



Checklist für Diamond DA40-Fixed Pitch

Edition #: **17** Edition date: **01.03.2015**

Please observe:

The file you are receiving hereby combines all three sections of the checklist: Normal Checklist, Emergency Checklist and Abnormal Checklist.

All pages of a new edition will have the same new "edition #" and "edition date", even if only one page was amended and all other pages still have the same, unchanged content.

Therefore the "List of Effective Pages" (LEP) is provided. It is here where you can see whether a particular page was amended. Pages which have been amended by a new edition will be marked yellow. For all other pages you will see which original "edition #" (and of course any higher "edition #") is still valid.

Note:

The system of assigning "Edition #" is as follows:

- if the revision affects all types, a new edition # (without a decimal figure) will be assigned to all of the checklists
- if the revision does not affect all types, the affected checklists will get subsequent "decimal figures" until a major revision affecting all checklists is issued.

Have a lot of nice flights and happy landings!

Peter Schmidleitner

Comments explaining Edition # 17 are on page 2 of this document

Checklist DA40-F G1000 LEP

Page	Following Edition	Date (or any higher) is valid
Section : Normal Checklist		
1	14	01.12.2006
2	15.1	01.03.2015
3	14	01.12.2006
4	14	01.12.2006
5	14	01.12.2006
6	14	01.12.2006
7	15.1	01.03.2015
8	14	01.12.2006

Section: Emergency and Abnormal Checklist		
1	14	01.12.2006
2	14	01.12.2006
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7	14	01.12.2006
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9	14	01.12.2006
10	14	01.12.2006
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Comments explaining Edition # 15

This is a major revision cycle and all checklists are now Edition # 15.

Normal Procedures:

Page 2:
Battery voltage check added.

Page 5:
Run up: recheck of C/Bs and voltage, throttle retard added;
items 13-16 marked as "When cleared for Line Up"

Emergency Procedures:

Page 3:
DOOR OPEN procedure revised

Comments explaining Edition # 17

Preflight Procedures:

Page 2:
Parking brake, chocks, towbar added

Normal Procedures:

Page 7:
Parking Check, item 3:
Text of ELT check revised

NORMAL CHECKLIST



This checklist is compiled according the guidelines of GAMA Specification No.1, SECTION 3, para 3.5, SECTION 3A, para 3A.5 and SECTION 4, para 4.5. The "Amplified Normal Procedures", „Amplified Emergency Procedures" and „Amplified Abnormal Procedures" according GAMA Specification No. 1 are in the DA40 Airplane Flight Manual Chapters 4A, 3 and 4B.

This checklist is a Recommended Operator Checklist and for reference only. It is not a substitute for and does not supersede the current approved Airplane Flight Manual or any of its supplements or parts thereof, or any training or procedures required by any regulatory or advisory bodies.

This checklist may not contain all procedures shown in the Airplane Flight Manual. For a comprehensive listing of all procedures consult the Airplane Flight Manual.

Use of the checklist is at the user's sole risk and discretion.

Any possible liability of Diamond Aircraft for any damages, injury or death resulting from its use is excluded.

All such terms and conditions shall be deemed to be explicitly accepted in full by using the checklist. If you do not understand, or if you disagree with, any of the above terms and conditions and in any jurisdiction that does not give effect to all provisions of these terms and conditions any use of the checklist is not permitted.

Use of the electronic checklist (if available):

Before using the electronic checklist on the G1000 the following sections have to be completed using this paper checklist:

- Preflight interior + exterior
- Preflight exterior
- Check before engine start items 1 to 18 (may be completed by heart).

This checklist also serves as a back up for the electronic checklist in case the G1000 MFD is not available.

PREFLIGHT INTERIOR + EXTERIOR.

