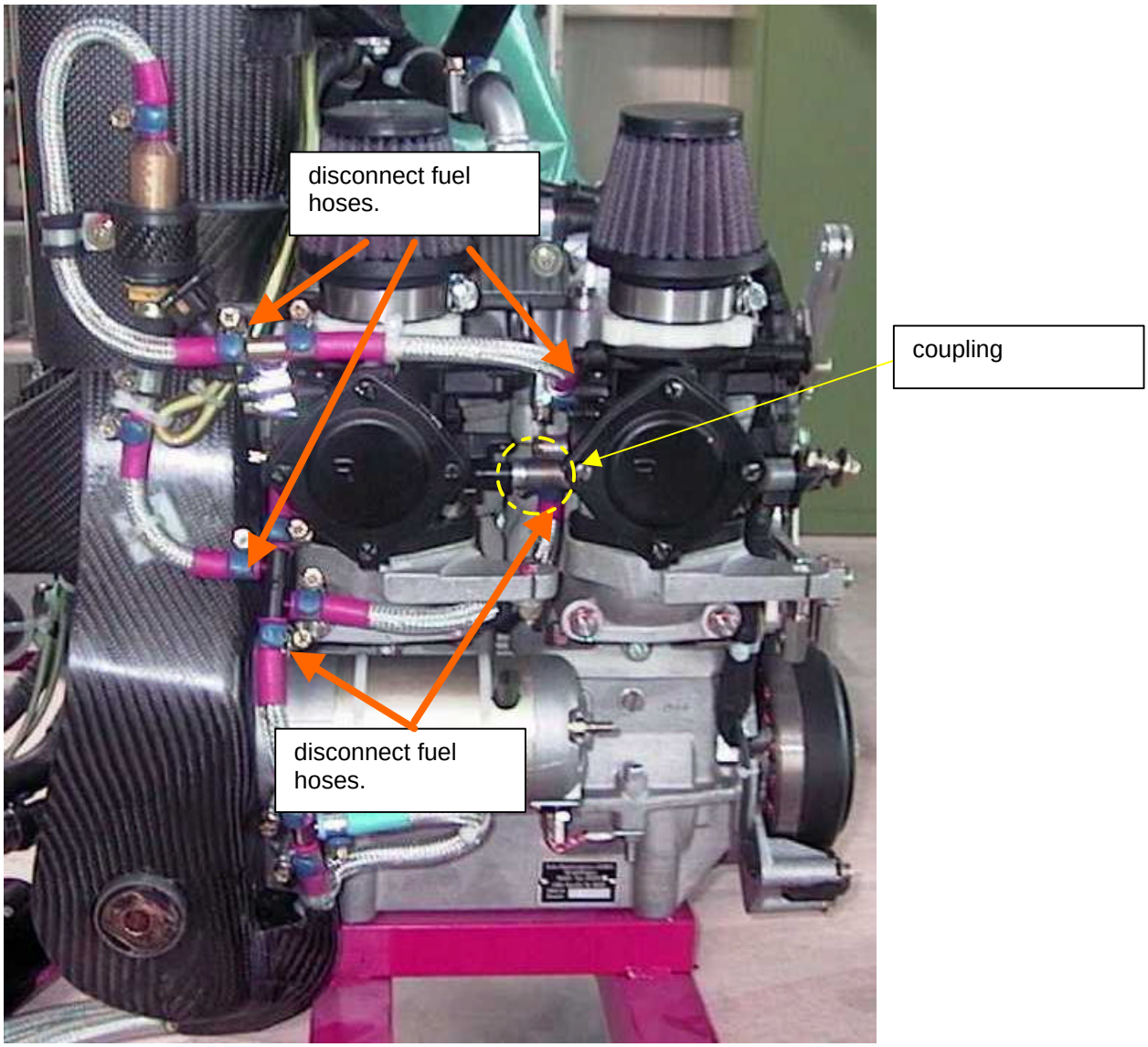
## Exchange of the metal coupling between both butterfly valve axles of the carburettors by an elastomeric coupling

