Checklist für Diamond DA40 TDI G1000

Edition #: 17.1  Edition date: 15.04.2017

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 Schmideitner

Comments explaining Edition # 17.1 are on page 2 of this document

Checklist DA40 TDI G1000

<table>
<thead>
<tr>
<th>Page</th>
<th>Following Edition (or any higher) is valid</th>
<th>Date</th>
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<td>14</td>
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Section: Normal Checklist

<table>
<thead>
<tr>
<th>Section: Emergency Checklist</th>
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<tbody>
<tr>
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<td>8</td>
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Section: Abnormal Checklist

| 9   | 14 | 01.12.2006 |
| 10  | 14 | 01.12.2006 |
| 11  | 14 | 01.12.2006 |
| 12  | 14 | 01.12.2006 |
Comments explaining Edition # 16.1

Emergency Procedures:

Page 4: “Emergency Landing”: Safety harnesses added
“Rough Engine and/or Power Loss” updated

Comments explaining Edition # 17

Preflight Procedures:

Page 2:
Parking brake, chocks, towbar added

Normal Procedures

Page 8:
Parking Check, item 3:
Text of ELT check revised

Comments explaining Edition # 17.1

Normal Procedures

Page 4: Engine Start Procedure: “Prop Area….CLEAR” placed on top
NORMAL CHECKLIST

Diamond DA40 TDI

This checklist is compiled according to 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 Flight Training and/or 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 20 (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.

15.04.2017  Diamond Flight Training  Page 1
Edition # 17.1  Does not replace the Airplane Flight Manual
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. Emergency Fuel Valve NORMAL
7. Engine Master OFF
8. ECU SWAP AUTO
9. Essential bus OFF
10. Avionic Master + electrics OFF
11. Electric Master ON
12. Check battery voltage
13. Check fuel quantity + temp
14. External lights ON
15. Pitot heat ON
16. Parking brake SET
17. Check stall warning
18. Check pitot heat
19. Check external lights
20. Pitot heat / ext. lights OFF
21. Electric Master OFF, key removed

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 (5)