- 1 Check Aircraft papers
- 2 Remove pitot cover
- 3 Check interior for foreign objects
- 4 Check flight controls free
- 5 Check circuit breakers
- 6 Ignition OFF, key removed
- 7 Mixture IDLE CUT OFF
- 8 Essential bus OFF
- 9 Avionic Master + electrics OFF
- 10 Electric Master ON
Check battery voltage
- 11 Electric fuel pump ON + OFF
- 12 Check fuel quantity
- 13 Parking brake SET
- 14 External lights ON
- 15 Check external lights
- 16 External lights OFF
- 17 Electric Master OFF

PREFLIGHT EXTERIOR

Left main gear

- Wheel fairing
- Tire condition, pressure (2,5 bar), position mark
- Brake, hydraulic line

Left wing

- Wing leading edge, top- and bottom surface, stall strips
- Drain fuel sump
- Stall warning
- Fuel vent
- Fuel filler cap
- Pitot, static probe (cover removed)
- Landing/Taxi light
- Wing tip, position light
- Static dischargers
- Aileron (freedom of movement, hinges, control linkage, security)
- Wing flap

Left fuselage

- Canopy left side
- Rear door
- Fuselage left side
- Antennas

Tail

- Elevator & rudder (freedom of movement, hinges)
- Trim - tab
- Tail skid + lower fin
- Static dischargers

Right fuselage

- Fuselage right side
- Rear window
- Canopy right side

Right wing

- Wing flap
- Aileron (freedom of movement, hinges, control linkage, security)
- Static dischargers
- Wing tip, position light
- Wing leading edge, top- and bottom surface, stall strips
- Fuel filler cap
- Fuel vent
- Drain fuel sump

Right main gear

- Wheel fairing
- Tire condition, pressure (2,5 bar), position mark
- Brake, hydraulic line

Nose section

- OAT sensor
- Propeller surface
- Spinner
- Cowling, Air inlets (3)

Nose gear

- Wheel fairing
- Tire condition, pressure (2,0 bar), position mark

Engine bay

- Engine oil level (min 5 qts)
- Drain fuel strainer

- Chocks removed
- Towbar removed

CHECK BEFORE ENGINE START

1	Preflight check	COMPLETED	1
2	Baggage and tow bar	SECURED	2
3	Parking brake.....	SET	3
4	Mixture	IDLE CUT OFF	4
5	Throttle	CLOSED	5
6	Carburetor heat.....	OFF (FWD)	6
7	Electric master	OFF	7
8	Avionic master	OFF	8
9	Essential bus.....	OFF	9
10	Alternate static.....	CLOSED	10
11	All electrics	OFF	11
12	Horizon emergency switch	OFF / GUARDED	12
13	ELT.....	ARMED	13
14	Circuit breakers.....	CHECKED IN	14
15	Flap selector	UP	15
16	Pitot heat	OFF	16
17	Electric fuel pump	OFF	17
18	Electric Master.....	ON (check avionic fan noise)	18
19	Rudder pedals	ADJUSTED	19
20	Passengers	INSTRUCTED	20
21	Seat belts	FASTENED	21
22	Rear door	CLOSED and LATCHED	22
23	Front canopy	POS 1 or 2	23
24	G1000.....	POWERED, ACKNOWLEDGED	24
25	Fuel quantity	CHECKED	25
26	Fuel selector	FULL TANK	26
27	MFD	ENGINE – SYSTEM	27
28	Fuel Quantity	RESET/SET if requ.	28
29	Total time in service.....	NOTED	29
30	MFD	ENGINE – DEFAULT	30
31	ACL (strobe)	ON	31
32	Propeller area.....	CLEAR	32

End of Checklist

ENGINE START PROCEDURE: next page**ENGINE START PROCEDURE**

MixtureFULL RICH
 Electric fuel pump..... ON
 Throttle..... ¼ OPEN
Cold engine: Prime..... 1 – 4 seconds
 Starter.....ENGAGE
 Oil pressure.....CHECK GREEN RANGE
 Throttle..... 1000 RPM
 Voltage, Electrical load CHECK INDICATION
 Annunciations / Eng.Instr.CHECK
 Electric fuel pump..... OFF

