



**flugschule fricktal**

# Summary of all checks and procedures

Checklist REV2 / 01.01.2019

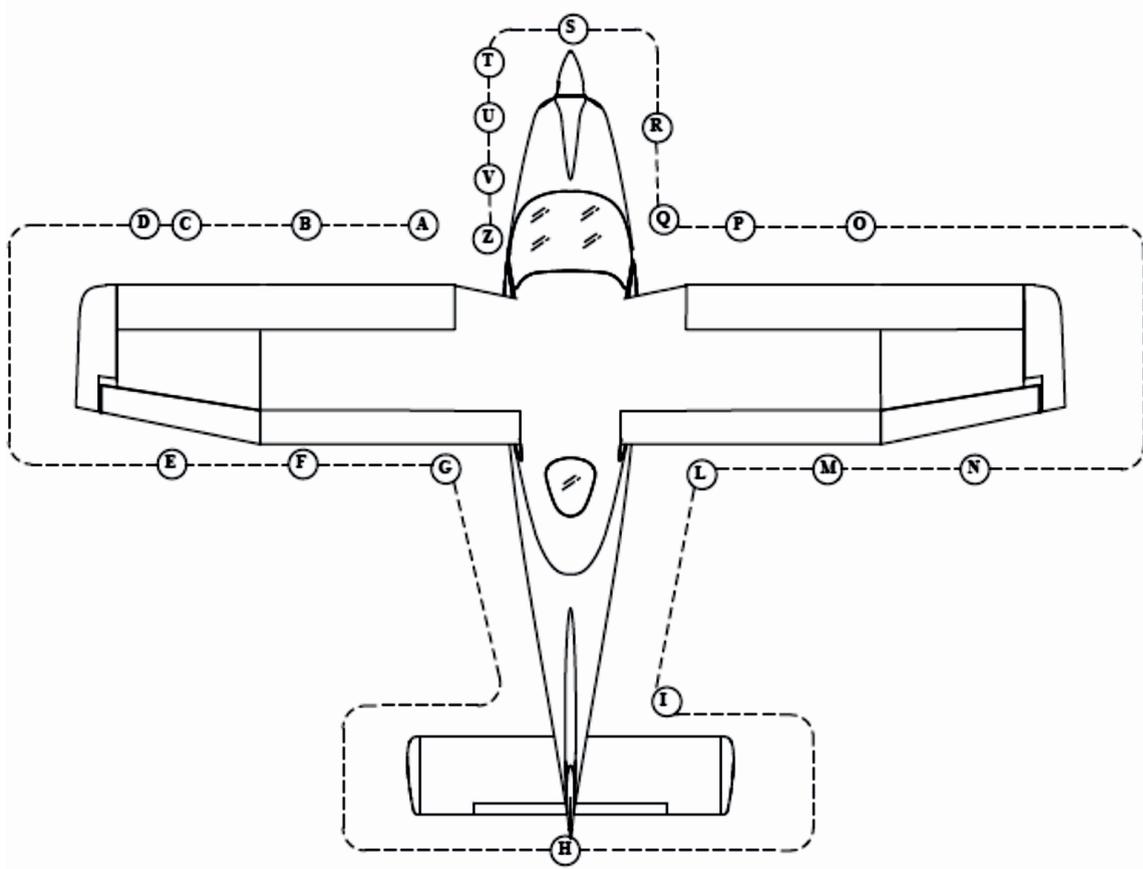
**Tecnam P2008 JC**

Dieses Dokument dient als Leitfaden für das Erlernen von Checks und Verfahren (*procedures*) und gibt wo nötig zusätzliche Informationen, um die Checks und Verfahren auf das Schulflugzeug Tecnam P2008 JC anzupassen. Es ist gedacht als Hilfsmittel um Checks und Verfahren am Boden zu üben, ist aber nicht für den Gebrauch im Cockpit während des Fluges vorgesehen. Es ersetzt in keiner Weise weder das Airplane Flight Manual AFM noch den SPHAIR-Ordner Grundlagen und Verfahren. Im Gegenteil, die erwähnten Unterlagen dienen als Grundlage für dieses Dokument.