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

Engine bay
Engine oil level (4,5 – 6,0 l)
Gearbox oil level
Drain fuel strainer

Chocks removed
Towbar removed
# CHECK BEFORE ENGINE START

<table>
<thead>
<tr>
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<th>Description</th>
<th>Status</th>
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<tr>
<td>1</td>
<td>Preflight check</td>
<td>COMPLETED</td>
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<tr>
<td>2</td>
<td>Baggage and tow bar</td>
<td>SECURED</td>
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<tr>
<td>3</td>
<td>Emergency fuel valve</td>
<td>NORMAL</td>
</tr>
<tr>
<td>4</td>
<td>Power lever</td>
<td>IDLE</td>
</tr>
<tr>
<td>5</td>
<td>Parking brake</td>
<td>SET</td>
</tr>
<tr>
<td>6</td>
<td>Alternate Air</td>
<td>CLOSED</td>
</tr>
<tr>
<td>7</td>
<td>Electric master</td>
<td>OFF</td>
</tr>
<tr>
<td>8</td>
<td>Avionic master</td>
<td>OFF</td>
</tr>
<tr>
<td>9</td>
<td>Essential bus</td>
<td>OFF</td>
</tr>
<tr>
<td>10</td>
<td>Alternate static</td>
<td>CLOSED</td>
</tr>
<tr>
<td>11</td>
<td>Engine master</td>
<td>OFF</td>
</tr>
<tr>
<td>12</td>
<td>ECU swap</td>
<td>AUTO</td>
</tr>
<tr>
<td>13</td>
<td>All light switches</td>
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</tr>
<tr>
<td>14</td>
<td>Emergency switch</td>
<td>OFF / GUARDED</td>
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<tr>
<td>15</td>
<td>ELT</td>
<td>ARMED</td>
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<td>16</td>
<td>Circuit breakers</td>
<td>CHECKED IN</td>
</tr>
<tr>
<td>17</td>
<td>Flap selector</td>
<td>UP</td>
</tr>
<tr>
<td>18</td>
<td>Pitot heat</td>
<td>OFF</td>
</tr>
<tr>
<td>19</td>
<td>Fuel transfer</td>
<td>OFF</td>
</tr>
<tr>
<td>20</td>
<td>Electric Master</td>
<td>ON</td>
</tr>
<tr>
<td>21</td>
<td>Rudder pedals</td>
<td>ADJUSTED</td>
</tr>
<tr>
<td>22</td>
<td>Passengers</td>
<td>INSTRUCTED</td>
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<tr>
<td>23</td>
<td>Seat belts</td>
<td>FASTENED</td>
</tr>
<tr>
<td>24</td>
<td>Rear door</td>
<td>CLOSED and LATCHED</td>
</tr>
<tr>
<td>25</td>
<td>Front canopy</td>
<td>POS 1 or 2</td>
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<tr>
<td>26</td>
<td>G1000</td>
<td>POWERED, ACKNOWLEDGED</td>
</tr>
<tr>
<td>27</td>
<td>MFD</td>
<td>EIS – FUEL</td>
</tr>
<tr>
<td>28</td>
<td>Fuel Quantity</td>
<td>CHECKED, RESET/SET if requ.</td>
</tr>
<tr>
<td>29</td>
<td>Fuel temperature</td>
<td>CHECKED</td>
</tr>
<tr>
<td>30</td>
<td>Total time in service</td>
<td>NOTED</td>
</tr>
<tr>
<td>31</td>
<td>MFD</td>
<td>EIS – SYSTEM</td>
</tr>
<tr>
<td>32</td>
<td>Power lever</td>
<td>IDLE</td>
</tr>
<tr>
<td>33</td>
<td>ACL (strobe)</td>
<td>ON</td>
</tr>
</tbody>
</table>

End of Checklist
**ENGINE START PROCEDURE**

- Propeller area ........................................ CLEAR
- Engine Master ............................................ ON
- Annunciations / Eng.Instr. .......................... CHECKED
- Glow indication ......................................... OFF
- Start key ................................................. START
- Oil pressure ..................... OUTSIDE RED within 3 sec
- Voltage, Electrical load .......... CHECK INDICATION
- Annunciations / Eng.Instr. .......................... CHECK

**CHECK AFTER ENGINE START**

1. Oil pressure ......................................... CHECKED
2. RPM 890 +/- 20........................................ CHECKED
3. Warm up time ........................................ START
   - Warm up:
     - Idle ................................................. 2 minutes
     - 1400RPM ........................... until Oil > 50°C and Coolant > 60°C
4. Pitot heat .......ON, annunciation + Amps checked
5. Pitot heat .............................................. OFF
6. Avionics master ........................................ ON

**FMS SETUP**

- I nitialize profile (AUX 4, MAP, MFD FPL, PFD FPL)
- F light plan
- R adios (COM, NAV, ADF, DME, CDI, BRG 1/2)
- P erformance (speed bugs)

7. FMS setup ........................................ COMPLETED

**AUTOPILOT TEST**

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

8. Autopilot test ...................................... COMPLETED
9. Flood light ....................... CHECKED, ON as required
10. Position lights ......................... ON as required
11. Flaps ......................... full travel CHECKED, then T/O
12. Altimeters (3) ................................. SET
13. Standby horizon ......................... CHECKED
14. Transponder ....................... CODE/MODE CHECKED
15. Parking brake ......................... RELEASED

End of Checklist; see next page for “During taxi” – items
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 ................................. CHECKED 6
7. Fuel Temperature (Diesel min +5°).................. CHECKED 7
8. Circuit breakers ................................. CHECKED 8
9. Electric elevator trim .................. CHECKED, T/O SET 9
10. Flaps ....................................................... CHECKED T/O 10
11. Flight controls ............................................ CHECKED 11
12. Power lever ........................................... IDLE 12
13. ECU test ..................................................... PERFORM 13

