

 CZECH SPORT AIRCRAFT	<h1>SERVICE BULLETIN</h1>	Czech Sport Aircraft a.s. Na Záhonech 212 686 04 Kunovice Czech Republic info@czechsportaircraft.com
		No.: SB-SC-070
		Date: 2019-07-19
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		Rev.: - Date: -

MODEL AFFECTED:	SportCruiser / PiperSport (excluding those operating under EASA rules)
SUBJECT:	Inspection and eventual adjustment of sufficient distance between exhaust and cooling tubes
AIRCRAFT AFFECTED:	All SportCruiser / PiperSport aircraft with dual circuit thermostat valve Hektic F 1104 installed
COMPLIANCE:	Apply this Service Bulletin as soon as possible, not later than before completing three flight hours as of the day of this Service Bulletin issue. Apply this service Bulletin every 100 FH or at any time when any works on exhaust or cooling tubes are performed.

DESCRIPTION:

This Service Bulletin contains instruction for inspection and eventual adjustment of cooling tubes in order to secure their sufficient distance from engine hot exhaust system and from other surrounding components.

AUTHORISATION TO PERFORM:

USA: Repairman (LS-M) or Mechanic (A&P)
 Europe: Part M or Part 145 Maintenance organization

REASON:

Sufficient distance of cooling tubes from engine hot exhaust system and from other surrounding parts is important safety requirement. If not followed, it may lead to contact between tubes causing a wear or even penetration of tubes and coolant loss with danger consequences.
 Inspection requirement is based on operational experience when clearances might change due to vibrations and various operational conditions.

MANPOWER:

Inspection: ½ hour, repair: 4 hours (app. values)

SPECIAL TOOLS:

Common tools for aircraft maintenance

WEIGHT AND BALANCE:

No effect

ELECTRICAL LOAD DATA:

N/A

PUBLICATIONS AFFECTED:

SportCruiser / Piper Sport Maintenance Manual

MATERIAL:

N/A

COSTS:

To be covered by the aircraft owner.

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ACCOMPLISHMENT INSTRUCTIONS:

1. Move the aircraft to a suitable place to perform the work.
2. Remove the engine upper cowling (see the SC-AMM-1-0-00, the latest revision).
3. Disconnect the battery terminals (see the SC-AMM-1-0-00, the latest revision).
4. Disconnect the carburetor air inlet hose from the left NACA inlet of the lower cowling (see the SC-AMM-1-0-00, the latest revision).
5. Disconnect the air inlet hose bringing the air into the heat exchanger (if installed) from the right NACA inlet of the lower engine cowling (see the SC-AMM-1-0-00, the latest revision).
6. Remove the engine lower cowling (see the SC-AMM-1-0-00, the latest revision).
7. Inspect tubes of cooling system on sufficient distance from exhaust tubes or other components (engine body, engine mounting, etc.) according to Figures 1 - 7. Ensure that at least the minimum distance provided in Table 1 below is kept.
8. If needed, release fixing stripes and clips and adjust positioning of cooling tubes in hose fittings accordingly. The recommended minimum distances are shown in Table 1.

Table 1: Recommended minimum distances between cooling and exhaust tubes or other components

Figure No.	Dimension	Recommended minimum distance from hot parts and other components (mm)
Figure 1: Distance between exhaust and coolant tube	A	8
Figure 2: Distance between exhaust and thermostat valve	B	8
Figure 3: Distance between cooling tube and engine mount – left side – bottom view (left side)	C	5
Figure 4: Distance between cooling tube and engine mount – right side – bottom view (right side)	D	5
Figure 5: Distance between cooling tube and alternator sensor – view from above	E	5
Figure 6: Distance between cooling tube and Spark plug – view from the right	F	2
Figure 7: Distance between cooling tube and fixing stripe free ends	G	10

9. After adjustment of distances tighten all released fittings and components and check the distances again.

Note: In case any recommended distance would not be possible to maintain, then

- for insufficient distance between cooling tube and exhaust system protect relevant cooling tube from exhaust system by proper thermo-insulating foil, or
- for insufficient distance between cooling tubes and other parts of engine compartment (engine mount, spark plugs, etc.) protect relevant tube from undesirable contact by a sufficient dampening insert (e.g. Silicone tube ID25, MVQ-blue, QI 512K2204).

