
- 10.9 Install the new airbox support using the removed supports hardware, torque bolts to 90 in.lbs.

NOTE

The coolant overflow bottle may remain filled during the next operation

- 10.10 Remove the tie-wrap holding the coolant overflow bottle to the engine mount. Position bottle aside to allow access to the shroud hardware.
- 10.11 Remove the coolant overflow bottle shroud and install the new shroud with the removed hardware.
- 10.12 Install the coolant overflow bottle to engine mount using the supplied tie-wrap.
- 10.13 Assemble the catch pans and rubber mount to the airbox, these parts are supplied with the airbox.
- 10.14 Connect the SCEET hoses to the airbox.
- 10.15 Install the airbox. Route the carburetor heat cable between the air ducts while installing.
- 10.16 Connect the SCEET hoses to the muffler shroud and the Intake air filter.
- 10.17 Route and connect the carburetor heat cable as shown in figure 1. Secure the cable as necessary with tie-wraps. Spiral wrap may be necessary where cable passes the right hand carburetor. Reference figure 1.
- 10.18 Connect left hand airbox drain tube by cutting existing left hand catch pan drain and installing supplied barbed tee fitting as shown in figure 2.

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- 10.19 Ensure that the carburetor heat actuates correctly.
- 10.20 Complete a maintenance logbook entry stating that Diamond Aircraft Service Bulletin DA20-75-01 Revision 0 Rotax Airbox Installation has been accomplished.

11. Weight and Balance: This installation adds 0.36kg (0.8 lbs.) of weight at a moment arm of -98 cm (- 38.6 in)

12. Credit Terms and Conditions:

Parts and Labour: Credit for the replacement parts and 2 hours labour will be issued upon the return of the removed airbox with a completed warranty credit application.

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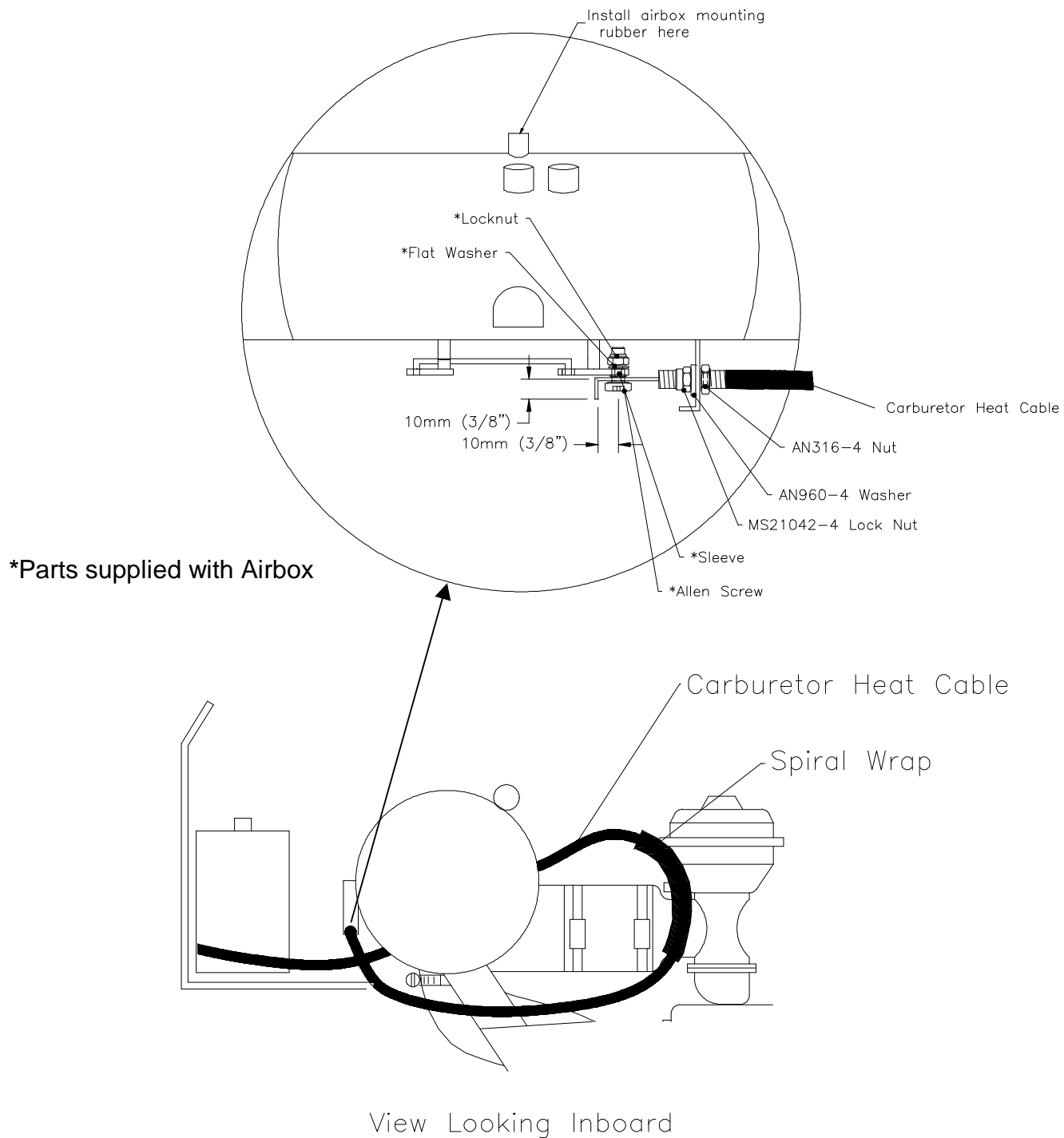