ECU TEST

ECU test button ........................................ press and hold
ECU backup unsafe light .......................... flashing
ECU A, Caution lights .............................. flashing
ECU B, Caution lights ............. flashing / prop cycling
ECU A, Caution lights ............. flashing / prop cycling
All ECU caution lights ..................... extinguished
ECU backup unsafe light .................... extinguished
ECU test button ........................................ release

14. ECU swap ....................... ECU B, ENGINE CHECKED 14
15. ECU swap .................................................... AUTO 15
16. Pitot heat .............................................. AS REQUIRED 16
17. Transponder .......................... CODE/MODE CHECKED 17
18. Parking brake ........................................ RELEASED 18

End of Checklist

For procedural items and take-off profile see next page
LINE UP PROCEDURE

Landing light............................................... ON
Approach sector ............................................. CLEAR
Runway............................................................. IDENTIFIED
Power lever max (100% / 10 sec) ....................... CHECK LOAD / RPM / FUEL FLOW / OP

AFTER TAKE-OFF PROCEDURE

After passing safe altitude:
Flaps ................................................................. UP
Landing light........................................................ OFF
CLIMB TO CRUISE CHECK

1 Flaps........................................ CHECKED UP 1
2 Landing light............................CHECKED OFF 2

End of Checklist

PERIODICALLY DURING CRUISE

Fuel Radio Engine Direction Altitude
Fuel transfer..........................repeat as required
Maximum fuel unbalance - Long range tank: 9 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 transfer ......................... AS REQUIRED 5

End of Checklist

BEFORE LANDING PROCEDURE

Downwind, latest base leg:
Flaps ................................................. T/O
Landing light........................................ ON
On final:
Flaps ................................................. LDG

GO AROUND PROCEDURE

Power ............................................. MAX
Flaps ................................................. T/O
Continue with take-off profile
AFTER LANDING CHECK

1. Flaps .................................................. UP 1
2. Pitot heat ........................................... OFF 2
3. Alternate air ................................. CLOSED 3
4. Landing/Taxi light ..................... AS REQUIRED 4

End of Checklist

PARKING CHECK

1. Parking brake ................................. SET 1
2. Power lever .......................... IDLE for 2 min. 2
3. ELT .................................................. CHECK not activated 3
4. Engine / System page .............. CHECKED 4
5. Engine / Fuel page ....... TTL TIME IN SVC NOTED 5
6. Avionic master ............................... OFF 6
7. Electrical consumers except ACL (strobe) ... OFF 7
8. Engine Master ............................... OFF 8
9. ACL (strobe) ...................................... OFF 9
10. Electric Master ............................. CHECKED OFF 10
11. Interior light ............................ CHECKED OFF 11
12. Start key ..................................... REMOVED 12

End of Checklist

OPERATING SPEEDS KIAS

<table>
<thead>
<tr>
<th>Speeds</th>
<th>850 kg</th>
<th>1000 kg</th>
<th>1150 kg</th>
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<tbody>
<tr>
<td>Best gliding angle (Flaps UP)</td>
<td>60</td>
<td>68</td>
<td>73</td>
</tr>
<tr>
<td>Best angle of climb (V_x)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best rate of climb (V_y)</td>
<td>54</td>
<td>60</td>
<td>66</td>
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<tr>
<td>Cruising climb speed</td>
<td>60</td>
<td>68</td>
<td>73</td>
</tr>
<tr>
<td>Rotating speed</td>
<td>49</td>
<td>55</td>
<td>59</td>
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<tr>
<td>Max. flap speed (V_{FE}) T/O</td>
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<tr>
<td>Max. flap speed (V_{FE}) LDG</td>
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<td>91</td>
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<tr>
<td>Landing speed Flaps UP</td>
<td>60</td>
<td>68</td>
<td>73</td>
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<tr>
<td>Landing speed Flaps LDG</td>
<td>58</td>
<td>63</td>
<td>71</td>
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<tr>
<td>Stalling speed (V_S0) LDG</td>
<td>42</td>
<td>&lt;980kg&gt;</td>
<td>49</td>
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<td>Stalling speed (V_S) T/O</td>
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<td>&lt;980kg&gt;</td>
<td>51</td>
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<td>Stalling speed (V_S) clean</td>
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<td>&lt;980kg&gt;</td>
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<td>Max. cruising speed (V_{NO})</td>
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<tr>
<td>Never exceed speed (V_{NE})</td>
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<td></td>
<td>178</td>
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<tr>
<td>Manoeuvring speed (V_{A})</td>
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<td>&lt;980kg&gt;</td>
<td>108</td>
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<tr>
<td>Max. turbulence speed</td>
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<td></td>
<td>129</td>
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</table>