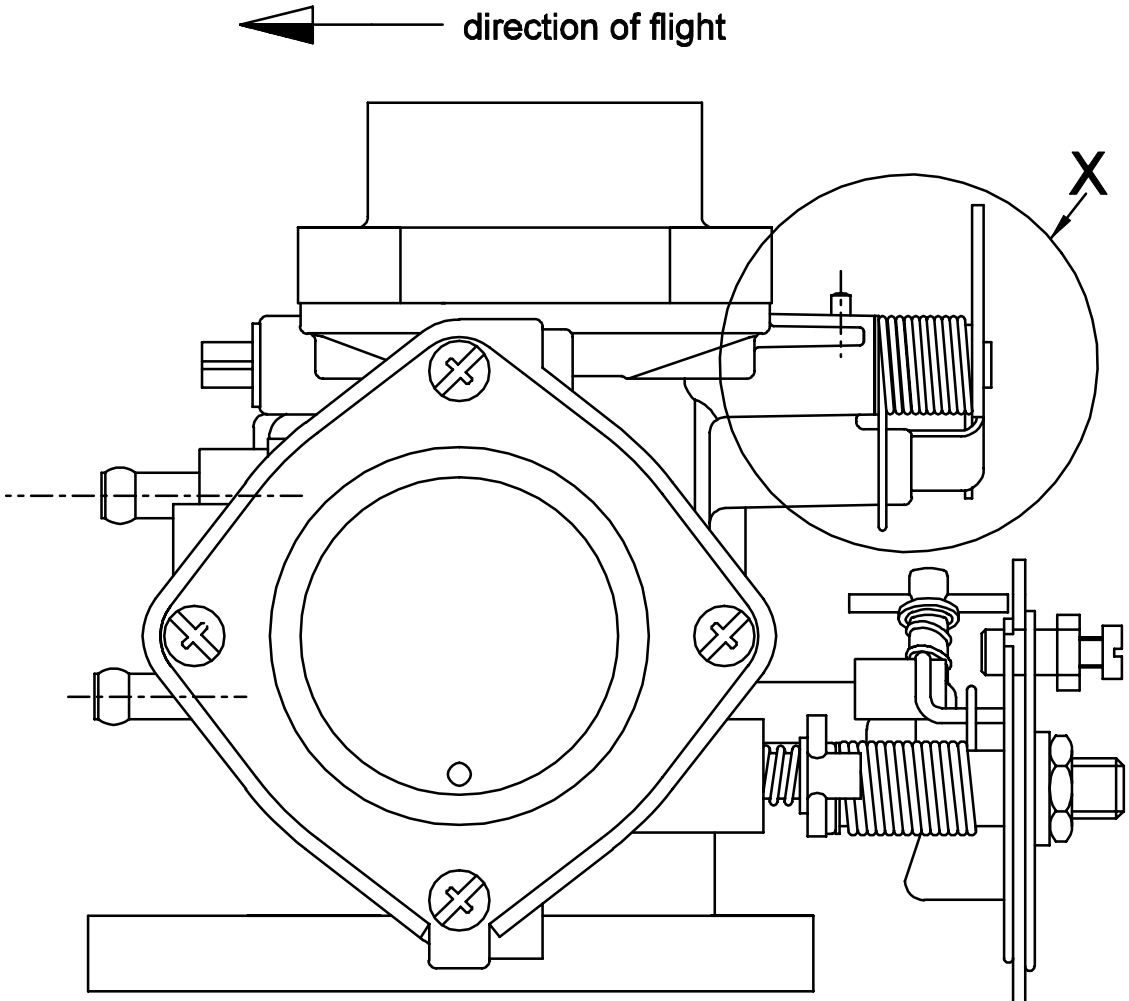
Installation see drawing 5M144, issue „c“ dated 21.06.02.

Exchanging the coupling is a difficult task and very time consuming without the use of jigs. We therefore recommend sending the carburettors to DG for modification.
Remove both carburettors according to instructions 1-7 and ship them well packed including the metal coupling to DG. DG will execute items 8-9. You have to execute items 10-16.

