

Subject:

Replacing the plastic fairing tape (elastic lipseal) at the control surface gaps of aileron, and horizontal and vertical tail.

Serial number applicability:

All ASW 24 production series.

Reason:

All serial no.s of the ASW 24 production series are fitted as standard with an elastic lipseal at the control surface gaps. The gaps at the aileron and at the elevator are sealed in addition by means of a Teflon sealing/slip tape (3M Scotch adhesive tape). For the removal of control surfaces, e.g. for any maintenance or repair work, it is necessary to remove the relevant elastic lipseal.

Action:

If the elastic lipseal needs to be removed only for maintenance or repair purposes, please observe the following:

To remove elevator or aileron:

The elastic lipseal and the sealing/slip tape need to be removed only on the upper surface (where the control surface hinges are located).

To remove the rudder:

It is NOT necessary to remove the elastic lipseal at the fin.

1. Carefully remove the old elastic lipseal in order to avoid any delaminations of the layers in this area. Remove any adhesive residue from the recessed step by means of synthetic resin thinners.
2. Accomplish any required inspection, maintenance or repair work at the control surfaces themselves and / or their hinges.
3. Cut the new elastic plastic fairing tape and the sealing/slip tape into appropriate lengths (refer to the table under point "Material").

Note:

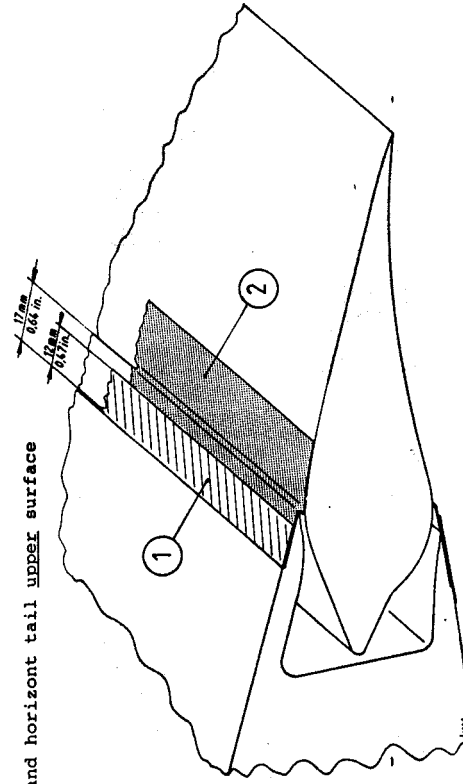
All surfaces must be completely clean, dry and free from dust and grease! This can best be tested by sticking a self adhesive tape to the cleaned surface and then pulling it off again to check that no further dust particles adhere to it.

4. Wing and horizontal tail upper surface:

Apply a 12 mm wide temporary positioning tape ① (e.g.: 12 mm Tesafilm 104) abutting the front edge of the recessed step (approx. 17 mm wide). See Fig.1.

Now apply the sealing/slip tape ② (3M Scotch Teflon Tape 30 mm wide) abutting the rear edge of the temporary positioning tape ①. Be careful that the sealing/slip tape lies slack over the gap and that the aileron and elevator is set to maximum positive deflection, so that later the Teflon sealing/slip tape is not stretched during normal negative deflections. Apply full aileron and elevator several times so that the sealing/slip tape fits well into the gap. The Teflon sealing/slip tape ② must be firmly rubbed down on to the surface.

Fig.1 Wing and horizontal tail upper surface

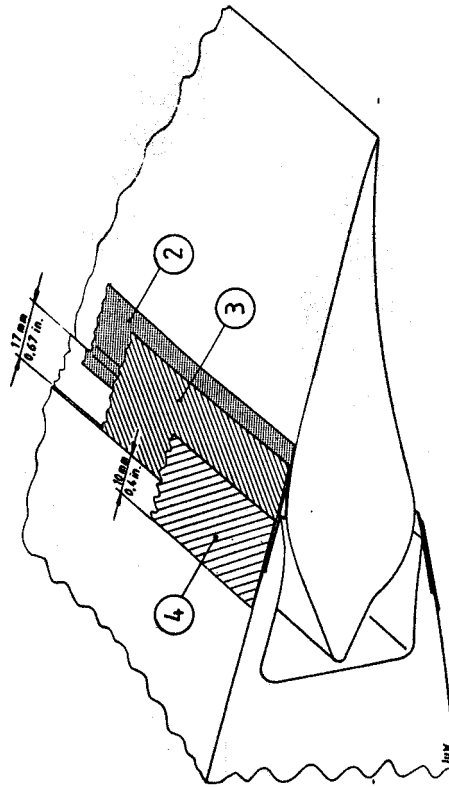


Then remove the temporary positioning tape ① first applied. Peel the protective backing from the plastic fairing strip ③ (Mylar foil, 30-15mm wide) and firmly stick it on abutting the front edge of the recessed step in the wing and stabilizer respectively, by means of its adhesive film layer. See Fig.2. Finally, press the adhesive zones of the plastic fairing strip firmly down on the surface by means of a soft wooden block (e.g.: Balsa) or a hard rubber roller.

Finally, a protective adhesive tape (4) is applied over the abutment of the front edge of the plastic fairing strip (3) and the step in the wing and stabilizer respectively (Fig.2). This tape should be as thin and moisture proof as possible; an example of a suitable tape would be white Tesafilm No.104, 25 mm wide.