Weights

<table>
<thead>
<tr>
<th>Weight</th>
<th>Empty weight</th>
<th>Max. baggage weight</th>
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<tr>
<td>Max. TKOF weight</td>
<td>1150 kg</td>
<td>850 kg</td>
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<tr>
<td></td>
<td></td>
<td>Max. baggage weight</td>
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# 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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Page</th>
<th>Description</th>
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<tbody>
<tr>
<td>ENG TEMP</td>
<td>Pg. 2</td>
<td>Coolant temperature high (red range)</td>
</tr>
<tr>
<td>OIL TEMP</td>
<td>Pg. 2</td>
<td>Oil temperature high (red range)</td>
</tr>
<tr>
<td>OIL PRES</td>
<td>Pg. 2</td>
<td>Oil pressure low (red range)</td>
</tr>
<tr>
<td>GBOX TEMP</td>
<td>Pg. 3</td>
<td>Gearbox temperature high (red range)</td>
</tr>
<tr>
<td>L/R FUEL TEMP</td>
<td>Pg. 3</td>
<td>Fuel temperature high (red range)</td>
</tr>
<tr>
<td>ALTN AMPS</td>
<td>Pg. 3</td>
<td>High Current (red range)</td>
</tr>
<tr>
<td>ALTN FAIL</td>
<td>Pg. 3</td>
<td>Alternator fail</td>
</tr>
<tr>
<td>STARTER</td>
<td>Pg. 3</td>
<td>Starter not disengaging</td>
</tr>
<tr>
<td>DOOR OPEN</td>
<td>Pg. 3</td>
<td>Unlocked doors</td>
</tr>
</tbody>
</table>

For other parameters “out of green range” see Abnormal Checklist. Abnormal Checklist starts at page 9.

### Emergency landing

- Engine
  - Rough engine and/or power loss .................................. page 4
  - Windmill engine start ........................................ page 5
  - Powered engine start .......................................... page 5
  - Fluctuating RPM ................................................ page 6
  - RPM overspeed .................................................. page 6
  - RPM underspeed ............................................... page 6

- Electric System
  - Under/over voltage .......................................... page 5
  - Total electrical fail ........................................ page 8

- Smoke and Fire
  - Fire / smoke on ground ....................................... page 7
  - Fire / smoke in continued TKOF ................................ page 7
  - Electric fire / smoke in flight ................................ page 7
  - Engine fire in flight ........................................ page 8

- Other Emergencies
  - Fuel transfer pump u/s ...................................... page 4
  - Suspicion of carbon monoxide ............................... page 8

Edition # 17.1 Does not replace the Airplane Flight Manual
**ENG TEMP**

- Check COOL LVL caution light
  - If “COOL LVL” OUT:
    - During climb:
      - Reduce power 10%
      - Increase airspeed 10 KIAS
      - If not returning to green range within 60 seconds: reduce power as far as possible and increase airspeed
    - During cruise:
      - Reduce power
      - Increase airspeed
      - Check coolant temperature in green range
      - If not returning to green range: land ASAP
  - If “COOL LVL” ON:
    - Reduce power
    - Expect loss of coolant fluid
    - Be prepared for emergency landing