CHECK AFTER ENGINE START

1	Oil pressure	CHECKED	1
2	Fuel selector	SWITCH TANKS	2
3	Throttle	1500 RPM for 1 minute	3
4	Pitot heatON, annunciation + Amps checked		4
5	Pitot heat	OFF	5
6	Avionics master.....	ON	6

FMS SETUP

I nitalize profile (AUX 4, MAP, MFD FPL, PFD FPL)
F light plan
R adios (COM, NAV, ADF, DME, CDI, BRG ½)
P erformance (speed bugs)

7	FMS setup	COMPLETED	7
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AUTOPILOT TEST

DISCONN press, check electric trim not working
 AP ON, check overpowering servos
 DISCONN press, check AP off

8	Autopilot test	COMPLETED	8
9	Flood light	CHECKED, ON as required	9
10	Position lights.....	ON as required	10
11	Flaps.....	FULL TRAVEL, THEN T/O	11
12	Altimeters (3)	SET + COMPARED	12
13	Transponder	CODE / MODE CHECKED	13
14	Parking brake.....	RELEASED	14

End of Checklist

DURING TAXI

Check brakes
 Check flight instruments

BEFORE TAKE OFF CHECK

1	Parking brake.....	SET	1
2	Seat belts	FASTENED	2
3	Rear door	CLOSED + LATCHED	3
4	Front canopy	CLOSED + LATCHED	4
5	Door warning light	OFF	5
6	Engine instruments green range	CHECKED	6
7	Mixture	RICH or as required	7

RUN UP

Throttle..... 1800 RPM
 Magnetos(max 175/50) CHECKED
 Circuit breakers, voltage..... RECHECKED
 Carburetor heat CHECKED
 Throttle..... IDLE

8	Amperemeter.....	CHECKED	8
9	Electric elevator trim	CHECKED, T/O SET	9
10	Flaps.....	CHECKED T/O	10
11	Flight controls	CHECKED	11
12	Fuel selector	FULLEST TANK	12

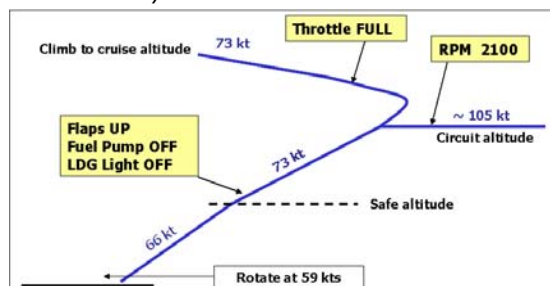
When cleared for Line Up:

13	Electric fuel pump	ON	13
14	Pitot heat	AS REQUIRED	14
15	Transponder	CODE / MODE CHECKED	15
16	Parking brake.....	RELEASED	16

End of Checklist

LINE UP PROCEDURE

Landing light..... ON
 Approach sector CLEAR
 Runway..... IDENTIFIED

**CLIMB TO CRUISE CHECK**

1	Flaps.....	CHECKED UP	1
2	Electric fuel pump	CHECKED OFF	2
3	Landing light	CHECKED OFF	3

End of Checklist

PERIODICALLY DURING CRUISE

Fuel **Radio** **Engine** **Direction** **Altitude**

Maximum fuel unbalance:

Standard tank: 10 USG, Long range tank: 8 USG

DESCENT / APPROACH CHECK

1	Landing data	RECEIVED	1
2	Altimeters (3)	SET	2
3	COM / NAV / FMS	SET	3
4	Seatbelts	FASTENED	4
5	Fuel selector	FULLER TANK	5
6	Mixture	AS REQUIRED	6
7	Carburetor heat.....	ON	7

End of Checklist

BEFORE LANDING PROCEDURE

Downwind, latest base leg:

Flaps T/O

Electric fuel pump..... ON

Landing light..... ON

On final:

