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

Checklist DA40 TDI - LEP

<table>
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Section: Normal Checklist

Section: Abnormal Checklist

7 14 01.12.2006
8 14 01.12.2006
9 14 01.12.2006
10 14 01.12.2006
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

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 supersed 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.
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. 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 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

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<thead>
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<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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<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>Circuit breakers</td>
<td>CHECKED IN</td>
</tr>
<tr>
<td>8</td>
<td>Fuel transfer</td>
<td>OFF</td>
</tr>
<tr>
<td>9</td>
<td>Avionic master</td>
<td>OFF</td>
</tr>
<tr>
<td>10</td>
<td>Essential bus</td>
<td>OFF</td>
</tr>
<tr>
<td>11</td>
<td>Electric Master</td>
<td>OFF</td>
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<tr>
<td>12</td>
<td>All light switches</td>
<td>OFF</td>
</tr>
<tr>
<td>13</td>
<td>Pitot heat</td>
<td>OFF</td>
</tr>
<tr>
<td>14</td>
<td>Alternate static</td>
<td>CLOSED</td>
</tr>
<tr>
<td>15</td>
<td>Emergency switch</td>
<td>OFF / GUARDED</td>
</tr>
<tr>
<td>16</td>
<td>ECU swap</td>
<td>AUTO</td>
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<tr>
<td>17</td>
<td>Engine Master</td>
<td>OFF</td>
</tr>
<tr>
<td>18</td>
<td>Instrument + flood light</td>
<td>OFF</td>
</tr>
<tr>
<td>19</td>
<td>Gyro slave switch</td>
<td>SLAVE</td>
</tr>
<tr>
<td>20</td>
<td>Flap selector</td>
<td>UP</td>
</tr>
<tr>
<td>21</td>
<td>Electric Master</td>
<td>ON</td>
</tr>
<tr>
<td>22</td>
<td>Annunciator Panel/ Eng.instr.</td>
<td>CHECKED</td>
</tr>
<tr>
<td>23</td>
<td>Acknowledge button</td>
<td>PRESS</td>
</tr>
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<td>24</td>
<td>Low coolant warning Light</td>
<td>CHECKED OFF</td>
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<tr>
<td>25</td>
<td>Rudder pedals</td>
<td>ADJUSTED</td>
</tr>
<tr>
<td>26</td>
<td>Passengers</td>
<td>INSTRUCTED</td>
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<tr>
<td>27</td>
<td>Seat belts</td>
<td>FASTENED</td>
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<tr>
<td>28</td>
<td>Rear door</td>
<td>CLOSED and LATCHED</td>
</tr>
<tr>
<td>29</td>
<td>Front canopy</td>
<td>POS 1 or 2</td>
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<tr>
<td>30</td>
<td>Fuel quantity</td>
<td>CHECKED</td>
</tr>
<tr>
<td>31</td>
<td>Fuel temperature</td>
<td>CHECKED</td>
</tr>
<tr>
<td>32</td>
<td>Hobbs meter</td>
<td>NOTED</td>
</tr>
<tr>
<td>33</td>
<td>Power lever</td>
<td>IDLE</td>
</tr>
<tr>
<td>34</td>
<td>ACL (strobe)</td>
<td>ON</td>
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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 ACKNOWLEDGE / 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 OT > 50°C and CT > 60°C

4 Pitot heat ... ON, annunciation + Amps checked
5 Pitot heat ............................................ OFF
6 Avionics master .................................... ON
7 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, ON as required
10 Position lights ................................. ON as required
11 Flaps ...................... full travel CHECKED, then T/O
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

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

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<td>ECU swap ................................……ECU B, ENGINE CHECKED</td>
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<td>15</td>
<td>ECU swap ..........................................AUTO</td>
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<td>16</td>
<td>Pitot heat ..........................................AS REQUIRED</td>
<td>16</td>
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<td>17</td>
<td>Transponder ........................................CODE / MODE CHECKED</td>
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<tr>
<td>18</td>
<td>Parking brake .......................................RELEASED</td>
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</table>

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 RPM / OP / LOAD / Fuel flow

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 / 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  
2. Pitot heat ....................OFF  
3. Alternate air.................CLOSED  
4. Landing/Taxi light..........AS REQUIRED  
5. Transponder .................AS REQUIRED  

End of Checklist

**PARKING CHECK**

1. Parking brake.......................SET  
2. Power lever.....................IDLE for 2 min.  
3. ELT................................CHECK not activated  
4. Hobbs meter .....................NOTE  
5. Avionic master ..................OFF  
6. Electrical consumers except ACL (strobe)...OFF  
7. Engine Master ..................OFF  
8. ACL (strobe) .....................OFF  
9. Electric Master ..................OFF  
10. Interior light ..................CHECKED OFF  
11. Start key .......................REMOVED  