**OIL TEMP**

- Check oil pressure
  - If too low:
    - Reduce power
    - Be prepared for loss of oil and engine fail; be prepared for emergency landing
  - If in green range:
    - Reduce power
    - Increase airspeed

**OIL PRES**

- Reduce power
- Be prepared for loss of oil and engine fail; be prepared for emergency landing
**GBOX TEMP**
- Reduce power
- Increase airspeed

**L/R FUEL TEMP**
- Reduce power
- Increase airspeed

**ALTN AMPS**
- **HIGH CURRENT**
  - Consumption of electrical power is too high
  - Switch off electrical equipment to reduce electrical load
    - If problem not cleared:
      ⇒ Land ASAP

**ALTN FAIL**
- **ALTERNATOR FAIL**
  - Batteries will last for about 30 minutes
  - Check circuit breakers
    - If all CBs OK:
      ⇒ ESSENTIAL BUS: ON
  - Switch off unnecessary electrical equipment
  - Land ASAP
  - Be prepared for engine fail and emergency landing

**STARTER**
- **STARTER NOT DISENGAGING**
  - Power lever IDLE
  - Engine master OFF
  - Electric master OFF

**DOOR OPEN**
- **UNLOCKED DOORS**
  - Reduce airspeed
  - Check canopy and rear door visually
    - If canopy and/or rear door unlocked:
      ⇒ Airspeed below 140 KIAS
      ⇒ Land ASAP

*Do not try to lock the rear door in flight*
**EMERGENCY LANDING**

1. Airspeed........................................ 73/68/60 kts  
2. ATC................................................. INFORM  
3. Emergency fuel valve.............................. OFF  
4. Engine Master....................................... OFF  
   
**On final:**  
5. Flaps .....................................................LDG  
6. Safety harnesses..................................TIGHT  
7. Electric master switch .......................... OFF  

**FUEL TRANSFER PUMP U/S**

1. Emergency fuel valve.......... EMERG. TRANSFER  
2. AUX fuel quantity ............... CHECK min 1 USG  
3. MAIN fuel quantity.............CHECK max 15 USG  
4. Emergency fuel valve............ Reset to NORMAL  

**ROUGH ENGINE AND/OR POWER LOSS**

1. Airspeed.................................73/68/60 KIAS  
2. Power lever ........................................... MAX  
3. G1000 annunciations ......................... CHECK  
   
**If ON:** go to appropriate checklist  
4. Alternate air ..............in icing conditions: OPEN  
5. Main tank fuel quantity .................CHECK  
6. Fuel transfer pump ......................... CHECK ON  
7. Emergency fuel valve............. CHECK NORMAL  
8. ECU swap........................................... ECU B  
   
- In case of power loss: ECU reset:  
9. Engine master................................. OFF – ON  
   
**If no success:**  
10. ECU swap.............................................AUTO  
   
**If no success and insufficient power:**  
   Land ASAP
WINDMILL ENGINE START

1. Airspeed............................... 73 - max 110 KIAS
2. Pressure Altitude.............................max 6000 ft
3. Power lever ................................ IDLE
4. Emergency fuel valve............... CHECK NORMAL
5. Alternate air ................................ OPEN
6. Fuel transfer pump ................................ ON
7. Avionic master ................................ OFF
8. Electric master ................................ ON
9. Engine master.............................. OFF, then ON
10. Avionic master ................................ ON

POWERED ENGINE START

1. Gliding airspeed ....................... 73/68/60 KIAS
2. Pressure Altitude.............................max 6000 ft
3. Engine master.............................. OFF
4. Power lever ................................ IDLE
5. Emergency fuel valve............... CHECK NORMAL
6. Alternate air ................................ OPEN
7. Fuel transfer pump ................................ ON
8. Avionic master ................................ OFF
9. Electric master ................................ ON
10. Engine master.............................. ON
11. Glow indication ........... CHECK ON, wait for OFF
12. Electric master ................................ START
13. Avionic master ................................ ON

