Checklist für Diamond DA40 TDI Diamond Star

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 Schmidleitner

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

<table>
<thead>
<tr>
<th>Page</th>
<th>Following Edition</th>
<th>Date (or any higher) is valid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14</td>
<td>01.12.2006</td>
</tr>
<tr>
<td>2</td>
<td>15.2</td>
<td>01.03.2015</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>01.12.2006</td>
</tr>
<tr>
<td>4</td>
<td>17.1</td>
<td>15.04.2017</td>
</tr>
<tr>
<td>5</td>
<td>14</td>
<td>01.12.2006</td>
</tr>
<tr>
<td>6</td>
<td>14</td>
<td>01.12.2006</td>
</tr>
<tr>
<td>7</td>
<td>14</td>
<td>01.12.2006</td>
</tr>
<tr>
<td>8</td>
<td>15.2</td>
<td>01.03.2015</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section: Normal Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section: Abnormal Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

Comments explaining Edition # 15.1

Emergency Checklist:

Page 1: "Emergency Landing": Safety harnesses added
Page 2: "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

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 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.

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.

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.

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. All avionics + all electrics OFF
11. Electric Master ON
   Check battery voltage
12. Check fuel quantity + temp
13. External lights ON
14. Pitot heat ON
15. Parking brake SET
16. Check stall warning
17. Check pitot heat
18. Check external lights
19. Electric Master OFF, key removed

PREFLIGHT INTERIOR + 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
Fuseelage left side
Antennas

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

Right fuselage
Fuseelage 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
Spiner
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

1. Preflight check..................................COMPLETED
2. Baggage and tow bar .......................SECURED
3. Emergency fuel valve .......................NORMAL
4. Power lever....................................... IDLE
5. Parking brake .................................... SET
6. Alternate air ..................................... CLOSED
7. Circuit breakers ...................................CHECKED IN
8. Fuel transfer ...................................... OFF
9. Avionic master ................................... OFF
10. Essential bus .................................... OFF
11. Electric Master .................................. OFF
12. All light switches .............................. OFF
13. Pitot heat .......................................... OFF
14. Alternate static .................................. CLOSED
15. Emergency switch .........................OFF / GUARDED
16. ECU swap ......................................... AUTO
17. Engine Master .................................... ON
18. Instrument + flood light .................OFF
19. Gyro slave switch ............................SLAVE
20. Flap selector ....................................... UP
21. Electric Master .................................. ON
22. Annunciator Panel / Eng.instr. ............ CHECKED
23. Acknowledge button ......................... PRESS
24. Low coolant warning Light ..............CHECKED OFF
25. Rudder pedals .................................... ADJUSTED
26. Passengers ........................................ INSTRUCTED
27. Seat belts ......................................... FASTENED
28. Rear door .......................................... CLOSED and LATCHED
29. Front canopy ..................................... POS 1 or 2
30. Fuel quantity ..................................... CHECKED
31. Fuel temperature .............................. CHECKED
32. Hobbs meter ...................................... NOTED
33. Power lever ....................................... IDLE
34. ACL (strobe) ........................................ ON

End of Checklist

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 OT > 50°C and CT > 60°C
4. Pitot heat ........................................ OFF
5. Avionics master .................................. ON
6. VHF COM / NAV / GPS ...................... SET

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
10. Position lights ................................. ON
11. Flaps ............................................ full travel
12. Altimeters (3) .................................. SET
13. Horizon / Directional gyro ......... CHECKED / SET
14. Transponder ................................. CODE / MODE CHECKED
15. Parking brake .................................. RELEASED

