

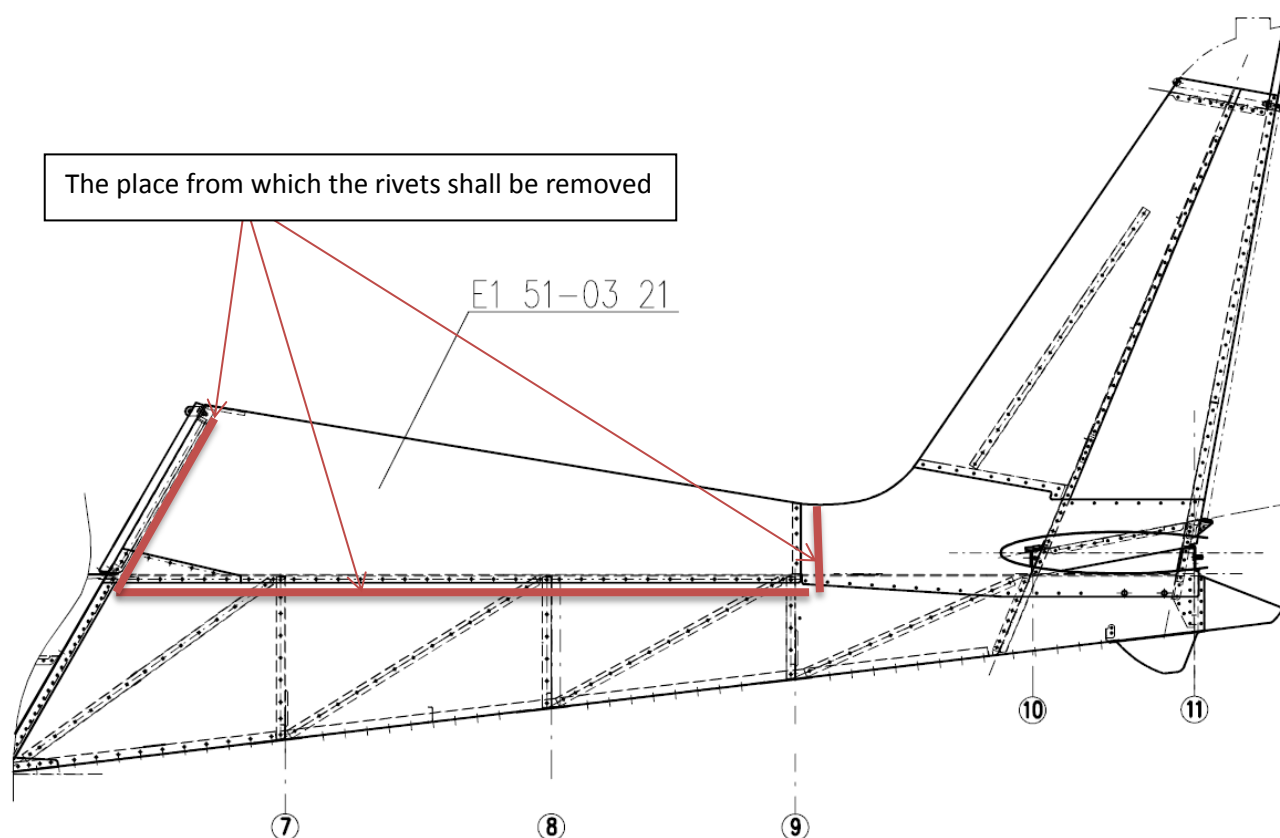
Replacement of the fin spar bulkhead

This applies to replacement of the bulkhead E1 01-28 21 with the bulkhead SG1 01-28 21 on the Eurostar airplanes model 2000 and model SL up to 2010.

Work procedure.