Mixture RICH

Carburetor heat OFF

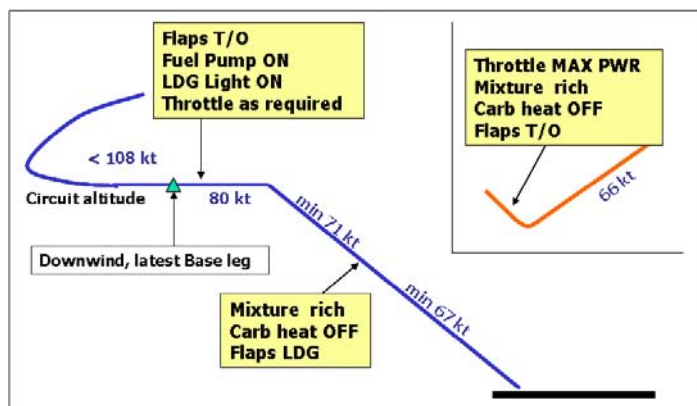
Flaps LDG

GO AROUND PROCEDURE

Power (Throttle, Mixture, Carburetor heat) MAX

Flaps T/O

Continue with take-off profile

**AFTER LANDING CHECK**

- | | | | |
|---|--------------------------|-------------|---|
| 1 | Flaps..... | UP | 1 |
| 2 | Pitot heat | OFF | 2 |
| 3 | Electric fuel pump | OFF | 3 |
| 4 | Carburetor heat | OFF | 4 |
| 5 | Landing/Taxi light | AS REQUIRED | 5 |

End of Checklist

PARKING CHECK

- | | | | |
|----|--|---------------------|----|
| 1 | Parking brake..... | SET | 1 |
| 2 | Engine instruments | CHECKED | 2 |
| 3 | Engine / System page TTL TIME IN SVC NOTED | | 3 |
| 4 | ELT | CHECK not activated | 4 |
| 5 | Avionic master | OFF | 5 |
| 6 | Electrical consumers except ACL (strobe) ... | OFF | 6 |
| 7 | Throttle | 1000 RPM | 7 |
| 8 | Ignition | GROUNDING CHECK | 8 |
| 9 | Mixture | IDLE CUT OFF | 9 |
| 10 | Ignition | OFF | 10 |
| 11 | ACL (strobe) | OFF | 11 |
| 12 | Electric Master..... | OFF | 12 |
| 13 | Interior light | CHECKED OFF | 13 |
| 14 | Start key | REMOVED | 14 |

End of Checklist

OPERATING SPEEDS KIAS			
	850 kg	1000 kg	1150 kg
Best gliding angle (Flaps UP)	60	68	73
Best angle of climb (V_X)			
Best rate of climb (V_Y)	54	60	66
Cruising climb speed	60	68	73
Rotating speed	49	55	59
Max. flap speed (V_{FE}) T/O	108		
Max. flap speed (V_{FE}) LDG	91		
Landing speed Flaps UP	60	68	73
Landing speed Flaps LDG	58	63	71
Stalling speed (V_{S0}) LDG	42	<-980kg->	49
Stalling speed (V_S) T/O	44	<-980kg->	51
Stalling speed (V_S) clean	47	<-980kg->	52
Max. cruising speed (V_{NO})	129		
Never exceed speed (V_{NE})	178		
Manoeuvring speed (V_A)	94	<-980kg->	108
Max. turbulence speed	129		

Weights

Max. TKOF weight	1150 kg	
Empty weight	795 kg	
Max. LDG weight	1150 kg	
Full tanks (standard)	107 kg	
Full tanks (long range)	132 kg	
Max. baggage in front	45 kg	45 kg
Max. baggage in rear	18 kg	