**Cabin Inspection:**

- |   |  |   |
|---|--|---|
| A | Aircraft Documents<br>(blue binder, AFM, Aircraft Log) | Check current and on board  |
| B | Weight and balance                                     | Calculate and check within limits   |
| C | Safety belts   | Connected to hard point, check condition  |
| D | Ignition key   | OFF, key retracted  |
| E | Master switch  | ON<br>wait for EFIS to start up, select engine page on MFD  |
| F | Voltmeter  | Check within limits (= not red)   |
| G | Lights   | All ON, check for operation   |
| H | Acoustic stall warning                                 | Check for operation   |
| I | Master switch  | OFF (and all light switches OFF)  |
| J | Baggage  | Check first aid kit, ELT, fire extinguisher, luggage secured with restraint net.<br>Check brake fluid level |

*Visual inspection is defined as follows: Check for defects, cracks, detachments, excessive play, unsafe or improper installation as well as for general condition. For control surfaces, visual inspection also involves additional checks for freedom of movement and security. Red lubber lines on bolts and nuts shall be intact.*



- |          |  |  |
|----------|--|--|
| <b>A</b> | Left fuel filler cap                     | Check fuel quantity (dipstick)<br>Drain tank sump<br>Check cap is closed   |
| <b>B</b> | Pitot tube                               | Remove pitot plug<br>Check for obstructions  |
| <b>C</b> | LH leading edge and wing skin            | Visual inspection<br>Check stall strips  |
| <b>D</b> | Left strobe light                        | Visual inspection  |
| <b>E</b> | LH aileron, hinges and LH tank vent line | Check for integrity and fixing<br>Check for damage, freedom of plays<br>Check no obstructions  |
| <b>F</b> | LH flap and hinges                       | Visual inspection  |
| <b>G</b> | LH main landing gear                     | Check inflation, tire condition (cuts, bruises, cracks and excessive wear), alignment, fuselage skin status, slippage markers integrity, gear structure and brake hoses, check for hydraulic fluid leakage |
| <b>H</b> | Stabilator and tab                       | Check leading edge. Check actuating mechanism and connection with tab: Check free of play, friction.<br>Check fuselage top and bottom skin.<br>Check antennas for integrity                                |

<b>I</b>	Vertical tail and rudder	Visual inspection Check free of play, friction
<b>L</b>	RH main landing gear	Check inflation, tire condition (cuts, bruises, cracks and excessive wear), alignment, fuselage skin status, slippage markers integrity, gear structure and brake hoses, check for hydraulic fluid leakage
<b>M</b>	RH flap and hinges	Visual inspection
<b>N</b>	RH aileron, hinges and RH tank vent line	Check for damage, freedom of plays Check no obstructions
<b>O</b>	Right strobe light	Visual inspection Check for integrity and fixing
	RH leading edge and wing skin	Visual inspection Check stall strips
<b>P</b>	Stall indicator switch	Check for integrity and free of play
<b>Q</b>	Right fuel filler cap	Check fuel quantity (dipstick) Drain tank sump Check cap is closed
<b>R</b>	Nose wheel strut and tire/ RH static port	Check inflation, tire condition and condition of shock absorber check for hydraulic fluid leakage. Check the right static port for obstructions
<b>S</b>	Propeller and spinner	Check for nicks, cracks, dents and other defects, check for free rotation. Check for fixing and no play between blades and hub