End of Checklist

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<th>850 kg</th>
<th>1000 kg</th>
<th>1150 kg</th>
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<tr>
<td>Best gliding angle (Flaps UP)</td>
<td>60</td>
<td>68</td>
<td>73</td>
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<tr>
<td>Best angle of climb (Vy)</td>
<td>54</td>
<td>60</td>
<td>66</td>
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<tr>
<td>Cruising climb speed</td>
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<td>68</td>
<td>73</td>
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<tr>
<td>Rotating speed</td>
<td>49</td>
<td>55</td>
<td>59</td>
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<tr>
<td>Max. flap speed (VFE) T/O</td>
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<tr>
<td>Max. flap speed (VFE) LDG</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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<td>&lt;-980kg-&gt;</td>
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<td>&lt;-980kg-&gt;</td>
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<td>52</td>
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<td>Max. cruising speed (VNO)</td>
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<tr>
<td>Never exceed speed (VNE)</td>
<td>178</td>
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<td>Maneuvering speed (VA)</td>
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<td>&lt;-980kg-&gt;</td>
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<td>Max. turbulence speed</td>
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<th>Max. TKOF weight</th>
<th>Max. baggage weight</th>
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<td>1150 kg</td>
<td>850 kg</td>
<td>30 kg</td>
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<tr>
<td>1000 kg</td>
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<tr>
<td>1150 kg</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.

Abnormal Checklist starts at page 7

WARNING LIGHTS .................................................................page 2

Engine
Rough engine and/or power loss .........................page 2
Windmill engine start ....................................................page 3
Powered engine start .....................................................page 3
Fluctuating RPM ..............................................................page 4
RPM overspeed .................................................................page 4
RPM underspeed ...............................................................page 4

Electric System
Under/over voltage ............................................................page 6
Total electrical fail .............................................................page 6

Smoke and Fire
Fire / smoke on ground ....................................................page 5
Fire / smoke in continued TKOF .................................page 5
Engine fire in flight .............................................................page 5
Electric fire / smoke in flight ............................................page 6

Other Emergencies
Fuel transfer pump u/s .....................................................page 3
Suspicion of carbon monoxide ............................................page 6

EMERGENCY LANDING

1 Airspeed .......................................................... 73/68/60 KIAS 1
2 ATC ................................................................. INFORM 2
3 Emergency fuel valve .............................................. OFF 3
4 Engine Master ....................................................... OFF 4

On final:

5 Flaps ................................................................. LDG 5
6 Safety harnesses .................................................... TIGHT 6
7 Electric master switch ................................................ OFF 7
WARNING LIGHTS

STARTER

STARTER NOT DISENGAGING

1. Power lever ........................................... IDLE 1
2. Engine master......................................... OFF 2
3. Electric master........................................ OFF 3

DOORS

DOOR(S) OPEN OR UNLOCKED

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

TRIM FAIL

AUTOPILOT TRIM FAIL

1. AP DISC switch (red button) ............... PRESS 1
2. AP circuit breaker ..................................... PULL 2

ROUGH ENGINE AND/OR POWER LOSS

1. Airspeed........................................... 73/68/60 KIAS 1
2. Power lever ........................................... MAX 2
3. Engine caution light ...............................check 3
   If ON: ........................................... CHECK CED
4. Alternate air .....................in icing conditions: OPEN 4
5. Main tank fuel quantity .......................... CHECK 5
6. Fuel transfer pump ................................. ON 6
7. Emergency fuel valve............... CHECK NORMAL 7
8. ECU swap............................................ ECU B 8
   • In case of power loss: ECU reset:
   9. Engine master.................................... OFF – ON 9
      If no success:
10. ECU swap............................................ AUTO 10
   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

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 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
2. Cabin heat.............................................. OFF
3. Emergency fuel valve ......................... OFF
4. Fuel transfer pump ................................ OFF
5. Engine master......................................... OFF
6. Electric master........................................ OFF
7. Canopy ................................................OPEN

When engine stopped:
Evacuate

FIRE / SMOKE DURING CONTINUED TKOF

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

ENGINE FIRE IN FLIGHT

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

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

**Land ASAP**

**SUSPICION OF CARBON MONOXIDE**

1. Cabin heat & defrost ..................................... OFF  
2. Ventilation .............................................. OPEN  
3. Emergency windows ...................................... OPEN  
4. Airspeed .............................................. max 120 KIAS  
5. Canopy ............................................... UNLATCH  

*Push up and lock in cooling gap position*

**UNDER / OVER VOLTAGE**

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

**Land ASAP**

**TOTAL ELECTRIC FAIL**

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

**Land ASAP**
CAUTION LIGHTS

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Indications outside of green range

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ENGINE

- 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

- 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

- 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**
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  
**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 EDU 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