All data for ISA + 15

Press. Alt.	FOT *)		85%		75%		65%	
	RPM	TAS	RPM	TAS	RPM	TAS	RPM	TAS
	FF Pwr	FF Econ	FF Pwr	FF Econ	FF Pwr	FF Econ	FF Pwr	FF Econ
MSL	2700	140	2750	130	2430	120	2280	109
	14.5	13.2	13.1	11.8	11.9	10.5	10.7	9.2
2000	2700	140	2650	136	2510	126	2360	115
	14.2	12.8	13.2	11.9	12.0	10.6	10.7	9.3
4000	2700	140	2700	140	2580	131	2440	121
	13.7	12.2	13.5	12.1	12.1	10.7	10.7	9.4
6000	2700	139	-	-	2660	136	2510	125
	13.0	11.6	-	-	12.2	10.8	10.7	9.5
8000	2690	138	-	-	2690	138	2570	129
	12.2	10.7	-	-	12.3	10.8	10.8	9.7
10000	2690	137	-	-	-	-	2610	131
	11.1	9.8	-	-	-	-	10.8	9.7

*) Full Open Throttle unless limited by max. RPM

EMERGENCY + ABNORMAL CHECKLIST

For conditions to use this
Emergency + Abnormal Checklist
see page 1 of the Normal Checklist.

All such conditions are fully
applicable also for this checklist.



G1000 WARNINGS

OIL PRES LO	Pg. 2	Oil pressure low (red range)
ALTERNATOR	Pg. 3	Alternator fail
STARTER ENGD	Pg. 3	Starter not disengaging
DOOR OPEN	Pg. 3	Unlocked doors

For other parameters "out of green range" see Abnormal Checklist

Abnormal Checklist starts at page 9

Emergency landing page 2

Engine

Rough engine and/or power loss page 4

Loss of RPM page 4

Windmill engine start page 5

Powered engine start..... page 5

Electric System

Total electric fail page 4

Smoke and Fire

Engine fire in flight page 6

Engine / carburetor fire on ground page 6

Electric fire / smoke in flight page 7

Electric fire / smoke on ground page 7

Other Emergencies

Suspicion of carbon monoxide page 8

Unintentional flight into icing page 8

Landing with defective main gear tire..... page 8

Landing with defective brakes page 8

EMERGENCY LANDING

- | | | | |
|---|-------------------------|---------------|---|
| 1 | Airspeed..... | 73/68/60 KIAS | 1 |
| 2 | ATC..... | INFORM | 2 |
| 3 | Fuel tank selector..... | OFF | 3 |
| | On final: | | |
| 4 | Flaps | LDG | 4 |
| 5 | Ignition..... | OFF | 5 |
| 6 | Master switch..... | OFF | 6 |

OIL PRES LO

OIL (OP) PRESSURE LOW

- | | | | |
|---|---|-------|---|
| 1 | Oil pressure (OP) | CHECK | 1 |
| 2 | Oil temperature (OT) | CHECK | 2 |
| 3 | Cylinder head temperature (CHT)..... | CHECK | 3 |

- **OP** indication below green
and
OT normal

- | | | | |
|---|--------------------------------|---------|---|
| 4 | OT and CHT | MONITOR | 4 |
|---|--------------------------------|---------|---|

- **OP** indication below green
and
OT or **CHT** rising

- | | | | |
|---|---|---------------|---|
| 5 | Engine power..... | REDUCE TO MIN | 5 |
| | Land ASAP,
be prepared for Emergency Landing | | |

- **OP** near zero, vibration, loss of oil,
smoke

- | | | | |
|---|-------------------------|-----------|---|
| 6 | Mechanical failure..... | SUSPECT | 6 |
| 7 | Engine | SHUT DOWN | 7 |
| | Emergency landing | | |

ALTERNATOR**ALTERNATOR FAIL**

- 1 Circuit breakers..... CHECK 1
- 2 Master switch (ALT) OFF, then ON 2
If alternator does not reset:
- 3 Essential bus ON 3
- 4 Unnecessary equipment OFF 4
Land within 30 minutes
If PFD attitude information lost:
- 5 Horizon emergency switch ON 5

STARTER ENGD**STARTER NOT DISENGAGING**

- 1 Throttle..... IDLE 1
- 2 Mixture IDLE CUT OFF 2
- 3 Ignition OFF 3
- 4 Master switch..... OFF 4