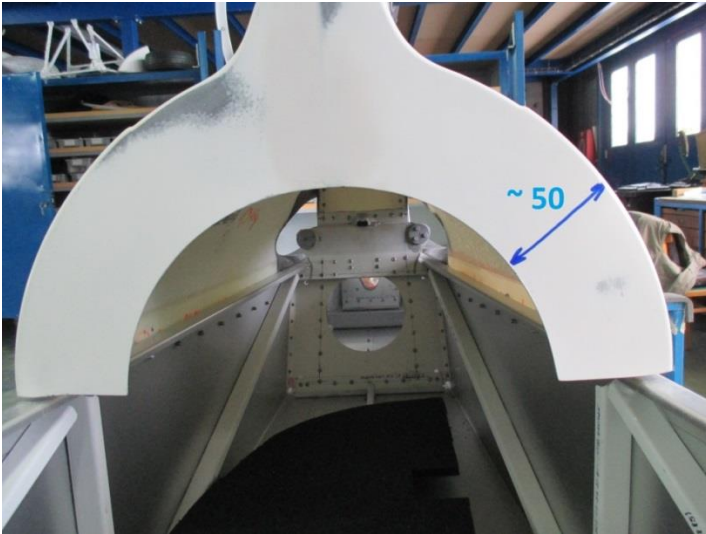
- Disconnect the controls - elevator control rod – elevator control lever.
- Disconnect the trim control.
- Remove HTU.
- Use a drill with an appropriate drill bit to remove the rivets $\varnothing 3.2 \times 7.9$ 1691-0410 from $\frac{1}{2}$ part E1 51-03 21 upper skin (left or right half from the airplane axis).

For purposes of the repair, it is sufficient to remove $\frac{1}{2}$ E1 51-03 21, but you can also remove the whole upper skin.



- Use a heat gun to increase the temperature of the connection of the part E1 51-03 21 and the fuselage (make sure that you do not damage the paint and the fuselage structure). After you increase the temperature of the connection, insert a knife or a thin strip of sheet metal between the parts and slowly separate the heated connection.
- Hold the lower edge of the removed $\frac{1}{2}$ part E1 51-03 21 and carefully bend the part - roll it upwards. Use e.g. a locking wire to secure it in the upper position to enable access to the interior of the fuselage.
- Remove the adhesive residues from the connection of the upper skin and the fuselage.

- Modify the face of the fiberglass fairing in accordance with the photograph (leave approximately 50 mm) to enable better access to the bulkhead.



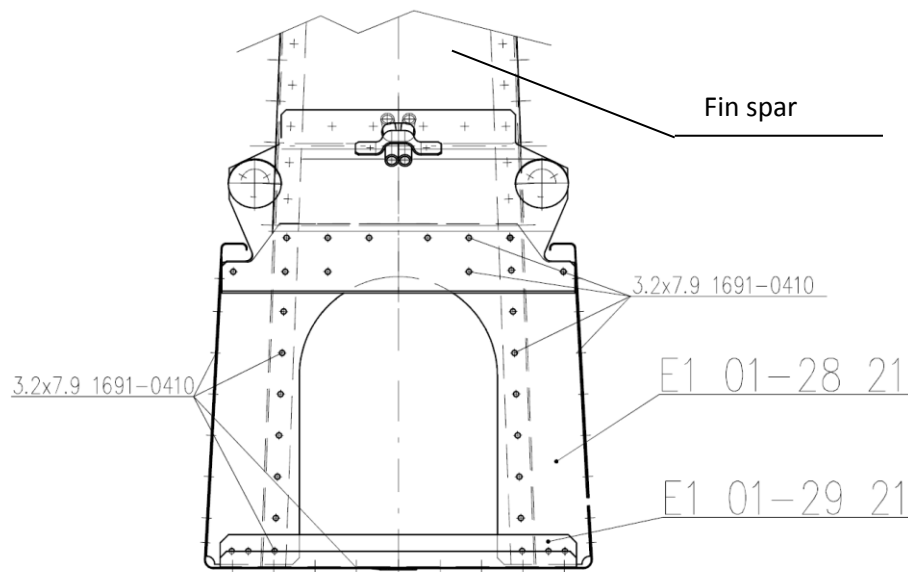
- Remove the clamp of the Bowden cable trim control which is attached to the bulkhead E1 01-28 21.