<b>T</b>	Engine cowling	Check surface condition, then open engine inspection doors.
	Nacelle inlets and outlets	Free of obstructions. Check connection and integrity of air inlet system, visually inspect that ram air inlet is unobstructed. Remove protective covers (if applicable)
	Radiators	Check for signs of fluid leakage, check free from obstruction
	Foreign objects	Check
<b>Before the 1<sup>st</sup> flight of the day:</b>		
	Coolant	Verify level in expansion tank, replenish as required to top (level must be at least 2/3 of tank in cold condition). Verify level in overflow bottle: Level must be between min. and max. mark
	 <b>WARNING</b>	
	Before proceeding with the next step be sure that magnetos and Master switch are OFF with the key retracted.	
	Propeller	Turn by hand, observe free rotation of 15° to 30° before crankshaft starts to rotate. Turn several times in direction of engine rotation and check for abnormal noise or excessive resistance and normal compression.
	Carburettors	Check throttle and choke cables for condition and installation
	Exhaust:	Inspect for damage, leakage and general condition.
	Engine mounts and silent-blocks	Check for condition

	Oil level	Check as follows: Open oil tank cap. Turn propeller in direction of engine rotation several revolutions until a murmur noise is heard from the open oil tank. Check oil level by dip stick, replenish as required.
	Gascolator	Drain. Then make sure, valve is closed
<b>U</b>	Engine cowling doors	Close, check for proper alignment of camlocks
<b>V</b>	Landing/taxi light and LH static port	Check, visual inspection for integrity Check for obstruction
<b>Z</b>	Tow bar and chocks	REMOVE, stow on board

# Summary of all checks and procedures Tecnam P2008 JC

( ) Numbers in parentheses refer to the chapter in the Airplane Flight Manual

[ ] Numbers in square brackets refer to the corresponding chapter in the “SPHAIR-Folder – Grundlagen und Verfahren”

CHECK / PROCEDURE	Wording (if different from CHECKLIST)	Remarks
<b>AIRCRAFT PREPARATION (4.1) [2.3, 2.4, 2.10]</b>		
1. Preflightcheck, draining.....	completed	
2. Electric switches .....	off	
3. Aircraft equipment, A/C Log.....	on board	
4. Master and Generator switches.....	on	red switches on
5. Flighttime-count. / Total hours (MFD)...	noted, checked	compare with aircraft log
6. Passenger.....	instructed	demonstrate how to fasten/release
		seatbelts and how to open the
		door in case of evacuation
7. Flight controls.....	free and correct	check controls for unrestricted
	left up, rear up, right up, rear down,	movement and observe correct
	free & correct	sense
8. Ignition key.....	into starter, off	
<b>AIRCRAFT PREPARATION COMPLETED</b>		

CHECK / PROCEDURE	Wording (if different from CHECKLIST)	Remarks
<b>ENGINE START (4.1, 4.2) [2.5]</b>		
1. Cabin and doors..... secured, closed and latched		push slightly against door to check
2. Parking brake..... set		
3. Circuit breakers ..... checked		check also the two CB's on the aft
4. Annunciator lights..... 3 on and test		wall of the baggage compartment
5. MFD..... select engine page		
6. Electric fuel pump..... on, pressure checked		watch the fuel pressure indication
		while switching the fuel pump on
7. Fuel quantity ..... lh... / rh ..., endurance ... hrs		
8. Fuel selector..... fullest tank (LH if both full)		if lh and rh equally filled: select left
9. Carburetor heat..... off		
10. Strobe lights..... on		
11. • warm engine ..... no choke		
• cold engine ..... push choke		
12. Throttle..... idle		
13. Propeller area..... clear		observe outside area before
14. Starter..... engage		engaging the starter
15. Oil pressure..... checked, annunc light out		
		(10 sec)
16. Choke..... slowly off		
17. Throttle..... 1000 RPM		
18. Electrical fuel pump..... off, pressure checked		fuel press. remains in green range
19. Strobe lights		
NAV lights		on
20. Avionic master switch and COM ..... on, COM: 121.500 checked		
21. Transponder..... ALT 7000		if in GND mode, leave as is
22. ATIS / departure information..... received	say RWY in use and QNH	
23. Avionics..... preselected, set	Audiopanel: COM1 active,	Microphone selector: COM 1
	Phone COM1	Headphone buttons: COM1, all
	GPS: acquiring satellites	others off
	COM1: Frq ..... active, Frq ..... SBY	Say frequencies and stations
	NAV1: Frq ....active, CRS ...set, Frq.... SBY	Or say: NAV not used



