

Repair manual DG-500MB

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Wings, wingflaps, ailerons and engine compartment

Resin systems

resin - Bakelite Rütapox L 20 with
hardener - Bakelite Rütapox SL 50
- Mixing ratio 100:30 by weight

or resin - MGS L 160 with
hardener - H 163
- mixing ratio 100:28 by weight

or resin - MGS L 285 with
hardener - H 286
- mixing ratio 100:38 by weight

The repaired areas must be tempered for a min. of 20 hrs. at 54°C (129°F) before the aircraft is flown.

Fibreglass fabric

Fabric at wings outer surface Interglas 90070, other fabric see above.

Carbonfibre rovings TOHO or TENAX HTA 24000 or TENAX HTS 24000

Carbonfibre fabric

Weight	Weave	Manufacturer/Type
appr. 285g/m ²	Atlas	Interglas 98160, C.Cramer C 475
appr. 245g/m ²	Linen	Sigri 8049, Interglas 98150 C. Cramer C 460
appr.245g/m ²	Twill	Sigri KDK 8043, Interglas 98151 C. Cramer C 462
appr.205g/m ²	Linen	Sigri 8003, Interglas 98140 C. Cramer C 450
appr.205g/m ²	Twill	Sigri KDK 8042, Interglas 98141 C. Cramer C 452

Carbonfibre tape Sigri KDU 1009 7.5 cm (3 in) wide

Foam

DIAB Divinycell H 60 colour brown
Divinycell H 80 colour grey
in the wingshell of the inner wingpanels over the
sparcaps and in the complete outboard wingpanels

Röhm GmbH Rohacell 51 colour white
Rohacell 71 colour white,
(only for the shear web of the spar).

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For all parts

Paint (Gelcoat)

Lesonal PE Schwabbellack 0369066

Mixing ratio 100:2 with 0720510 hardener. Up to 10% thinner 0630260 can be used.

or MGS T 35

Mixing ratio 100:2-3 with hardener SF 2.

Up to 10% thinner SF can be used.

or PUR paint if such paint was optionally applied.

Glue for Plexiglas

To attach the canopy:

glue Casco Nobel	1805	Foss Than 2K
hardener Casco Nobel	1821	Curing Agent
mixing ratio	3 : 1	by weight
	or 2 : 1	by volume

thickened with Aerosil.

Kleber Henkel Teroson	Macroplast	UK 8303 B60
Härter Henkel Teroson	Macroplas	UK 5400
Mischungsverhältnis:	6 : 1	by weight
	oder 4,4 : 1	by volume

thickened with Aerosil.

To repair cracks in the canopy:

Röh m Acrifix 92 which hardens by exposure to light.

Filler

For glueing, the resin-hardener mix should be thickened with chopped cotton fibres FL 1 f. (add enough so that the resin no longer flows). The surfaces to be glued should be wetted with non-thickened resin + hardener before.

To glue foam pieces into place when repairing sandwich sections and to fill in irregularities and gaps etc. around the repair, Microballoon BJO - 0930 can be used mixed with the resin-hardener. Application and mixing is the same as for the cotton flocks.

Sources for material

All materials can be obtained from the DG Flugzeugbau Factory.