UNDER / OVER VOLTAGE

1. Essential bus ......................................... ON

Land ASAP
**FLUCTUATING RPM**

1. Power lever ....................... CHANGE SETTING 1
   If no success:
2. ECU swap ............................................ ECU B 2
   If no success:
3. ECU swap .............................................AUTO 3
   If no success:
   Land ASAP

**RPM OVERSPEED**

1. Power lever ............ ADJUST to max. 2300 RPM 1
2. Flaps .......................... UP 2
3. Airspeed ............................... 73 KIAS 3
4. Power lever .................. AS REQUIRED 4
   but do not exceed 2300 RPM
5. ECU swap .................................. ECU B 5
   • If no success:
6. ECU swap ................................ AUTO 6
   Land ASAP
   
   If increased climb rate required:
7. Flaps ......................................... T/O 7
8. Airspeed ............................... 66 KIAS 8
9. Power lever ............ ADJUST to max. 2300 RPM 9

**RPM UNDERSPEED**

1. Power lever .................. AS REQUIRED 1
2. ECU swap .................................. ECU B 2
   • If no success:
3. ECU swap ................................ AUTO 3
   Land ASAP
**FIRE / SMOKE ON GROUND**

1. Power lever ........................................... IDLE 1
2. Cabin heat.............................................. OFF 2
3. Emergency fuel valve............................... OFF 3
4. Fuel transfer pump ................................. OFF 4
5. Engine master......................................... OFF 5
6. Electric master....................................... OFF 6

When engine stopped:
7. Canopy ................................................. OPEN 7

Evacuate

**FIRE / SMOKE DURING CONTINUED TKOF**

1. Cabin heat.............................................. OFF 1
   Land ASAP
   When landing assured:
2. Emergency fuel valve............................... OFF 2
3. Fuel transfer pump ................................. OFF 3
4. Engine master......................................... OFF 4
5. Electric master....................................... OFF 5
6. Emergency window............. OPEN as necessary 6
7. Canopy ................................................. UNLATCH as necessary 7

**ELECTRIC FIRE / SMOKE IN FLIGHT**

1. Emergency switch ................................. ON 1
2. Avionic master ...................................... OFF 2
3. Electric master....................................... OFF 3
4. Cabin heat............................................. OFF 4
5. Emergency window............. OPEN as necessary 5
6. Canopy ................................................. UNLATCH as necessary 6

Land ASAP
**ENGINE FIRE IN FLIGHT**

1. Cabin heat........................................ OFF 1
2. Emergency landing ...................... PREPARE 2
3. Airspeed.................................73/68/60 KIAS 3
4. ATC............................................... INFORM 4
5. Emergency window......... OPEN as necessary 5
6. Canopy .........................UNLATCH as necessary 6
   When landing assured:
   7. Emergency fuel valve ................... OFF 7
   8. Power lever ................................ MAX 8
   9. Engine Master .......................... OFF 9
      On final:
   10. Flaps ......................................... LDG 10
   11. Electric master switch ............. OFF 11

**SUSPICION OF CARBON MONOXIDE**

1. Cabin heat & defrost ...................... OFF 1
2. Ventilation........................................ OPEN 2
3. Emergency windows ...................... OPEN 3
4. Airspeed..................................max 120 KIAS 4
5. Canopy ................................... UNLATCH 5
   *Push up and lock in cooling gap position*

**TOTAL ELECTRIC FAIL**

1. Circuit breakers.........................CHECK ALL IN 1
2. Essential bus ............................. ON 2
   If no success:
3. Emergency switch ...................... ON 3
4. Flood light, if necessary .............. ON 4
5. Power ........................................ SET 5
   according power lever position and/or engine noise
6. Flaps ..................................... VERIFY POSITION 6
   Land ASAP
G1000 CAUTION LIGHTS

