

Flight manual DG-1000T

0 Revisions

0.1 Record of revisions

Any revision of the present manual, except actual weighing data, must be recorded in the following table and in case of approved sections endorsed by the responsible airworthiness authority.

The new or amended text in the revised page will be indicated by a black vertical line in the right hand margin, and the Revision No. and the date will be shown on the bottom left hand of the page.

Rev. No.	Affected Pages/section	Description	Issue Date	EASA Approval Date	Inserted Date Signature
1	0.5, 7.14, 7.15	TN1000/09	October 2006	12.12.2006	
2	0.3-0.5, 1.5, 1.6, 2.5, 2.11, 2.12, 2.14, 2.15, 3.3, 4.13, 4.16-4.18, 4.21, 4.24, 4.25, 5.3, 5.5-5.8, 6.6, 6.8	TN1000/10 Manual revision	January 2007	March 27. 2007	
3	0.3 – 0.5, 2.12, 4.6, 4.12, 4.13, 7.14 – 7.17	TN1000/11 Manual revision	October 2007	5. Dec. 2007	
4	0.1, 0.4, 0.5, 4.9, 4.17, 7.5	landing gear positive locking device TN1000/13	February 2008	28. April 2008	
5	0.5, 7.9	TN1000/15 Throttle handle in rear cockpit, Option	March 2008	17. April. 2008	

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0.2 List of effective pages (cont.)

Section	page	issued	replaced	replaced	replaced	replaced
4	App.	4.1	July 2005			
	"	4.2	"			
	"	4.3	"			
	"	4.4	"			
	"	4.5	"			
	"	4.6	"	Oct. 07		
	"	4.7	"			
	"	4.8	"			
	"	4.9	"	Febr. 08		
	"	4.10	"			
	"	4.11	"			
	"	4.12	"	Oct. 0707		
	"	4.13	"	Jan. 07	Oct. 07	
	"	4.14	"			
	"	4.15	"			
	"	4.16	"	Jan. 07		
	"	4.17	"	Jan. 07	Febr. 08	
	"	4.18	"	Jan. 07		
	"	4.19	"			
	"	4.20	"			
	"	4.21	"	Jan. 07		
	"	4.22	"			
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	"	4.24	"	Jan. 07		
	"	4.25	"	Jan. 07		
	"	4.26	"			
	"	4.27	"			
	"	4.28	"			
	"	4.29	"			
5	"	5.1	July 2005			
	"	5.2	"			
	"	5.3	"	Jan. 07		
	"	5.4	"			
	App.	5.5	"	Jan. 07		
		5.6	"	Jan. 07		
		5.7	"	Jan. 07		
		5.8	"	Jan. 07		
		5.9	"			

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0.2 List of effective pages (cont.)

Section	Page	issued	replaced	replaced	replaced	replaced
6	6.1	July 2005				
	6.2	"				
	6.3	"				
	6.4	"				
	6.5	"				
	6.6	"	Jan. 07			
	6.7	"				
	6.8	"	Jan. 07			
	6.9	"				
	6.10	"				
	6.11	"				
7	7.1	July 2005				
	7.2	"				
	7.3	"				
	7.4	"				
	7.5	"	Febr. 08			
	7.6	"				
	7.7	"				
	7.8	"				
	7.9	"	March 08			
	7.10	"				
	7.11	"				
	7.12	"				
	7.13	"				
	7.14	"	Oct. 06	Oct. 07		
	7.15	"	Oct. 06	Oct. 07		
	7.16	"	Oct. 07			
	7.17	"	Oct. 07			
	7.18	"				
7.19	"					
7.20	"					
7.21	"					
7.22	"					
7.23	"					
7.24	"					

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3. C.G. Tow hook:-
 - a) check the ring muzzle of the C.G. hook for wear and function;
 - b) check for cleanliness and corrosion;
4. Main landing gear and nose wheel (if fitted):-
 - a) check the struts, the gear box, the gear doors and the tyre for wear; dirt in the struts can hinder the landing gear from locking over centre the next time!;
With TN1000/13 executed, standard from ser. no. 10-133 on:
 Check all parts of the landing gear positive locking device (notch and latch at the landing gear struts) for dirt. Check the Bowden cable for damage.
 - b) check the tyre pressure;
 main wheel: 2.5 bar - 36 psi
 nose wheel: 2.5 bar - 36 psi
 - c) check wheel brake and hose for wear and function;
5. Left wing:-
 - a) check locking of the outboard wing;
 - b) check the aileron for excessive free play;
 - c) check airbrake- and box and control rod for wear and free play. It must be possible to retract the airbrake, even if it is pressed backwards in direction of flight. If there is any water in the airbrake box this has to be removed;
 - d) check the locking of the rear wing attachment pin.
6. Powerplant and brake fluid level:-
 - a) all screwed connections and their securing
 - b) function of throttle, and propeller brake
 - c) ignition system incl. wires and the spark plug connectors for tight fit
 - d) Check toothed belt for wear and correct tension, sudden loss of tension indicates damage of the engine assembly
 - e) engine retaining cable and its connections in the engine compartment and at the engine
 - f) fuel lines, electrical wires, bowden cables and structural parts for wear and kinks.
 - g) exhaust muffler, propeller mount, cooling air guides, mechanical fuel pump and accessories for tight fit and any cracking.
 - h) apply strong pressure to the propellermount in forward, backward and sideward directions to check if the bolted connection between the engine block and the propeller mount or any thing else is loose or damaged. Check the rubber engine mounts also.
 - i) visual check of the propeller
 - j) turn the propeller 1 revolution by hand and listen for abnormal sounds which may indicate engine damage
 - l) drain condensed water from the fuel tank. The drainer is located in the main wheel box on the rear wall on the right hand side.