End of Checklist

DURING TAXI

Check Brakes
Check flight instruments
### BEFORE TAKE OFF CHECK

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Parking brake</td>
<td>SET</td>
<td>1</td>
<td>2</td>
<td>Seat belts</td>
<td>FASTENED</td>
</tr>
<tr>
<td>3</td>
<td>Rear door</td>
<td>CLOSED + LATCHED</td>
<td>3</td>
<td>4</td>
<td>Front canopy</td>
<td>CLOSED + LATCHED</td>
</tr>
<tr>
<td>5</td>
<td>Door warning light</td>
<td>OFF</td>
<td>5</td>
<td>6</td>
<td>Engine instruments</td>
<td>CHECKED</td>
</tr>
<tr>
<td>7</td>
<td>Fuel Temperature (Diesel min. +5°)</td>
<td>CHECKED</td>
<td>7</td>
<td>8</td>
<td>Circuit breakers</td>
<td>CHECKED</td>
</tr>
<tr>
<td>9</td>
<td>Electric elevator trim</td>
<td>CHECKED, T/O SET</td>
<td>9</td>
<td>10</td>
<td>Flaps</td>
<td>CHECKED T/O</td>
</tr>
<tr>
<td>11</td>
<td>Flight controls</td>
<td>CHECKED</td>
<td>11</td>
<td>12</td>
<td>Power lever</td>
<td>IDLE</td>
</tr>
<tr>
<td>13</td>
<td>ECU test</td>
<td>PERFORM</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ECU TEST**

- ECU test button: press and hold
- ECU backup unsafe light: flashing
- ECU A, B, 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

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>ECU swap</td>
<td>ECU B, ENGINE CHECKED</td>
<td>14</td>
<td>15</td>
<td>ECU swap</td>
<td>AUTO</td>
</tr>
<tr>
<td>16</td>
<td>Pitot heat</td>
<td>AS REQUIRED</td>
<td>16</td>
<td>17</td>
<td>Transponder</td>
<td>CODE / MODE CHECKED</td>
</tr>
<tr>
<td>18</td>
<td>Parking brake</td>
<td>RELEASED</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### LINE UP PROCEDURE

- Landing light: ON
- Approach sector: CLEAR
- Runway: IDENTIFIED
- Power lever max (100% / 10 sec): IDENTIFIED

**CHECK RPM**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Climb to cruise altitude</td>
<td>73 kt</td>
<td>60 %</td>
<td></td>
</tr>
<tr>
<td>~ 110 kt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circuit altitude</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Flaps: UP
- Landing light: OFF

### AFTER TAKE-OFF PROCEDURE

- After passing safe altitude:
  - Flaps: UP
  - Landing light: OFF

For procedural items and take-off profile see next page
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 / GPS .......................... SET 3
4. Directional gyro .......................... SET 4
5. Seatbelts .................................. FASTENED 5
6. Fuel transfer ............................ AS REQUIRED 6

*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
5. Transponder ............................ AS REQUIRED 5

*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. Hobbs meter ............................. NOTED 4
5. Avionic master .......................... OFF 5
6. Electrical consumers except ACL (strobe) ... OFF 6
7. Engine Master .......................... OFF 7
8. ACL (strobe) ............................. OFF 8
9. Electric Master .......................... OFF 9
10. Interior light ........................... CHECKED OFF 10
11. Start key .................................. REMOVED 11

*End of Checklist*

OPERATING SPEEDS KIAS

<table>
<thead>
<tr>
<th>Speed Category</th>
<th>Empty weight (850 kg)</th>
<th>1000 kg</th>
<th>1150 kg</th>
</tr>
</thead>
<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\textsubscript{\text{a}})</td>
<td>54</td>
<td>60</td>
<td>66</td>
</tr>
<tr>
<td>Best rate of climb (V\textsubscript{\text{y}})</td>
<td>49</td>
<td>55</td>
<td>59</td>
</tr>
<tr>
<td>Cruising climb speed</td>
<td>60</td>
<td>68</td>
<td>73</td>
</tr>
<tr>
<td>Rotating speed</td>
<td>47</td>
<td>53</td>
<td>59</td>
</tr>
<tr>
<td>Max. flap speed (V\textsubscript{\text{F}}} T/O</td>
<td>91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. flap speed (V\textsubscript{\text{F}}} LDG</td>
<td>60</td>
<td>68</td>
<td>73</td>
</tr>
<tr>
<td>Landing speed Flaps UP</td>
<td>58</td>
<td>63</td>
<td>71</td>
</tr>
<tr>
<td>Landing speed Flaps LDG</td>
<td>42</td>
<td>&lt;-980 kg&gt;</td>
<td>49</td>
</tr>
<tr>
<td>Stalling speed (V\textsubscript{\text{\text{g}}} LDG</td>
<td>44</td>
<td>&lt;-980 kg&gt;</td>
<td>51</td>
</tr>
<tr>
<td>Stalling speed (V\textsubscript{\text{\text{g}}} T/O</td>
<td>47</td>
<td>&lt;-980 kg&gt;</td>
<td>52</td>
</tr>
<tr>
<td>Stalling speed (V\textsubscript{\text{\text{g}}} clean</td>
<td>129</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. cruising speed (V\textsubscript{\text{\text{g}}}</td>
<td>178</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never exceed speed (V\textsubscript{\text{\text{g}}}</td>
<td>94</td>
<td>&lt;-980 kg&gt;</td>
<td>108</td>
</tr>
<tr>
<td>Max. turbulence speed</td>
<td>129</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Weights