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<th>Condition</th>
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<td>Engine ECU A fail</td>
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<tr>
<td>ECU B FAIL</td>
<td>9</td>
<td>Engine ECU B fail</td>
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<tr>
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<td>10</td>
<td>Main tank fuel qty low</td>
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<tr>
<td>VOLTS LOW</td>
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<td>Bus voltage too low</td>
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<tr>
<td>PITOT FAIL</td>
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<td>Pitot heating system failed</td>
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<tr>
<td>COOL LVL</td>
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<td>Engine coolant level low</td>
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<tr>
<td>PITOT HT OFF</td>
<td></td>
<td>Pitot heating system OFF</td>
</tr>
</tbody>
</table>

Indications outside of green range

- RPM high ........................................ page 11
- OIL PRESSURE high/low ................... page 11
- OIL TEMPERATURE high/ low............. page 11
- FUEL TEMPERATURE high/low.............. page 12
- COOLANT TEMPERATURE high/low ..... page 12
- GEARBOX temperature high ............. page 12
- ALTERNATOR load yellow range ........ page 12
- VOLT high ....................................... page 12

ECU A OR B FAIL ON GROUND

▶ Discontinue operation, terminate flight preparation

ECU A FAIL DURING FLIGHT

Remark: in case of ECU A fail the system automatically switches to ECU B

▶ Press ECU TEST button for more than 2 seconds
  ▶ If ECU A caution message re-appears or cannot be reset:
    ⇒ Land ASAP
  ▶ If ECU A caution message can be reset:
    ⇒ Continue flight. Engine must be serviced after LDG

ECU B FAIL DURING FLIGHT

▶ Press ECU TEST button for more than 2 seconds
  ▶ If ECU B caution message re-appears or cannot be reset:
    ⇒ Land ASAP
  ▶ If ECU B caution message can be reset:
    ⇒ Continue flight. Engine must be serviced after LDG
**L FUEL LOW**

- Fuel transfer pump: ON
- Check fuel quantity
  - If light still ON:
    - Expect fuel leak
    - Be prepared for emergency landing

**MAIN TANK FUEL QTY LOW**

**VOLTS LOW**

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

- Check circuit breakers
  - On ground
    - Increase RPM
      - If light still ON:
        - Terminate flight preparation
  - In flight
    - Switch off unnecessary electrical equipment
      - If light still ON:
        - Apply “ALTERNATOR FAIL”-emergency procedure *(Emergency Checklist page 3)*

**PITOT FAIL**

- check pitot heat ON
  - if in icing conditions
    - expect failure of the pitot-static-system
    - alternate static valve: OPEN
    - leave area with icing conditions
INDICATIONS OUTSIDE OF GREEN RANGE

**RPM high**
- Reduce power
- Keep RPM in green range with appropriate power lever setting
  - If power not sufficient: land ASAP

**Oil pressure high**
- Check oil temperature
- Check coolant temperature
  - If within green range
    ⇒ Oil pressure indication may be faulty; watch temperatures
  - If outside of green range
    ⇒ Reduce power
    ⇒ Be prepared for engine fail;
      be prepared for emergency landing

**Oil pressure low**
- Reduce power
- Be prepared for loss of oil and engine fail;
  be prepared for emergency landing

**Oil temperature high**
- Check oil pressure
  - If too low
    ⇒ Reduce power
    ⇒ Be prepared for loss of oil and engine fail;
      be prepared for emergency landing
  - If in green range
    ⇒ Reduce power
    ⇒ Increase airspeed

**Oil temperature low**
- Increase power
- Reduce airspeed
**Fuel temperature high**
- Reduce power
- Increase airspeed

**Fuel temperature low**
- Increase power
- Reduce airspeed

**Coolant temperature high**
- Refer to Emergency Checklist page 2, “ENG TEMP”

**Coolant temperature low**
*Remark: During low power descent from high altitude coolant temperature may decrease*
- Check “COOL LVL” caution light
  - If ON
    - Reduce power
    - Expect loss of coolant fluid
    - Be prepared for emergency landing

**Gearbox temperature high**
- Reduce power
- Increase airspeed

**Alternator load yellow range**
- Switch off unnecessary electrical equipment
  - If indication still outside of green range:
    - Land ASAP

**VOLT high**
- Land ASAP