- Remove the rear control rod and insert it into the fuselage - in the direction of flight.
If necessary, remove the clamp of the Bowden cable which is routed along the control rod to the fuselage.

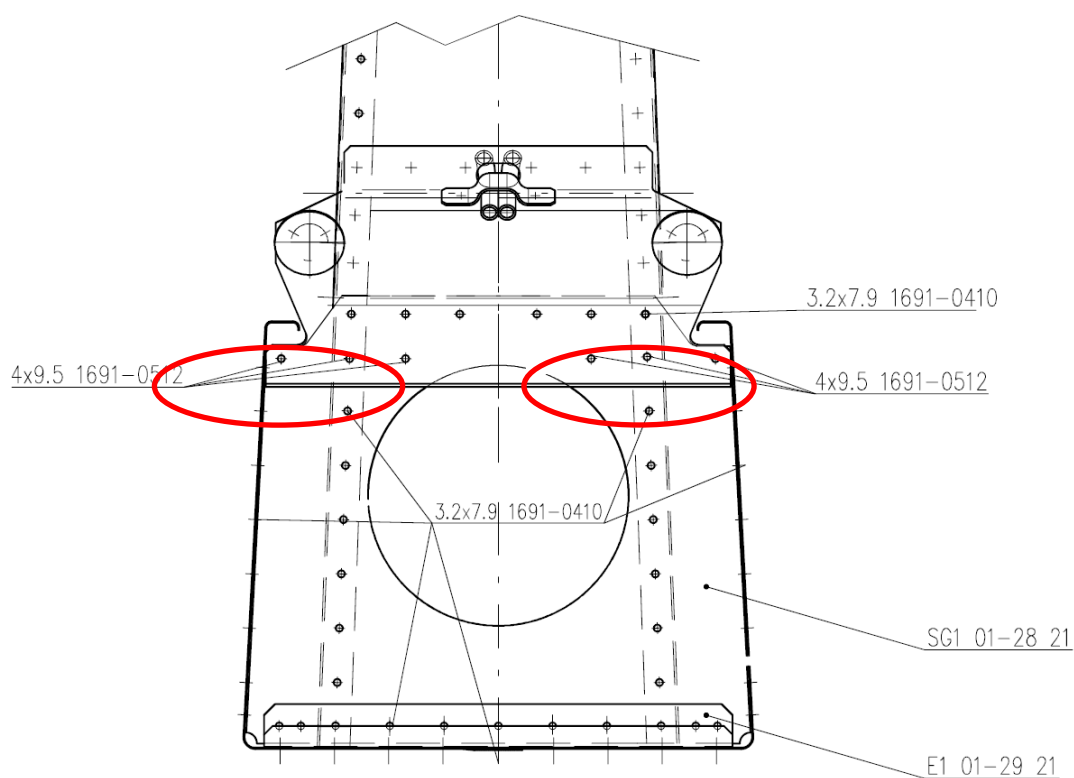
- Use a drill with an appropriate drill bit to remove the rivets 3.2x7.9 1691-0410 from the connection of the part E1 01-28 21, E1 01-29 21 and the fuselage.

Part E1 01-29 21 shall be removed together with the part E1 01-28 21.

