



*Release*

**MANDATORY BULLETIN No. SPORTSTAR – 012 a**

(ZBSPORTSTAR-012a)

1. **CONCERNING TO :** All SportStar aircraft having TruTrak autopilot installation.
2. **REASON :** The current installation of the autopilot servos includes no mechanical stops of servo levers. These stops are to prevent the servo arm to get into a dead position or rotated by 180° and reverse sense of deflections. One SportStar aircraft was found with turned down a servo lever of the cross control system during the assembly, causing reversal direction of servo rod travel controlling the wing ailerons.
3. **ACTION :** Supplemental installation of a stop for the TruTrak autopilot rod
4. **ACTION LATEST DATE :** The nearest periodic inspection..
5. **ACTION TO BE DONE BY :** Aircraft owner, operator or authorized mechanic.
6. **COSTS COVERED BY :** Aircraft manufacture will send the installation kit.
7. **NECESSARY MATERIAL :** see Enclosure
8. **WORK PROCEDURE :** see Enclosure.
9. **APPENDICES :** Installation of a stop for the TruTrak autopilot rod
10. **ELABORATED BY :** Petr Javorsky, Tomas Mahdalik

Petr JAVORSKÝ  
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08.08.2008  
Date:

Jiří VYCHOPEN  
LAA Supervisor

08.08.2008  
Date:



## Installation of a stop for the Trutrak autopilot rod

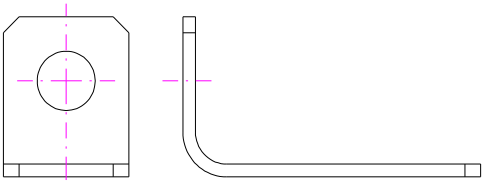


Photo	Work Flow
	<p>Needed material :</p> <ul style="list-style-type: none"><li>- STOP S4 25-13 21 - 2 pcs</li><li>- screw 6-32x1/4'' (not shown) - 1 pc</li><li>- blind rivet 4x9,5 1691-0512 (not shown) - 1 pc</li><li>- washer Ø 3,5 DIN127B (not shown) - 2 pcs</li></ul>
<p>List of needed tooling:</p> <ul style="list-style-type: none"><li>- drill Ø 4.1 mm for rivets</li></ul>	<ul style="list-style-type: none"><li>- Phillips screwdriver</li><li>- riveting pliers for blind rivets - for the stop rivetting</li><li>- hand drilling machine</li><li>- nut wrench M8</li><li>- imbus wrench 7/64'' (2,8)</li></ul>
	<p>Remove upholstered part of a seat.</p>
	<p>Remove control stick sleeve from the velcro tape.</p>



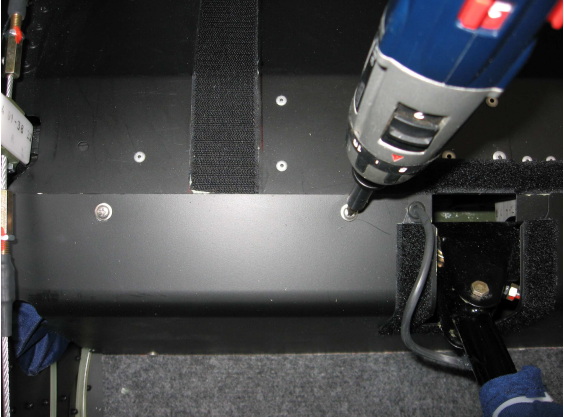
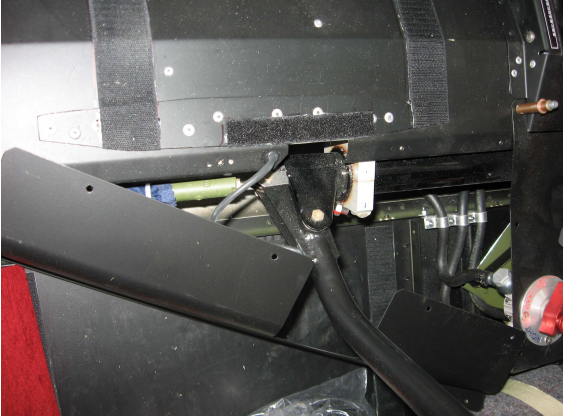
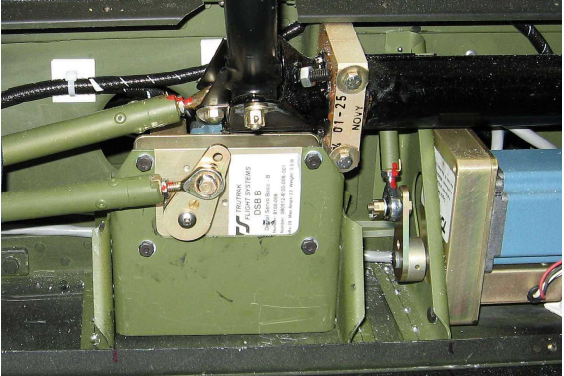
Photo	Work Flow
	<p>Screw off 6 screws by Phillips screwdriver attaching a right control system cover (in front of a co-pilot).</p>
	<p>Remove the control system cover.</p>
	<p>View of the Trutrak autopilot servo.</p>



