

 CZECH SPORT AIRCRAFT	<h1>SERVICE BULLETIN</h1>	Czech Sport Aircraft a.s. Na Záhonech 212, 686 04 Kunovice Czech Republic office@czechsportaircraft.com	
		No.: SB-SC-039	Rev.: 1
		Date: 2017-09-20 Page: 1 of 6	Date: 2017-10-09

MODEL AFFECTED:	SportCruiser / PiperSport
SUBJECT:	Landing Light Replacement
AIRCRAFT AFFECTED:	All SportCruiser / PiperSport aircraft, as applicable
COMPLIANCE:	Apply this Service Bulletin when replacement of the landing light Trail Tech 4213-SX is needed

DESCRIPTION:

This Service Bulletin contains instructions for replacement of the Original landing light Trail Tech 4213-SX (hereinafter referred to as the "Original landing light") by the new Trail Tech D112-SX landing light (hereinafter referred to as the "New landing light").

AUTHORISATION TO PERFORM:

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

REASON:

Production of the Original landing light was terminated by the manufacturer. The New landing light Trail Tech D112-SX is an equivalent and approved replacement.

MANPOWER:

Approximately 9 working hours.

SPECIAL TOOLS:

Common maintenance tools for aircraft servicing (imperial and metric size tools, as well)

WEIGHT AND BALANCE:

Insignificant effect.

ELECTRICAL LOAD DATA:

Not affected. Direct current is app. 0,5 Amps (by 2,2 Amps less than for the Original landing light)

REFERENCES:

N/A

PUBLICATIONS AFFECTED:

SportCruiser / PiperSport Maintenance Manual, SC-AMM-1-0-00, Rev.9.
 SportCruiser / PiperSport Wiring Manual, SC-WMA-1-0-03, Rev.9.
 SportCruiser / PiperSport Illustrated Parts Catalog, SC-IPC-1-0-00, Rev.8.

MATERIAL:

Parts can be ordered as an assembly kit from the Czech Sport Aircraft a.s.

COSTS:

To be covered by the aircraft owner / operator.



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Legend to the figures 1 to 5 below:

ITEM	NAME	DRAWING / NOMENCLATURE
1	Original landing light Trail Tech 4213-SX	6902LI13
2	Light console	
3	Bolt	
4	Self-locking nut	
5	Washer	
6, 7	Connector cover	
8	Female connector	
9	Male connector	
10	Wire (black, white)	
-		
12	Castle nut	
13	Cotter pin origin	
13	Cotter pin new – AN380-3-3	3231A303
20	Bolt - AN4-10A	3111A410
21	Bracket Top	CI0191N
22	Bolt – Hexagon Socket head DIN7984-M5x24-ZB	3111X525
23	New landing light Trail Tech D112-SX	6902LI14
24	Male connector	Component D112-SX
25	Washer - Flat DIN125-5,3-ZB	3131X502
26	Nut - Self Locking DIN985-M5-ZB	3121X409
27	Eye Bolt Pressed	CI0195N
28	Nut - Thin DIN439-M6-ZB (2 pcs)	3121X605
29	Bracket Bottom	CI0192N
30	Rubber 7851, 63x20, thickness 1	511K0009
31	Nut - Self Locking AN365-428	3121B654
32, 33	Washer Flat AN960-416	3131A416
34	Washer Single Tab 5,3 DIN93-A2	3131X507
35	Washer Serrated 5,3-DIN6798A-ZB	3131X501

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ACCOMPLISHMENT INSTRUCTIONS:

To accomplish this bulletin carry out the following steps:

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 carburettor air inlet hose from the left NACA inlet of the lower cowling (see the SC-AMM-1-0-00, the latest revision).
4. 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).
5. Remove the engine lower cowling (see the SC-AMM-1-0-00, the latest revision).
6. Disconnect the battery terminals.
7. Disconnect the Original landing light from the aircraft wiring system - cable with the connector (6, 9) from the wiring (7, 8, 10). See Figure 1 below.
8. Remove the Original landing light (1) with bracket (2) from the engine mount.
9. Screw back the castle nut (12) and secure with the new cotter pin (13). To eliminate the slackness use the washer (33).
10. Install the New landing light (23) with the new holder (21, 29, 30) supplied by the Czech Sport Aircraft using connecting parts (20, 31, 32, 22, 25, 26, 27, 28, 35), see Figure 2.
11. If the gap between the light mounting (23) and the threaded eye (27) on the screw (22) is 0,5 mm or more, insert the washer (34) between the light mounting and the threaded eye. Tighten the screw (22) firmly.
12. Interconnect the airplane connector (8) with the landing light connector (24), see Figure 1 and 3.
13. Install the engine lower cowling and check the landing light position – it must be adjusted so that the optical axis of the landing light passes through the middle of the engine lower cowling opening, see Figure 3 and 4. Use the parts (21, 29, 30) for adjustment.
Note: To reach the adjustment parts (21, 29, 30), the engine lower cowling has to be removed first. To check the adjustment, the engine lower cowling has to be installed first.
14. Once a correct landing light position is done, remove the engine lower cowling and secure the adjustment by tightening the nut (28) and connecting parts (20, 31, 32).
15. Find the circuit breaker of the landing light (LDG L) on the instrument panel (see the SC-AMM-1-0-00, latest revision) and check the rating. A value of 3A is correct for the New landing light circuit breaker rating.
16. Connect the battery terminals.