CHECK / PROCEDURE	Wording (if different from CHECKLIST)	Remarks
STOP TAXI [5.3.3]		
Parking brake..... set		
Power..... 1000 RPM set		
Taxi light..... off		switch off landing light
<b>ENGINE RUN UP</b>		
1. Parking brake..... set		
2. MFD..... select engine page		
3. Engine instruments, oil temperature	in limits, $\geq 50^{\circ}\text{C}$	wait until oil temp $\geq 50^{\circ}\text{C}$ (green)
4. Area behind..... clear		(perform departure briefing while waiting)
5. Throttle..... 1600 RPM		
6. Magnetos.....	max. drop 130 RPM / max. diff. 50 RPM	drop and difference in limits
7. Carburetor heat.....	checked, RPM-drop / no icing	check RPM drop
8. Engine instruments, annunc. lights.....	green, all off	oil pressure green, oil temperature green, cyl. head temp green (2x), fuel pressure green, annunciator lights all off
9. Throttle .....	idle (min 580 RPM)	check idle RPM is between 700 and at least 580 and engine does not stop
10. Throttle.....	1000 RPM	
<b>ENGINE RUN UP COMPLETED</b>		

CHECK / PROCEDURE	Wording (if different from CHECKLIST)	Remarks
<b>CHECK BEFORE DEPARTURE (4.5, 4.21) [12.2.3]</b>		
1. Flight controls..... free and easy		recheck controls for unrestricted movement
2. Electrical fuel pump..... on, pressure checked		
3. Fuel quantity ..... lh... / rh... , endurance .... hrs	left tank ...../ right tank ...../ Endurance .....	say instrument reading in Liter
4. Fuel selector..... fullest tank (LH if both full)	Fuel selector left / right	switch to fuller tank
5. Carburetor heat..... off		
6. Magnetos..... both		
7. Choke..... off		
8. Flaps..... set T/O		Take Off always with Flaps T/O
9. Trim..... set neutral	elevator trim neutral	
10. Engine instruments, annunc. lights..... in limits / checked	engine instruments green, Fuel Pump annunciator ON, all other annunciator lights off	oil pressure, oil temperature, cyl. head temp (2x), fuel pressure - GREEN
11. Flight instruments..... set for departure	Airspeed indicators Attitude indicator Altimeter Altitude preselector Vertical speed Turn rate indicator Slip indicators Heading indicator HDG bug	check the correct setting of all flight instruments. It is not required to recite each and every value or setting again when this was already done just before (ref. engine start checklist, item #24)
12. Avionics / MFD ..... set / select map page	GPS: Waypoint or route set & checked Audio panel COM / NAV / CRS  Transponder: ALT 7000  select map page on MFD	Or say: "GPS not used" Verify audio panel correctly set Check frequencies and stations Or say: "NAV not used" If in GND mode, leave as is
<i>continued</i>		

CHECK / PROCEDURE	Wording (if different from CHECKLIST)	Remarks
<p><i>continued</i></p> <p>13. Departure briefing [12.2.1]..... completed</p>	<p>Take Off RWY __, ....., ____m, .....procedure, flaps T/O</p> <p>Routing / Altitudes Speeds: rotate ... / initial climb ... / climb speed clean 70 Abnormal situations / Emergency -any failure on ground: Power idle, apply brakes, • Parking brake .....set In case of structural damage, fire or smoke: ON GROUND EMERGENCY: • Throttle..... idle • Magnetos.....off • Fuel selector.....off • ATC: Mayday Mayday Mayday, fire on board, request fire brigade • Master switch.....off • When engine has stopped: Evacuate -engine failure after lift off: Nose down, land straight ahead (+/-) If above 1000 ft/AAL .....ft/ QNH (say the corresponding altitude): Consider return to the field and landing on opposite RWY Best glide speed is 71 KIAS with flaps UP, safe speed with flaps T/O is 58 KIAS</p>	<p>say departure RWY and RWY condition (grass, concrete, dry, wet, soft, etc.), RWY length, say TKOF procedure (short field, soft field, etc.) describe outbound route look at the airspeed indicator during this item describe actions for: -any failure on ground</p> <p>-engine failure below 1000ft/AAL</p> <p>-engine failure above 1000ft/AAL</p> <p>say best glide speed</p>
<p>14. Doors ..... closed and latched</p> <p>15. Seats..... locked</p> <p><i>continued</i></p>		<p>check upper door latch (both sides)</p> <p>make sure the seats are properly locked</p>

