0 General

0.1 Manual amendments

No.	Page	Description	Date
1	0.5, 0.6, 4.14-4.16 diagrams 7, 11, 12	Manual revision TN 413/2	September 2003
2	0.6, diagrams 1 and 11	Manual revision TN 413/3	May 2004
3	0.4, 0.6, 1.9, diagram 7	Landing gear / over centre lock in extended position TN 413/7	Nov. 2004

0.2 List of effective pages

Section	page	issued	replaced/	replaced/	replaced/
0	0.0	March 2002			
	0.1	see manual amendments			
	0.2	"			
	0.3	"			
	0.4	"			
	0.5	"			
	0.6	"			
	0.7	March 2002			
	0.8	"			
	0.9	"			
	0.10	"			
	0.11	"			
	0.12	"			
1	1.1	March 2002			
	1.2	"			
	1.3	"			
	1.4	"			
	1.5	"			
	1.6	"			
	1.7	"			
	1.8	"			
	1.9	"	Nov. 2004		
	1.10.	"			
	1.11	"			
	1.12	"			
	1.13	"			
	1.14	"			
	1.15	"			
	1.16	"			
	1.17	"			
2	2.1	March 2002			
	2.2	"			
	2.3	"			
	2.4	"			
	2.5	"			
	2.6	"			
	2.7	"			

0.2 List of effective pages (continued)

diagram	issued	replaced/	replaced/	replaced/
1	Nov. 2001	May 2004		
2	Nov. 2001			
3	Nov. 2001			
4	Nov. 2001			
5	Nov. 2001			
6	Nov. 2001			
7	Nov. 2001	Sept. 2003	Nov. 2004	
8	Nov. 2001			
9	Nov. 2001			
10	Nov. 2001			
11	Nov. 2001	Sept. 2003	May 2004	
12	Nov. 2001	Sept. 2003		
5EP34	25.01.90			
5EP50	17.12.98			
5V18	14.10.94			
10FW2	5.10.99			

1.6 Undercarriage

1.6.1 Main wheel (Version without nose wheel)

1.6.1.1 Undercarriage control circuit

see diagram 12 and 7 (inside landing gear box)

In the retracted position the undercarriage is locked by an over centre device.
In the extended position the lock is by a locking notch at pushrod 10FW38 in the rear cockpit and additionally by over centre locking force generated by a rubber buffer if TN 413/7 has been executed:.
A gas strut reduces the retraction force and keeps the undercarriage in the retracted overcentre locking position.

1.6.1.2 Adjustment

a) In extended position (landing gear struts over centre) a max. free play of ca. 0.5 mm (0.02 in.) between the notch at pushrod 10FW38 and the locking plate 10FW35 (see detail X in diagram 12) is allowed when the landing gear handle is pushed forward with a force of approx. 200N (44 lbs.), measurement with main wheel not resting on the ground. Adjustment should be made at the rod end in pushrod 10FW20 at the connection to the actuating lever 10Fw15/1.
   Additionally with TN 413/7 executed:
   a) Screw out the rubber buffer just so far that it touched the GFRP block (L/G extended).
   b) Retract the L/G a little and screw out the rubber buffer for another 4-4.5mm (.16-.18 in.). Fix in position by counter rotating the nut.
   c) Sit in the front cockpit and extend the L/G. You must feel an over centre locking force.
   d)Retract the L/G, you must feel a strong locking force. If necessary increase the locking force by unscrewing the rubber buffer or decrease the locking force by screwing in the buffer.
b) Overcentre lock in retracted position:
   Adjustment of the overcentre locking force inside the landing gear box is at the rod ends in the two pushrods 10FW14/3 at their connections to shaft 10FW13/1. The overcentre travel may be adjusted by changing the thickness of the stop-blocks located at the roof of the landing gear box.
   Warning: If you have adjusted the overcentre locking force don't fail to readjust the locking in extended position see a).

1.6.1.3 Free play

Free play between bellcrank 10FW15/1 and shaft 10FW13/1 is not allowed.

If there is any free play tighten the two securing bolts M 6x35 at the bellcrank and the two securing bolts M6x35 inside the landing gear box at the shaft with a 10 mm open-end wrench. If there is still some free play, the bolts should be removed and the holes drilled out and reamed to diameter 8 H7. M 8 x 40 LN 9037 bolts should then be installed. The bolts for installation inside the landing gear box must be shortened to 36mm.