DOOR OPEN**UNLOCKED DOORS**

- 1 Airspeed..... REDUCE 1
- 2 Canopy and rear doorCHECK visually 2
If unlocked:
Airspeed below 140 KIAS, land ASAP
Do not try to lock the rear door in flight

ROUGH ENGINE AND/OR POWER LOSS

- 1 Airspeed.....73/68/60 KIAS 1
- 2 Electrical fuel pump ON 2
- 3 Fuel tank selector CHECK 3
- 4 Engine instruments..... CHECK 4
- 5 Throttle..... CHECK 5
- 6 Mixture SET 6
- 7 Carburetor heat ON 7
- 8 Ignition switch BOTH 8
- 9 Throttle / Mixture TRY VARIOUS SETTINGS 9
If no success and insufficient power:
Land ASAP

LOSS OF RPM

- 1 Electrical fuel pump ON 1
- 2 Fuel tank selector CHECK 2
- 3 Friction adjuster CHECK 3

TOTAL ELECTRIC FAIL

- 1 Circuit breakers..... CHECK, PULL, RESET 1
- 2 Essential bus ON 2
If no success:
- 3 Horizon emergency switch ON 3
- 4 Flood light, if necessary ON 4
- 5 Power SET 5
according power lever position and/or engine noise
- 6 FlapsVERIFY POSITION 6
Land ASAP

WINDMILL ENGINE START

- | | | | |
|----------------|----------------------------|----------------|---|
| 1 | Airspeed..... | 73 - 130 KIAS | 1 |
| 2 | Fuel tank selector | FULLEST TANK | 2 |
| 3 | Ignition | BOTH | 3 |
| 4 | Mixture | CHECKED | 4 |
| 5 | Electrical fuel pump | ON | 5 |
| 6 | Carburetor heat | ON | 6 |
| If no success: | | | |
| 7 | Mixture | LEAN | 7 |
| 8 | Mixture | SLOWLY TO RICH | 8 |

POWERED ENGINE START

- | | | | |
|---|----------------------------|--------------|---|
| 1 | Airspeed..... | 70 - 80 KIAS | 1 |
| 2 | Electrical equipment | OFF | 2 |
| 3 | Avionic master | OFF | 3 |
| 4 | Master switch (BAT)..... | ON | 4 |
| 5 | Mixture | CHECKED | 5 |
| 6 | Fuel tank selector | CHECKED | 6 |
| 7 | Electric fuel pump..... | ON | 7 |
| 8 | Carburetor heat | ON | 8 |
| 9 | Ignition | START | 9 |

ENGINE FIRE IN FLIGHT / AFTER TAKE OFF

- | | | | |
|-----------------------|----------------------------|----------------------|----|
| 1 | Cabin heat..... | OFF | 1 |
| 2 | Emergency landing | PREPARE | 2 |
| 3 | Airspeed..... | 73/68/60 KIAS | 3 |
| 4 | ATC | INFORM | 4 |
| 5 | Canopy | UNLATCH as necessary | 5 |
| When landing assured: | | | |
| 6 | Fuel tank selector | OFF | 6 |
| 7 | Throttle..... | MAX PWR if possible | 7 |
| 8 | Electrical fuel pump | OFF | 8 |
| 9 | Master switch..... | ON | 9 |
| 10 | Emergency window | OPEN if required | 10 |
| On final: | | | |
| 11 | Mixture | IDLE CUT OFF | 11 |
| 12 | Flaps | LDG | 12 |
| 13 | Ignition | OFF | 13 |
| 14 | Master switch..... | OFF | 14 |

**ENGINE/CARBURETOR FIRE
ON GROUND WHEN STARTING**

- | | | | |
|--------------------------|--------------------------|------------------------|----|
| 1 | Starter | CRANK | 1 |
| If engine fires: | | | |
| 2 | Throttle..... | 1800 RPM for 4 minutes | 2 |
| 3 | Cabin heat..... | OFF | 3 |
| If engine does not fire: | | | |
| 4 | Mixture | IDLE CUT OFF | 4 |
| 5 | Throttle..... | MAX POWER | 5 |
| 6 | Electric fuel pump..... | OFF | 6 |
| 7 | Fuel tank selector | OFF | 7 |
| 8 | Master switch..... | OFF | 8 |
| When engine stopped: | | | |
| 9 | Ignition | OFF | 9 |
| 10 | Canopy | OPEN | 10 |