CHECK / PROCEDURE	Wording (if different from CHECKLIST)	Remarks
<p><i>continued</i></p> <p>16. Seat belts / cabin + Passenger..... fastened / secured</p>		<p>makes sure: all seat belts on, no objects in the cabin or cockpit that might interfere with safety of flight</p>
<b>READY FOR DEPARTURE</b>		
<b>LINE UP CHECK: [12.3.1]</b>		
1. Approach & RWY.....	clear	
2. Strobelights.....	on	
3. Time.....	noted	Time (say the minutes of actual time)
4. Transponder.....	set	Time check [12.3.7]
		If in GND mode:Leave it in GND, it will automatically transfer to ALT
5. RWY	identified	RWY identified
6. RWY HDG and HDG indicator .....	compared	Runway identification [12.3.3]
7. Wind.....	checked	Runway / Gyro comparison [12.3.4]
8. Time.....	check	Wind check [12.3.5]
		Start stopwatch
<b>LINE UP CHECK COMPLETED</b>		
TAKE OFF (4.6) [12.4.1]		
Brakes.....	apply	
Power.....	set	Take off power set and checked
Brakes.....	released and free	verify min 2000 RPM before you release brakes
		release brakes and place feet on rudder pedals only. Brake pedals must be completely free. Prevent that brakes are unintentionally applied.
ACCELERATION CHECKS (4.5, 4.23) [12.4.2]		
Air speed.....	rising	if not at least 35 at mid-RWY: stop takeoff
CLEAN CONFIGURATION (4.5, 4.23) [12.5.2]		
Clear of obstacles.....	Flaps 0° (UP)	Clear of obstacles, sixty rising, flaps UP
Climb power.....	RPM max. 2250	start clean up when clear of obstacles, earliest at 300 ft/AAL
		verify full throttle, RPM max. 2250