10. Install the engine lower cowling (see the SC-AMM-1-0-00, the latest revision).

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11. Connect the carburetor air inlet hose on the left side of the NACA inlet of the lower cowling (see the SC-AMM-1-0-00, the latest revision).
12. Connect the air inlet hose bringing the air into the heat exchanger (if installed) to the right NACA inlet of the lower engine cowling (see the SC-AMM-1-0-00, the latest revision).
13. Connect the aircraft battery terminals.
14. Install the engine upper cowling (see the SC-AMM-1-0-00, the latest revision).
15. Depending on corrective actions made on cooling system, perform engine run test and check the cooling system on leakage (see the SC-AMM-1-0-00, the latest revision).
16. Complete the aircraft records (log book) to reflect compliance with this Service Bulletin.
17. Thereby, the performance of this Service Bulletin is completed.

SUPPLEMENTS:

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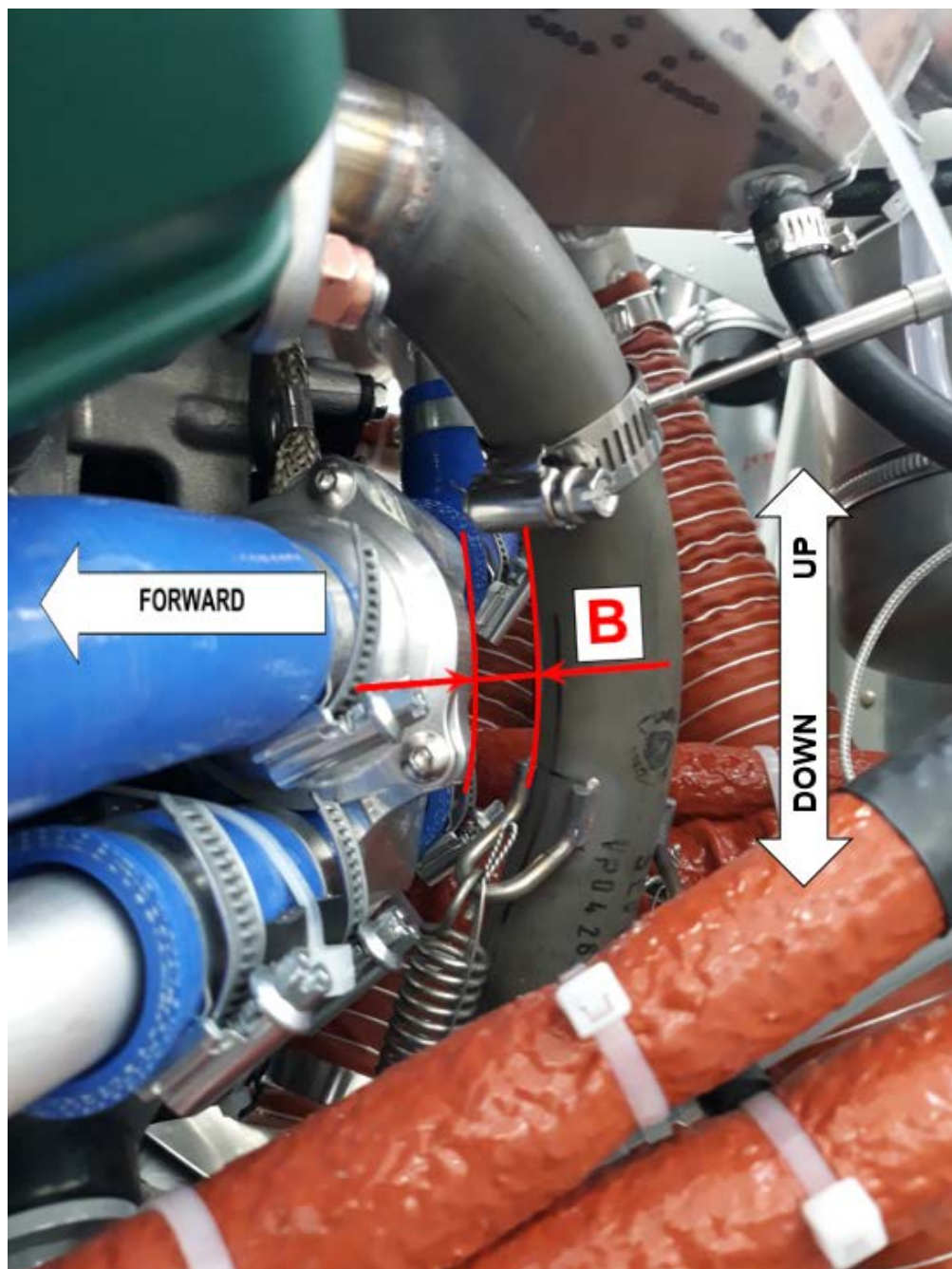
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Figure 1: Distance between exhaust and coolant tube