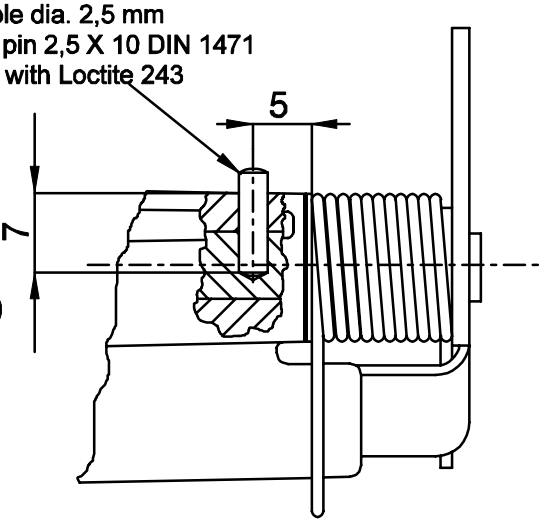
1. Extend the powerplant completely via the manual switch.
2. Switch off main switch.
3. Remove the left engine bay door.
4. Remove both air intake filters and seal the intakes with tape.
5. Disconnect the fuel hoses from the carburettors at the marked positions (see picture 1).
6. Disconnect the throttle cable from the rear carburettor.
7. Remove the nuts which fix the carburettors to the intake manifolds (flat end spanner 13mm). Lift off the carburettors. Loosen the set screw at the rear flange of the metal coupling and pull both carburettors apart.
8. Loosen the set screw at the front flange of the metal coupling and remove the coupling from the axle, don’t loose the bush 5M142/2 (see drawing 5M144)!. Saw off the front throttle axle according to drawing 5M144 detail Z to dimension 8mm. To prevent from bending the throttle axle it must be clamped in a vice and the carburettor must be supported.
9. Install the new elastomeric coupling according to drawing 5M144. It might be necessary to shorten bush 5M142/2 by 1mm to accomplish this. For final assembly secure the set screws with Loctite 243. Place the carburettor flanges on a flat surface and make sure that the butterfly valves are parallel. This requires removal of the tape from the intake openings and check in open and idle positions. Minor differences are tolerable and can be adjusted via the idle Tommy screws.
10. Use new gaskets between carburettor flanges and intake manifolds and reassemble the carburettors. When tightening the nuts be careful not to tilt the carburettors and to locate them concentric with the intake openings. Check the throttle butterfly axles for light movement when tightening the nuts.
11. Check the throttle butterfly axles for light movement over the full range (stops are at the rear carburettor) prior to connecting the throttle cable.
12. Connect the throttle cable to the rear carburettor and check if the travel is sufficient, otherwise adjust at the adjustment screw.
13. Reassemble the fuel hoses.
14. Remove the tape from the carburettor intakes and install the intake air filters.
15. Reassemble the left engine bay door.
16. Execute an engine test run (don’t run the engine without the wings assembled to your glider!). Adjust the carburettors according to MM section 1.13.7 if necessary.




picture 1: fuel hoses to be disconnected




drill-hole dia. 2,5 mm
notched taper pin 2,5 X 10 DIN 1471
secured with Loctite 243




detail X (scale = 1,5 : 1)

| Toleranzen nach Arbeitsanweisung BA 1 | | | | |
|---|---|---|---|---|
| Schweißen nach Arbeitsanweisung SA 1 | | | | |
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| | | | | |
| | | | | |
| Ausg. | Änderung | ÄM | Tag | Name |

| | Tag | Name |
|---|---|---|
| Gez. | 28.09.01 | Nico Polzin |
| Gepr. | | |
| Norm. | | |