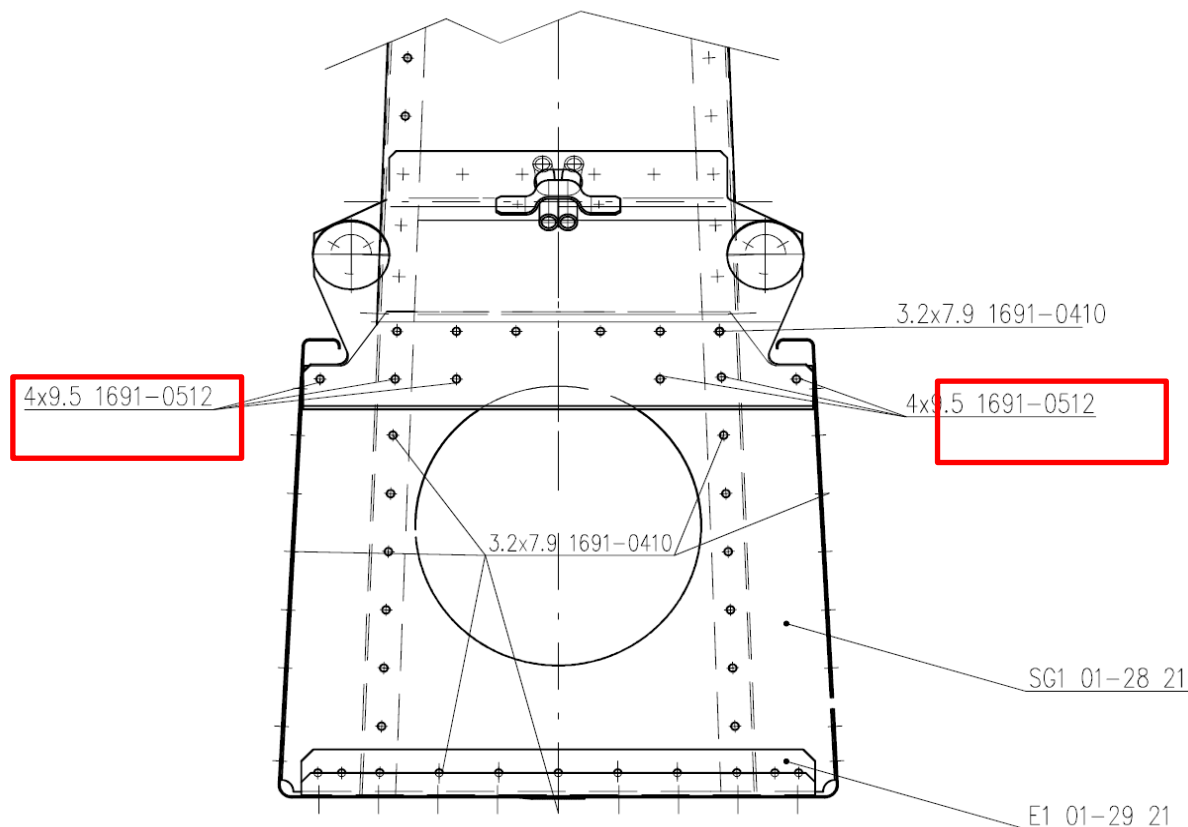


- Use a heat gun to increase temperature of the part E1 01-28 21, E1 01-29 21 and carefully remove it from the surrounding structure and remove the bulkhead from the fuselage.
- Remove the adhesive residues from the fuselage. Use a vacuum cleaner to remove dirt from the interior of the fuselage.
- Put the new part SG1 01-28 21, E1 01-29 21 in place of the original part E1 01-28 21 and use a drill to attach it in accordance with the drawing.

Note that in case of 6 holes – rivets, there is a difference from the original riveting!!!



- Remove the part SG1 01-28 21, clean the part E1 01-29 21, apply a very thin layer of the Emfimastic PU50 adhesive to the bulkhead SG1 01-28 21, E1 01-29 21 around the rivet connection of the part and the surrounding structure.
- Insert the part SG1 01-28 21, E1 01-29 21 into the fuselage and use the rivets to attach it in accordance with the drawing.



- Use technical gasoline to remove the adhesive residues from the surrounding structure.
- Check the riveting.
- Install the removed parts (Bowden cable, elevator control rod) on the airplane.
- Make sure that the control rod is secured.
- Check of free movement of the control rod of the elevator and trim control.
- Check the interior of the fuselage.
- Apply a very thin layer of the Emfimastic PU50 adhesive to the connection of the upper skin E1 51-03 21 and the fuselage.
- Use the rivets 3.2x7.9 1691-0410 to attach the upper skin E1 51-03 21 to the fuselage.
- Use technical gasoline to remove the adhesive residues from the fuselage.
- Install HTU.
- Connect the control rod of the elevator and trim control.
- Perform the final overall inspection.
- Write record about repairing to the log book

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Jaroslav Kopeček
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