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Figure 2: Distance between exhaust and thermostat valve





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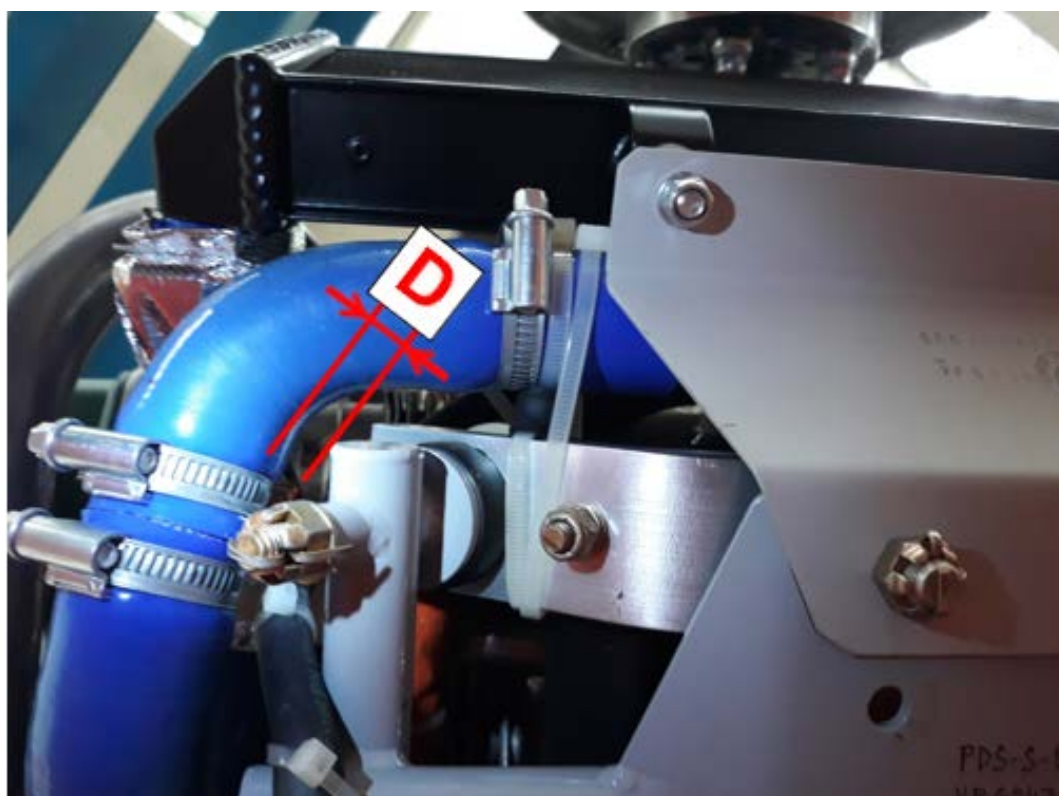
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Figure 3: Distance between cooling tube and engine mount – left side – bottom view



Figure 4: Distance between cooling tube and engine mount – right side – bottom view



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Figure 5: Distance between cooling tube and alternator sensor – view from above