Figure 1
Carburetor Heat Cable Installation

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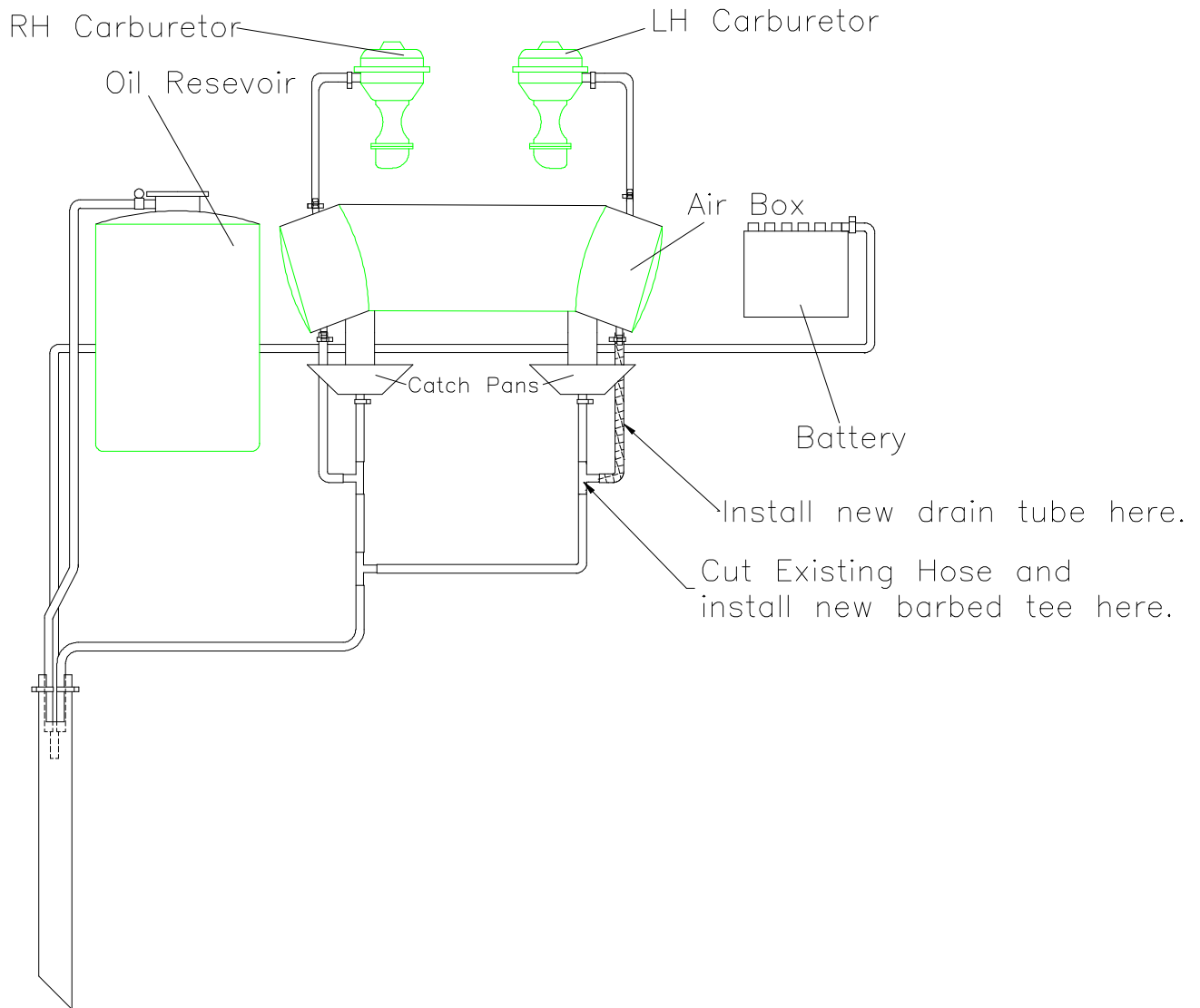


Figure 2
Vent Tubing Modification/Installation