- Empty weight: 850 kg
- Max. baggage weight: 30 kg

15.04.2017 Diamond Flight Training Page 7
Edition # 17.1 Does not replace the Airplane Flight Manual
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.

Abnormal Checklist starts at page 7

**WARNING LIGHTS**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power lever</td>
<td>IDLE</td>
</tr>
<tr>
<td>Engine master</td>
<td>OFF</td>
</tr>
<tr>
<td>Electric master</td>
<td>OFF</td>
</tr>
</tbody>
</table>

**STARTER**

**STARTER NOT DISENGAGING**

<table>
<thead>
<tr>
<th>Action</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power lever</td>
<td>IDLE</td>
</tr>
<tr>
<td>Engine master</td>
<td>OFF</td>
</tr>
<tr>
<td>Electric master</td>
<td>OFF</td>
</tr>
</tbody>
</table>

**DOORS**

**DOOR(S) OPEN OR UNLOCKED**

<table>
<thead>
<tr>
<th>Action</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Airspeed</td>
<td>REDUCE</td>
</tr>
<tr>
<td>Canopy and rear door</td>
<td>CHECK visually</td>
</tr>
</tbody>
</table>

If unlocked:
- Airspeed below 140 KIAS, land ASAP
- Do not try to lock the rear door in flight

**TRIM FAIL**

**AUTOPILOT TRIM FAIL**

<table>
<thead>
<tr>
<th>Action</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AP DISC switch (red button)</td>
<td>PRESS</td>
</tr>
<tr>
<td>AP circuit breaker</td>
<td>PULL</td>
</tr>
</tbody>
</table>

**ROUGH ENGINE AND/OR POWER LOSS**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airspeed</td>
<td>73/68/60 KIAS</td>
</tr>
<tr>
<td>Power lever</td>
<td>MAX</td>
</tr>
<tr>
<td>Engine caution light</td>
<td>check</td>
</tr>
<tr>
<td>Alternate air</td>
<td>OPEN</td>
</tr>
<tr>
<td>Main tank fuel quantity</td>
<td>CHECK</td>
</tr>
<tr>
<td>Fuel transfer pump</td>
<td>ON</td>
</tr>
<tr>
<td>Emergency fuel valve</td>
<td>CHECK NORMAL</td>
</tr>
<tr>
<td>ECU swap</td>
<td>ECU B</td>
</tr>
</tbody>
</table>

In case of power loss: ECU reset:
- Engine master                      | OFF – ON |

If no success:
- ECU swap                           | AUTO |

If no success and insufficient power:
- Land ASAP

**EMERGENCY LANDING**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airspeed</td>
<td>73/68/60 KIAS</td>
</tr>
<tr>
<td>ATC</td>
<td>INFORM</td>
</tr>
<tr>
<td>Emergency fuel valve</td>
<td>OFF</td>
</tr>
<tr>
<td>Engine master</td>
<td>OFF</td>
</tr>
<tr>
<td>Flaps</td>
<td>LDG</td>
</tr>
<tr>
<td>Safety harness</td>
<td>TIGHT</td>
</tr>
<tr>
<td>Electric master switch</td>
<td>OFF</td>
</tr>
</tbody>
</table>
**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