Evacuate

ELECTRIC FIRE / SMOKE IN FLIGHT

- | | | | |
|---|--------------------------------|----------------------|---|
| 1 | Horizon emergency switch | ON | 1 |
| 2 | Canopy | UNLATCH as necessary | 2 |
| 3 | Master switch (ALT/BAT) | OFF | 3 |
| 4 | Cabin heat..... | OFF | 4 |
| 5 | Emergency window..... | OPEN as necessary | 5 |

Land ASAP

If electronics/avionics required: apply isolation procedure as follows

- | | | | |
|---|--------------------------|----|---|
| 6 | Master switch (BAT)..... | ON | 6 |
| 7 | Essential bus | ON | 7 |

If smoke decreases: Land ASAP

If smoke persists:

- | | | | |
|----|--|------|----|
| 8 | Master switch (ALT) | ON | 8 |
| 9 | Essential bus | OFF | 9 |
| 10 | BATT and ESS TIE circuit breakers..... | PULL | 10 |

Land ASAP

ELECTRIC FIRE / SMOKE ON GROUND

- | | | | |
|---|-------------------------------|--------------|---|
| 1 | Master switch (ALT/BAT) | OFF | 1 |
| 2 | Throttle..... | IDLE | 2 |
| 3 | Mixture | IDLE CUT OFF | 3 |

When engine stopped:

- | | | | |
|---|----------------|------|---|
| 4 | Ignition | OFF | 4 |
| 5 | Canopy | OPEN | 5 |

Evacuate

SUSPICION OF CARBON MONOXIDE

- | | | | |
|---|-------------------------|---------|---|
| 1 | Cabin heat..... | OFF | 1 |
| 2 | Ventilation..... | OPEN | 2 |
| 3 | Emergency windows | OPEN | 3 |
| 4 | Forward canopy | UNLATCH | 4 |

UNINTENTIONAL FLIGHT INTO ICING

- | | | | |
|---|-----------------------------|------------------|---|
| 1 | Pitot heat | ON | 1 |
| 2 | Cabin heat..... | ON | 2 |
| 3 | Cabin air distribution..... | UP | 3 |
| 4 | RPM..... | INCREASE | 4 |
| 5 | Carburetor heat | ON | 5 |
| 6 | Emergency windows | OPEN as required | 6 |

Leave icing area, inform ATC

When pitot heat fails:

- | | | | |
|---|------------------------------|--------|---|
| 7 | Alternate static valve | OPEN | 7 |
| 8 | Emergency windows | CLOSED | 8 |

LANDING WITH DEFECTIVE MAIN GEAR TIRE

- | | | | |
|---|-----------|----------|---|
| 1 | ATC | INFORMED | 1 |
|---|-----------|----------|---|

For landing:

- Land on RWY side with "good" tire
- Keep wing on "good" side low
- Support directional control with brake

LANDING WITH DEFECTIVE BRAKES

After touchdown (if necessary):

- | | | | |
|---|--------------------------|--------------|---|
| 1 | Fuel tank selector | OFF | 1 |
| 2 | Mixture | IDLE CUT OFF | 2 |
| 3 | Ignition | OFF | 3 |
| 4 | Master switch..... | OFF | 4 |

G1000 CAUTION LIGHTS

PITOT OFF	No procedure	Pitot heating system OFF
PITOT FAIL	Pg. 9	Pitot heating system failed
L FUEL LOW	No procedure	Left tank fuel qty low (< 3 USG)
R FUEL LOW	No procedure	Right tank fuel qty low (< 3 USG)
LOW VOLTS	Pg 9	Bus voltage too low