4.5.5 Approach and landing

Note: Always land in the gliding configuration, engine retracted, except in an emergency.

4.5.5.1 Normal landing

It is recommended to dump the waterballast before landing even on airfields. Dump the ballast before an outlanding in any case.

Abeam the landing point extend the landing gear. In calm weather approach with approx. 100 km/h (54 kts.) (ballast dumped!). With strong wind and / or waterballast fly faster! The very effective Schempp-Hirth dive brakes make a short landing possible.

Slipping may be used as additional landing aid.

Caution: While side-slipping the rudder is held in its deflected position by the airflow. So it is recommended to practice slipping at a higher altitude.

The slip can be introduced at the recommended approach speed see above. To recover from the slip neutralize the aileron control first, this will reduce the force which sucks the rudder in it's displaced position. During the slip the airspeed indicator shows airspeed values which are too low, so the slip must be executed with regard to the position of the horizon. No influence on the slipping characteristics when slipping with partially filled waterballast is noticeable.

Strong crosswind offers no problem.

Do not approach too slowly with fully extended airbrakes otherwise the aircraft may drop during flare out. When flaring out keep the airbrake setting you were using, opening them further may drop the motorglider!

You can land the DG-1000T on soft fields with the landing gear extended, as there is no tendency of nosing over. During touch down pull the stick completely to avoid the fuselage nose touching the ground.

After landing in a muddy field clean the landing gear and tow releases. Dirt in the front strut can keep the landing gear from locking over centre next time.

With TN1000/13 executed, standard from ser. no. 10-133 on:

Dirt in the landing gear positive locking device (notch and latch at the landing gear struts).may keep the latch from engaging in the notch next time. Simply hosing with water is the best cleaning method (don't use a high pressure cleaner).

10) Undercarriage retraction - extension handle - black



back = retracted, front = extended,

The undercarriage is locked in the extended position by an overcentre locking arrangement and an additional safety catch. The handle is to be turned towards the cockpit wall, so that the locking catch will engage. In retracted position the landing gear is locked over centre.

With TN1000/13 executed, standard from ser. no. 10-133 on:

An additional landing gear positive locking device (notch and latch at the landing gear struts) secures the landing gear in the extended position. An additional catch in the front upper area of the landing gear box secures the landing gear in retracted position.

11) Airbrake handle - blue

The wheel brake is operated at the end of the airbrake handle travel.



Parking brake combined with an airbrake securing device (Piggott-hook): Pull the airbrake handle back to actuate the wheelbrake and rotate the handle to the cockpit wall. A detent will engage in one of 4 notches to hold the system in this position.

In case the airbrakes mistakenly haven't been locked, a detent engages in one of several notches to avoid inadvertent deployment of the airbrakes. To open and to close the airbrakes the operating handle must be rotated into the cockpit so far that the detent passes the notches.

12) Constantly open de-misting air vents

13) Main air vent

14) Main air vent operating knob

pushed to front = closed
pulled = open



15) Swivel air vents

16) Canopy opening handle - white-red
towards the nose = closed
into cockpit = open





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35. DEI-NT in the rear cockpit (Option) with integrated ignition switch:
The ignition is only on and the powerplant will be extended, if the ignition switches in both cockpits are in the on position. As soon as 1 ignition switch will be switched off, the ignition is off and the powerplant will be retracted.

This means, that for operation from the front seat the ignition switch in the rear cockpit must be always in the "on" position. For operation from the rear seat, the ignition switch in the front cockpit must be "on".

Caution: For passenger flying etc. it is necessary to secure the ignition switch in the rear cockpit with the securing plate. The securing plate is equipped with a quarter turn lock which must be operated with a screw driver. For storage you may install the securing plate turned downwards 180 °.

36. Manual powerplant extension-retraction switch in the rear cockpit (Option), only together with DEI-NT in the rear cockpit. 

37. Starter button in the rear cockpit (Option), only together with DEI-NT in the rear cockpit. 

38. **Throttle handle in rear cockpit TN1000/15 (Option):**
The handle is located between item 36) and 37), similar to the front cockpit (not shown in drawing on page 7.3).
Note: No starter button can be installed in the handle.