**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

**FLUCTUATING RPM**

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

   - If no success:
     4. Land ASAP

**RPM OVERSPEED**

1. Power lever ............ ADJUST to max. 2300 RPM
2. Flaps ....................................................... UP
3. Airspeed ................................. 73 KIAS
4. Power lever ......................... AS REQUIRED
   but do not exceed 2300 RPM
5. ECU swap................................. ECU B
   - If no success:
     6. ECU swap................................. AUTO

   - If increased climb rate required:
     7. Flaps ....................................................... T/O
    8. Airspeed ................................. 66 KIAS
    9. Power lever ............ ADJUST to max. 2300 RPM

**RPM UNDERSPEED**

1. Power lever ......................... AS REQUIRED
2. ECU swap................................. ECU B
   - If no success:
     3. ECU swap................................. AUTO

   - If increased climb rate required:
     7. Flaps ....................................................... T/O
    8. Airspeed ................................. 66 KIAS
    9. Power lever ............ ADJUST to max. 2300 RPM

   - If no success:
     9. 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

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

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

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 ............................................OPEN 5
   Push up and lock in cooling gap position

UNDER / OVER VOLTAGE
1. Essential bus ......................................... ON 1
   Land ASAP

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
**CAUTION LIGHTS**

**ENGINE**
- Page 7  
  Eng. parameter(s) out of green range

**PITOT**
- Page 7  
  Pitot heating system failed or OFF

**LOW FUEL**
- Page 7  
  LH tank fuel quantity low

**ECU A**
- Page 8  
  Engine ECU A malfunction

**ECU B**
- Page 8  
  Engine ECU B malfunction

**LOW VOLTS**
- Page 8  
  Bus voltage too low

**ALTERNATOR**
- Page 8  
  Alternator failure

---

**Indications outside of green range**
- RPM high ........................................ page 9
- OIL pressure high/low ........................ page 9
- OIL temperature high/ low .................. page 9
- FUEL temperature high/low ............... page 9
- COOLANT temperature high/low ........... page 10
- GEAR temperature high ...................... page 10
- GENERATOR temperature high ............ page 10
- VOLT low/high .................................... page 10

---

**ENGINE**

**ENG. PARAMETER(S) OUT OF GREEN RANGE**

- Check Compact Engine Display CED 125
- Check Auxiliary Engine Display AED 125
- Press „Acknowledge“ button
  - If an indication is outside of green range:
    - continue with appropriate INDICATIONS OUTSIDE OF GREEN RANGE procedure

**PITOT**

**PITOT HEATING SYSTEM FAILED OR OFF**

- 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 FUEL**

**LH TANK FUEL QTY LOW**

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

---

**ECU A OR B**

**ON GROUND**

- Discontinue operation, terminate flight preparation

**ECU A**

**DURING FLIGHT**

  - 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**

**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

**LOW VOLTS**

**BUS VOLTAGE TOO 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“-caution procedure

---

**ALTERNATOR**

**ALTERNATOR FAILURE**

- Check circuit breakers
  - If all CBs OK:
    - ESSENTIAL BUS: ON
- Switch off unnecessary electrical equipment
- Land ASAP
- Be prepared for engine fail; be prepared for emergency landing
**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 (OP) 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 (OP) low**
- Reduce power
- Be prepared for loss of oil and engine fail; be prepared for emergency landing

**Oil temperature (OT) 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 (OT) low**
- Increase power
- Reduce airspeed

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

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

**Coolant temperature (CT) high**
- Check WATER LEVEL caution light
  - If “WATER LEVEL” OUT
    - During climb:
      - Reduce power 10%
      - Increase airspeed 10 KIAS
      - If not returning to green range within 60 seconds:
        - Reduce power as much 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 “WATER LEVEL” ON
    - Reduce power
    - Expect loss of coolant fluid
    - Be prepared for emergency landing

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

**Gear temperature (GT) high**
- Reduce power
- Increase airspeed

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

**VOLT low**
- Check circuit breakers
- Switch off unnecessary electrical equipment
  - If light still ON
    - Apply "ALTERNATOR"-caution procedure

**VOLT high**
- Land ASAP