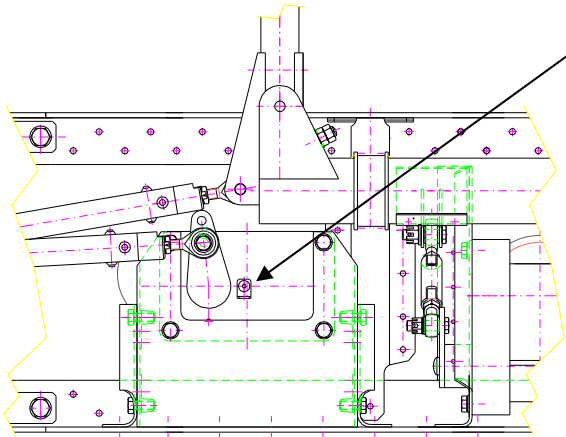
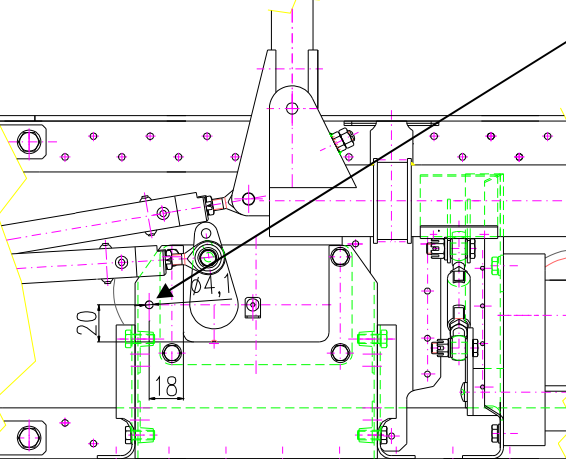
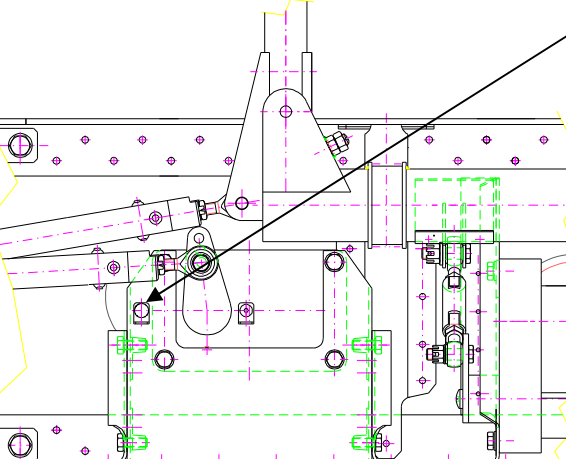

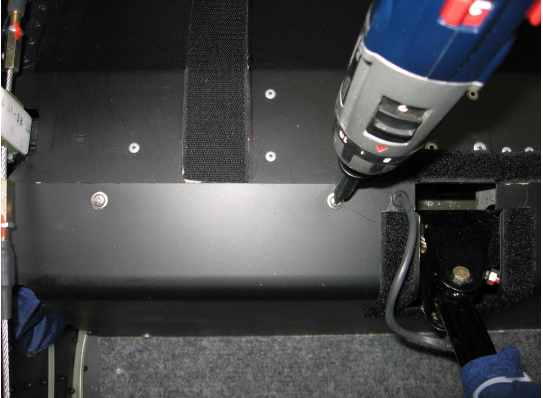


Photo	Work Flow
	<p>Screw STOP S4 25-13 21 by the screw 6-32x1/4" in accordance with the picture. Input two Ø3,5 DIN127B washers under the STOP.</p>
	<p>Drill Ø4,1 hole by picture.</p>
	<p>Rivet the STOP S4 25-13 21 using 4x9,5 1691-0512 rivets by picture.</p>



Photo	Work Flow
	<p>Connect a rod to internal hole of the servo lever.</p> <p>Connect the rod to middle hole of the servo lever .</p> <ol style="list-style-type: none"><li>1. Set up the rods in ZERO angle of the control surfaces.</li><li>2. Servo lever must contain 90° angle with the rod in ZERO angle of the control surfaces.</li><li>3. Verify free movement of servos and control system with considering maximum control surfaces elevation.</li></ol>
	<p>Set back the control system cover and screw it.</p>
	<p>Return back the control stick sleeve.</p>
	<p>Return back the upholstered part of the seat.</p>