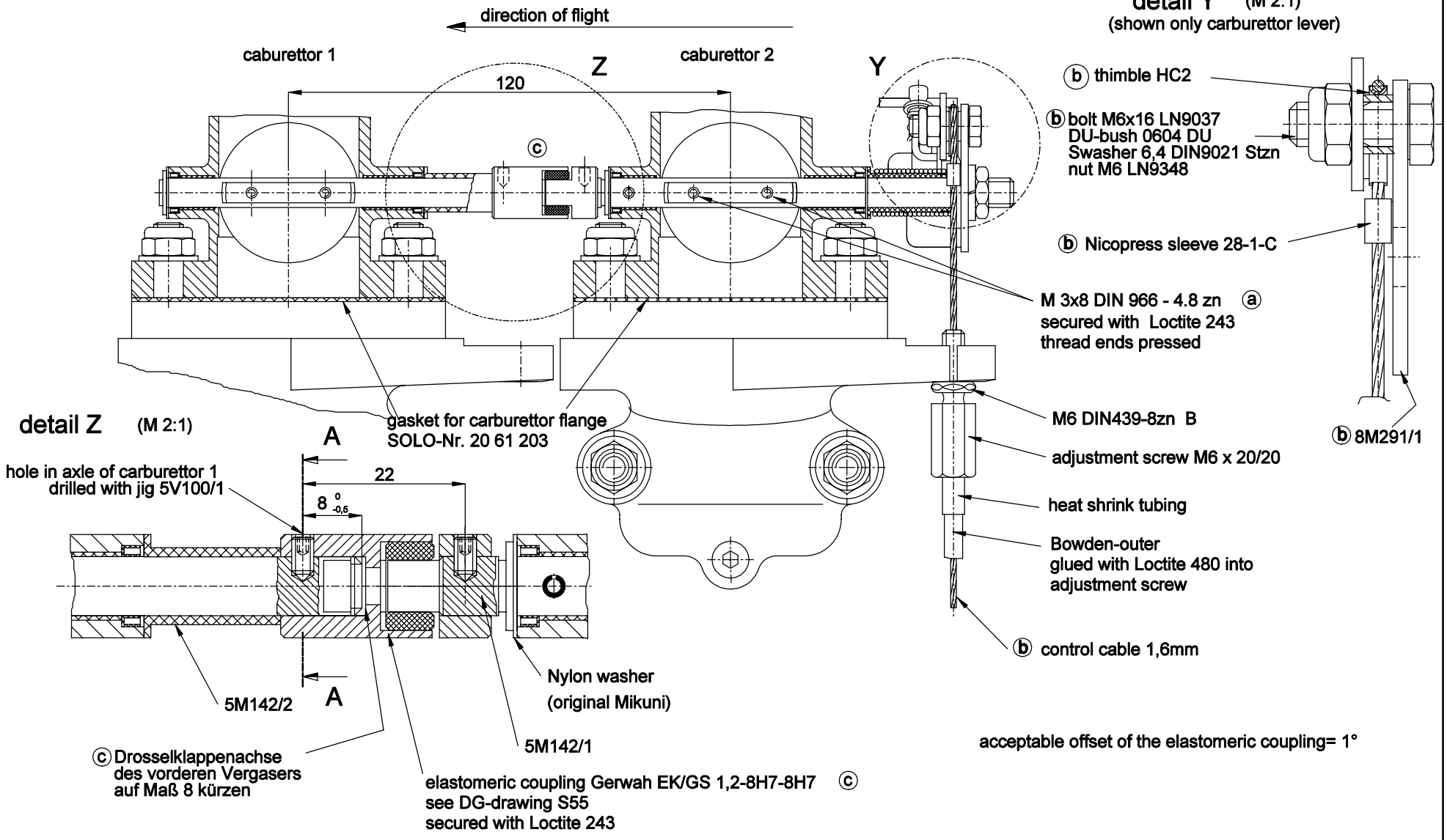
Maßstab
1 : 1
1,5 : 1

Maße ohne Toleranz-ang. nach:

# Carburettor BN 38 new version blocking the choke axis

DG Flugzeugbau GmbH
76646 Bruchsal
Otto-Lilienthal-Weg 2

8M303




| Toleranzen nach Arbeitsanweisung BA 1 | | | | |
|---|---|---|---|---|
| Schweißen nach Arbeitsanweisung SA 1 | | | | |
| c | Neue Vergaser-kupplung S55 | B16 | 21.06.02 | Lehner |
| b | Neue Vergaseran-lenkung 8M291/1 | B12 | 23.11.00 | Lehner |
| a | DIN7991-8.8 -> DIN966-4.8 | B3 | 25.07.00 | Lehner |
| Ausg. | Änderung | ÄM | Tag | Name |

| | Tag | Name |
|---|---|---|
| Gez. | 19.01.99 | S. Lehner |
| Gepr. | | |
| Norm. | | |

from ser. no. B3 on

Maßstab 1:1 2:1

Maße ohne Toleranz-ang. nach:

# Carburettor coupling assembly

(Mikuni Vergaser BN38 new version)

DG Flugzeugbau GmbH
76646 Bruchsal 4
Im Schollengarten 20

5M144