This protective tape serves to prevent the detachment of the front edge of the plastic fairing strip (elastic lipseal) which might result in dangerous flight characteristics.

Fig.2 Wing and horizontal tail upper surface



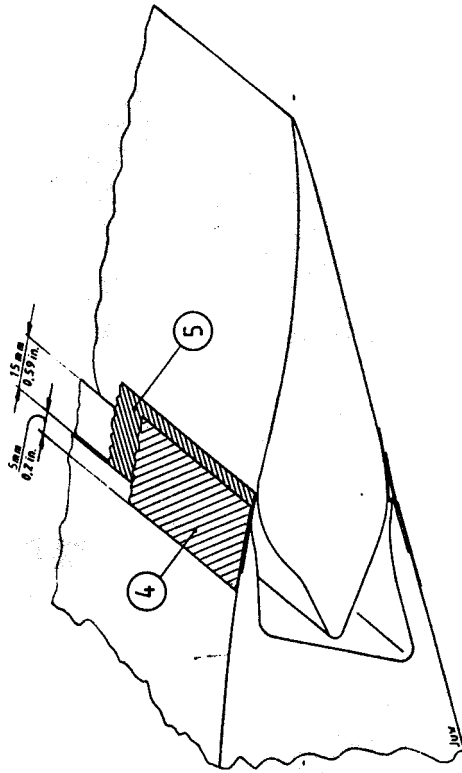
5. Wing and horizontal tail lower surface:

Remove protective backing from plastic fairing strip (5) (Mylar foil 22-15 mm wide) and stick it on abutting the front edge of the recessed step (about 15 mm wide) in the wing and stabilizer respectively, by means of its adhesive film layer. (Fig.3).

Finally, press the adhesive zones of the plastic fairing strips (5) firmly down on the surface by means of a soft wooden block (e.g. Balsa), or a hard rubber roller.

Stick a protective adhesive tape (4) over the abutment of the front edge of the plastic fairing strip (5) (elastic lip) and the step in the wing and stabilizer respectively (Fig.3).

Fig.3 Wing and horizontal tail lower surface

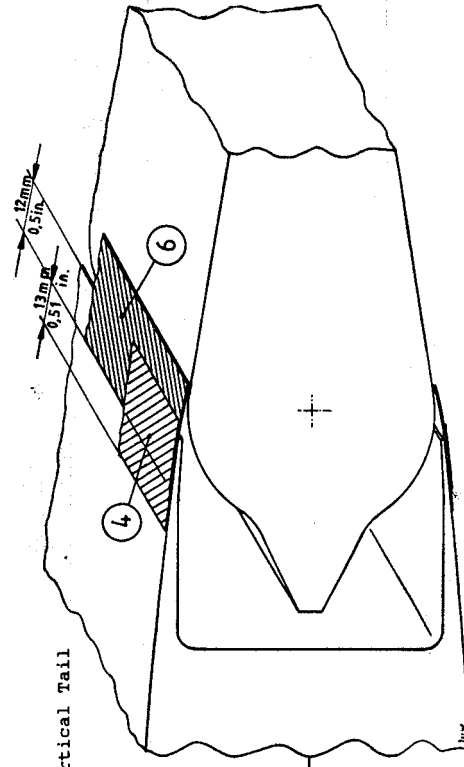


6. Vertical tail:

There are no recessed steps at the fin. As shown in Fig.4 the plastic fairing strip (6) (Mylar foil, 30-12 mm wide) is stuck on over the rudder-fin transition at the left and right side (with its adhesive film layer on the fin), then pressed firmly down on the surface, and secured against detachment by sticking on a protective adhesive tape (4) over the abutment of the front edge of the plastic fairing strip (elastic lip).

Fig.4

Vertical Tail



Material:

	Wing Sur- faces		Horizontal Tail Sfcs.s		Vertical Tail Sfcs.s L & R *
	Upper	Lower	Upper	Lower	
1 Temporary positioning tape Tesa film No. 104, 12 mm wide	2x 3,01 m		1x 2,30 m		
2 Sealing/slip tape 3M Scotch Teflon Tape, 30 mm wide	2x 3,01 m		2x 1,06 m		
3 Plastic fairing tape Mylar foil, 30-15 mm wide	2x 3,01 m		1x 2,30 m		
4 Protective adhesive tape Tesa film No. 104, white, 25 mm wide	2x 3,01 m	2x 3,01 m	1x 2,30 m	2x 1,06 m	2x 0,97 m
5 Plastic fairing tape Mylar foil, 22-15 mm wide		2x 3,01 m		2x 1,06 m	
6 Plastic fairing tape Mylar foil, 30-12 mm wide					2x 0,97 m

* = left and right

The materials required can be obtained from Messrs. Schleicher.

Notes:

1. This action can be accomplished by a competent person.
2. Ensure that the elastic lipseal is in contact with the surfaces of the controls even when they are fully deflected.
The secure and firm adhesion of the elastic lip must be checked.
3. Maintenance Instruction B describes how to fix or replace the turbulators (e.g: zigzag tape or nap tape) on wing, horizontal and vertical tail. Partly the turbulators are glued on direct in front of or direct onto the plastic fairing strips.

Poppenhausen, February 5, 1990

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The translation into English has been done by best knowledge and judgement; in any case of doubt the German original is controlling.