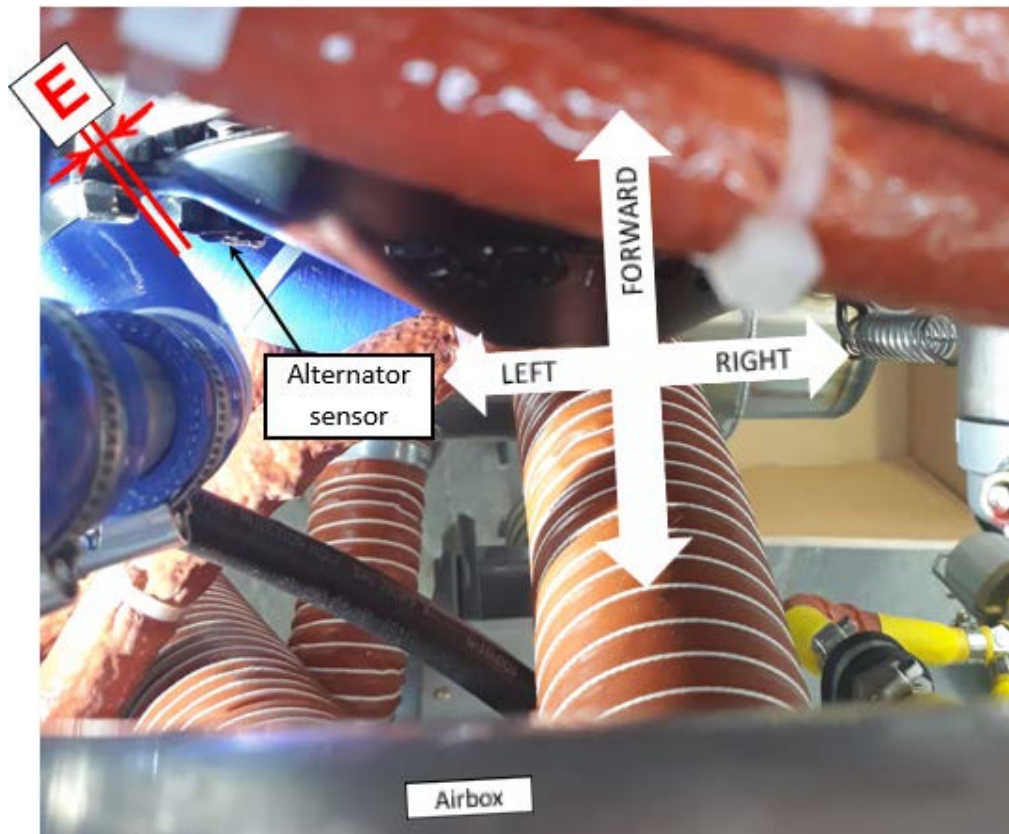
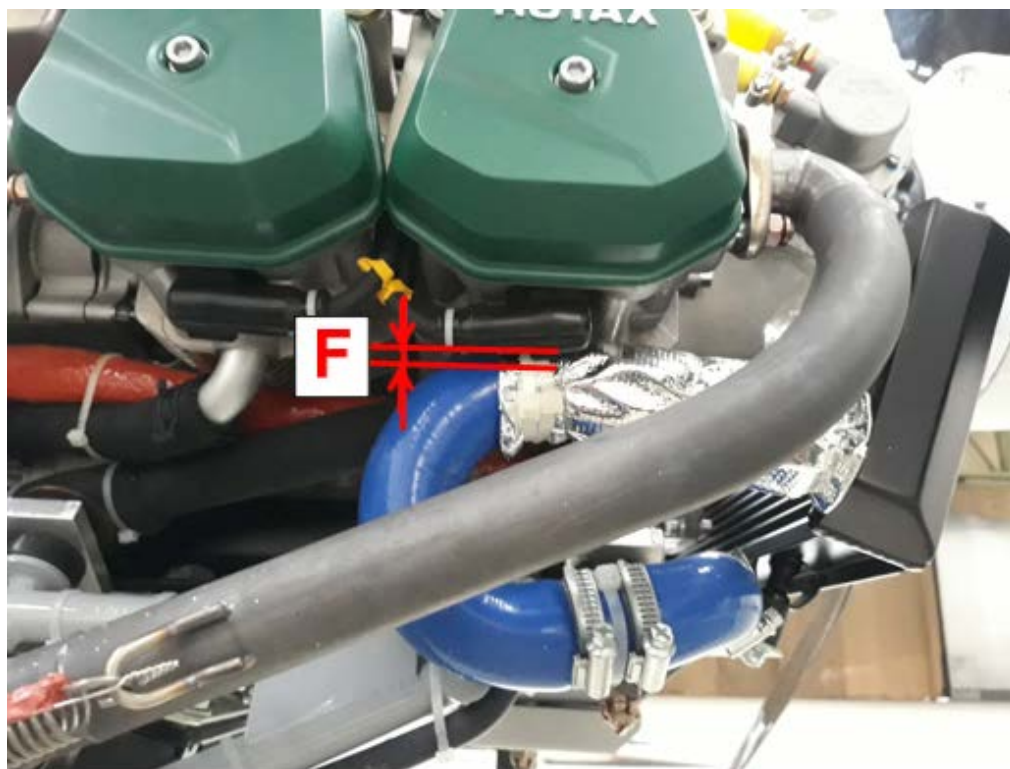


Figure 6: Distance between cooling tube and Spark plug – view from the right



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Figure 7: Distance between cooling tube and fixing stripe free ends



Note to figure 7: Stripe end should be bent in order to prevent damage of the hose in case of accidental contact.

APPROVAL:

This Service Bulletin has been approved by:

Title	Head of design Organization	Airworthiness Manager
Name	Jiří Sklenář	Miroslav Koukal
Hand written signature	