Attention:

The new landing light (23) has two brightness modes:

2500 Lumens – yellow wire connected and 1250 Lumens - red wire connected.

If you change the New landing light (23) yourself, remember that it can only be operated at 1250 Lumens, otherwise there might be a risk of overloading the 12V DC supply.

Therefore, ensure that the +12VDC voltage is connected to the red and - (0V) to the black wire.

17. Perform functional test of the New landing light.
18. Install the engine lower cowling (see the SC-AMM-1-0-00, the latest revision).
19. Connect the carburettor air inlet hose to the left NACA inlet of the lower cowling (see the SC-AMM-1-0-00, the latest revision).
20. 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).
21. Mount the engine upper cowling (see the SC-AMM-1-0-00, the latest revision).



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22. Perform a suitable function test of the New landing light (switch the light on and verify that all three LED lights are alight).
23. Complete the aircraft records (log book) to reflect compliance with this bulletin.

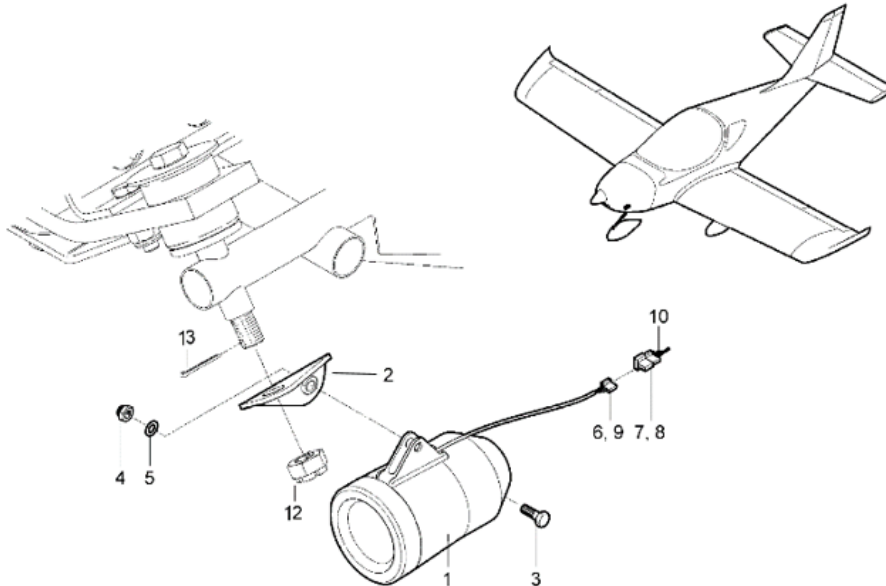


Figure 1 – Dismounting of the Original landing light Trail Tech 4213-SX

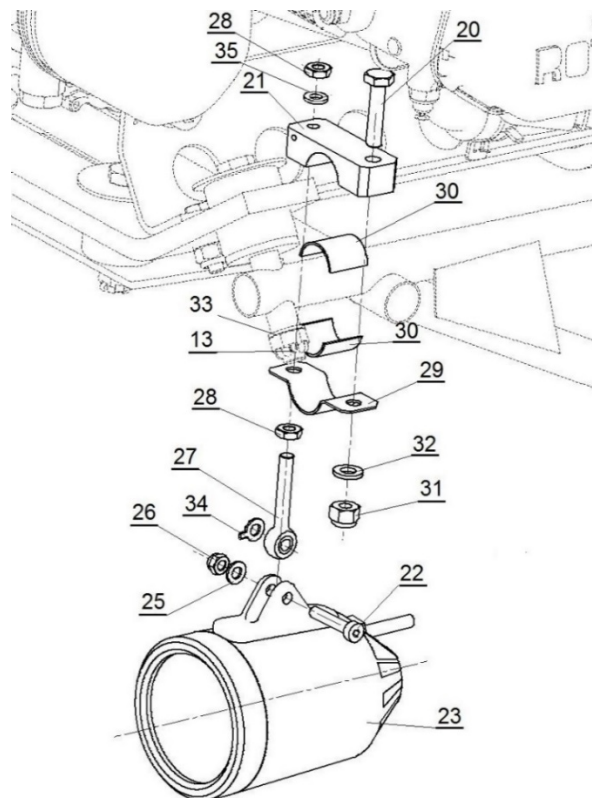


Figure 2 – Mounting of the New landing light Trail Tech D112-SX



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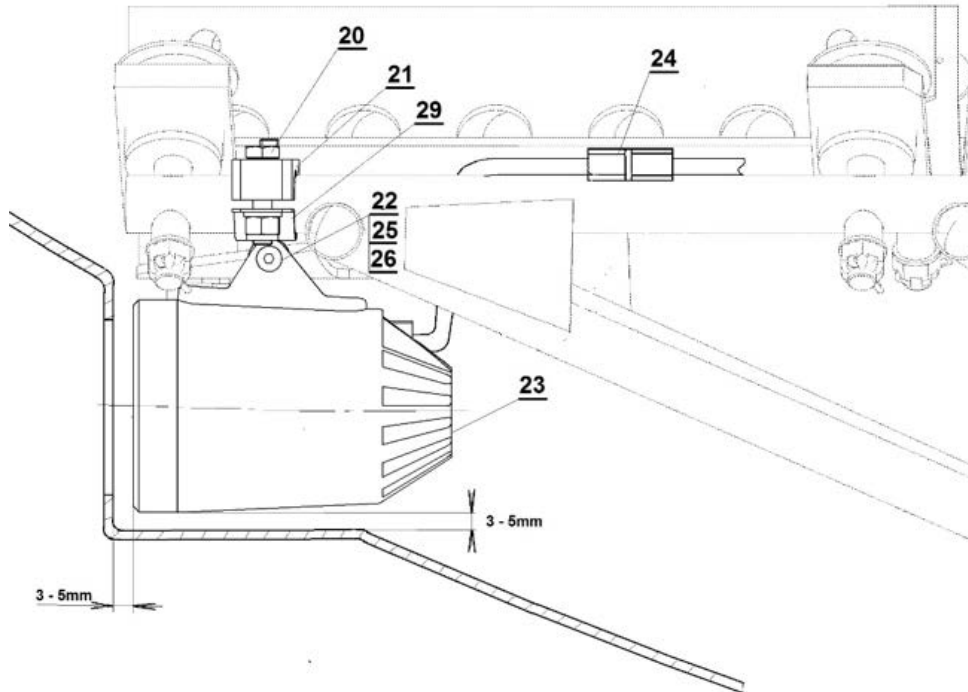


Figure 3 – The New landing light position adjustment

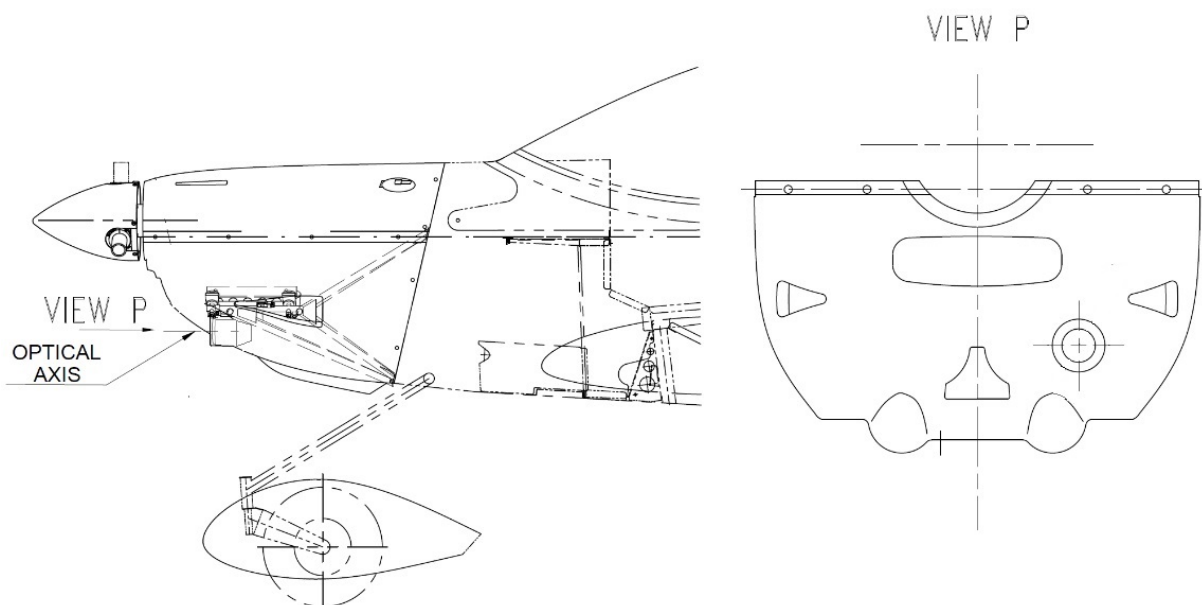


Figure 4 – Adjustment of the New landing light axis

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APPROVAL:

This SB was approved by:

Title	Head of the Design Organisation	Airworthiness Manager
Name	Jiří Konečný	Miroslav Koukal
Hand written signature		