Engine instrument indications outside of green range

OIL pressure low / highpage 10
 OIL temperature highpage 10
 CYLINDER Head Temp high / lowpage 11
 EXHAUST GAS Temp low.....page 11
 FUEL FLOW highpage 11
 FUEL PRESSURE low.....page 11
 VOLT high (overvoltage)page 11

PITOT FAIL**PITOT HEATING SYSTEM FAILED**

- check pitot heat ON
 - ❖ if in icing conditions
 - ⇒ expect failure of the pitot-static-system
 - ⇒ alternate static valve: OPEN
 - ⇒ leave area with icing conditions

LOW VOLTS**BUS VOLTAGE TOO LOW**

Remark: possible reasons are
 - malfunction of electrical supply
 - RPM too low

- ❖ On ground
 - ⇒ Increase RPM to 1200
 - ⇒ Electrical equipment OFF
 - ⇒ Check Ammeter and voltmeter
 - ❖ If light still ON
 - ⇒ Terminate flight preparation
- ❖ In flight
 - ⇒ Switch off unnecessary electrical equipment
 - ⇒ Check Ammeter and voltmeter
 - ❖ If light still ON
 - ⇒ Apply "ALTERNATOR FAIL"-emergency procedure
(Emergency Checklist page 3)

OIL pressure low

- Check OIL PRES LO warning light
 - ❖ OIL PRES LO warning light ON or flashing
 - ⇒ Apply "OIL PRES LO"-emergency procedure
(Emergency Checklist page 2)
 - ❖ OIL PRES LO warning light OFF
 - ⇒ Check oil temperature and cylinder head temperature (CHT)
 - ❖ Oil temperature and CHT normal
 - ⇒ Monitor oil pressure warning light
(suspect faulty oil pressure indication)
 - ⇒ Monitor oil temperature and
cylinder head temperature
 - ❖ Oil temperature or CHT rising
 - ⇒ Reduce engine power to minimum
 - ⇒ Land ASAP
 - ⇒ Be prepared for engine failure and emergency landing
 - ❖ Oil pressure near zero, vibration, loss of oil, smoke
 - ⇒ Suspect mechanical failure in the engine
 - ⇒ Shut down engine immediately
 - ⇒ Perform emergency landing

Oil pressure high

- Check oil temperature
 - ❖ If oil temperature normal:
 - ⇒ suspect faulty oil pressure indication, continue flight

Oil temperature high

- Check oil pressure
 - ❖ If oil pressure low:
 - ⇒ Continue with OIL pressure LOW checklist
(Emergency Checklist page 2)
 - ❖ If oil pressure in green range:
 - ⇒ Check cylinder head temperature
 - ⇒ Check mixture setting, enrich if necessary
 - ⇒ Reduce power, increase airspeed
 - ⇒ Land ASAP

Cylinder head temperature (CHT) high

- Enrich mixture
- Check oil pressure
 - ❖ If oil pressure low:
 - ⇒ Continue with abnormal checklist "Oil pressure low" (page 10)
 - ❖ If oil pressure in green range:
 - ⇒ Check mixture and enrich if necessary
 - ⇒ Reduce power, increase airspeed

Cylinder head temperature (CHT) or EGT low

- A very low reading for a single cylinder may be the result of a loose sensor

FUEL FLOW high

- Check fuel pressure
 - ❖ If fuel pressure low suspect fuel leak:
 - ⇒ Check and monitor fuel quantity
 - ⇒ Check power setting
 - ⇒ Land ASAP

Consider reduced range and endurance due to possible loss of fuel

FUEL PRESSURE low

- Electric fuel pump ON
- Check fuel quantity
- Check fuel tank selector
- Check and adjust mixture if necessary
- Land ASAP

Be prepared for engine failure

OVER VOLTAGE

- Essential bus ON
- Master switch (ALT) OFF
- Master switch (BAT) ON
- Switch OFF unnecessary equipment
- Land ASAP