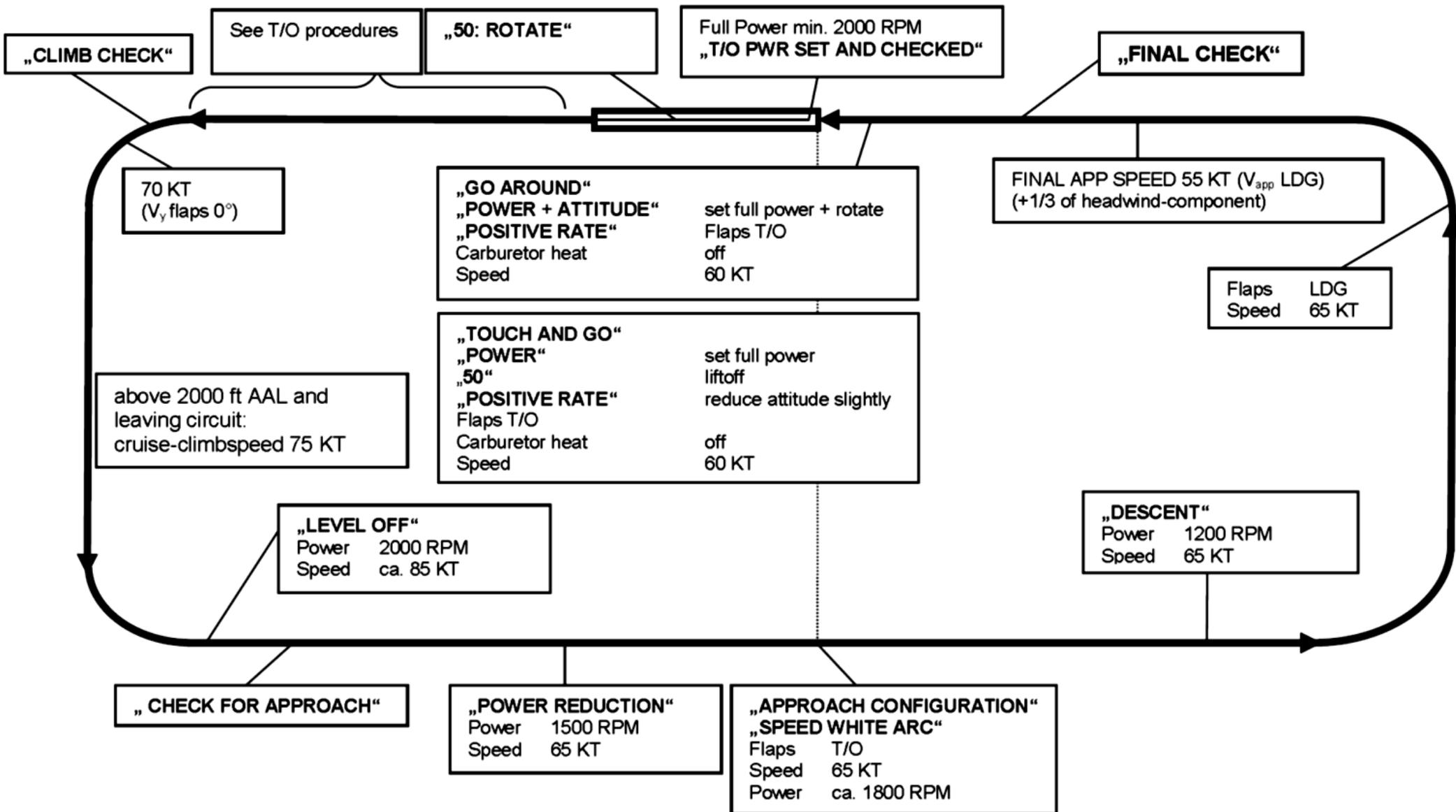
CHECK / PROCEDURE	Wording (if different from CHECKLIST)	Remarks
<b>CLIMB CHECK: [12.5.5]</b> 1. Climb power..... set 2. Flaps..... 0° (up) 3. Electric fuel pump ..... off, pressure checked  <b>CLIMB CHECK COMPLETED</b>	 flaps up fuel pump off, fuel pressure checked	Execute at 500 ft/AAL or above check full throttle, RPM max. 2250
LEVEL OFF [7.4.2] Attitude..... for level flight  Power..... set Trim..... set	approaching altitude starting level off	say 100 ft before reaching level 50 ft (-30 ft latest) before: start leveling off Accelerate with max. 2250 RPM to >90 KT before reducing power
<b>CRUISE CHECK: [6.4]</b> 1. Altimeters / PFD..... set  2. Engine instruments, annunc. lights.... in limits, all off 3. Cruise power..... set according table 4. Fuel quantity ..... lh... / rh... , endurance ... hrs 5. Lights..... as required 6. Transponder..... ALT 7000 or according ATC  <b>CRUISE CHECK COMPLETED</b>	altimeters set to QNH..... / standard 1013 HDG on PFD ____ / compass heading ____  .....RPM set left tank .... / right tank .... / endurance .....	altimeter setting acc. situation and compare PFD with altimeter and with magnetic compass  set cruise pwr according table  LDG light remains ON CODE / MODE checked
ENTRY INTO THE CLIMB [7.2.4] Altitude preselector..... set Lookout..... perform Power..... full power (max. 2250 RPM) Attitude..... adjust for type of climb Trim..... eliminate control loads	xy blue airspace clear	(e.g.: 4500 ft blue or FL75 blue) check airspace above

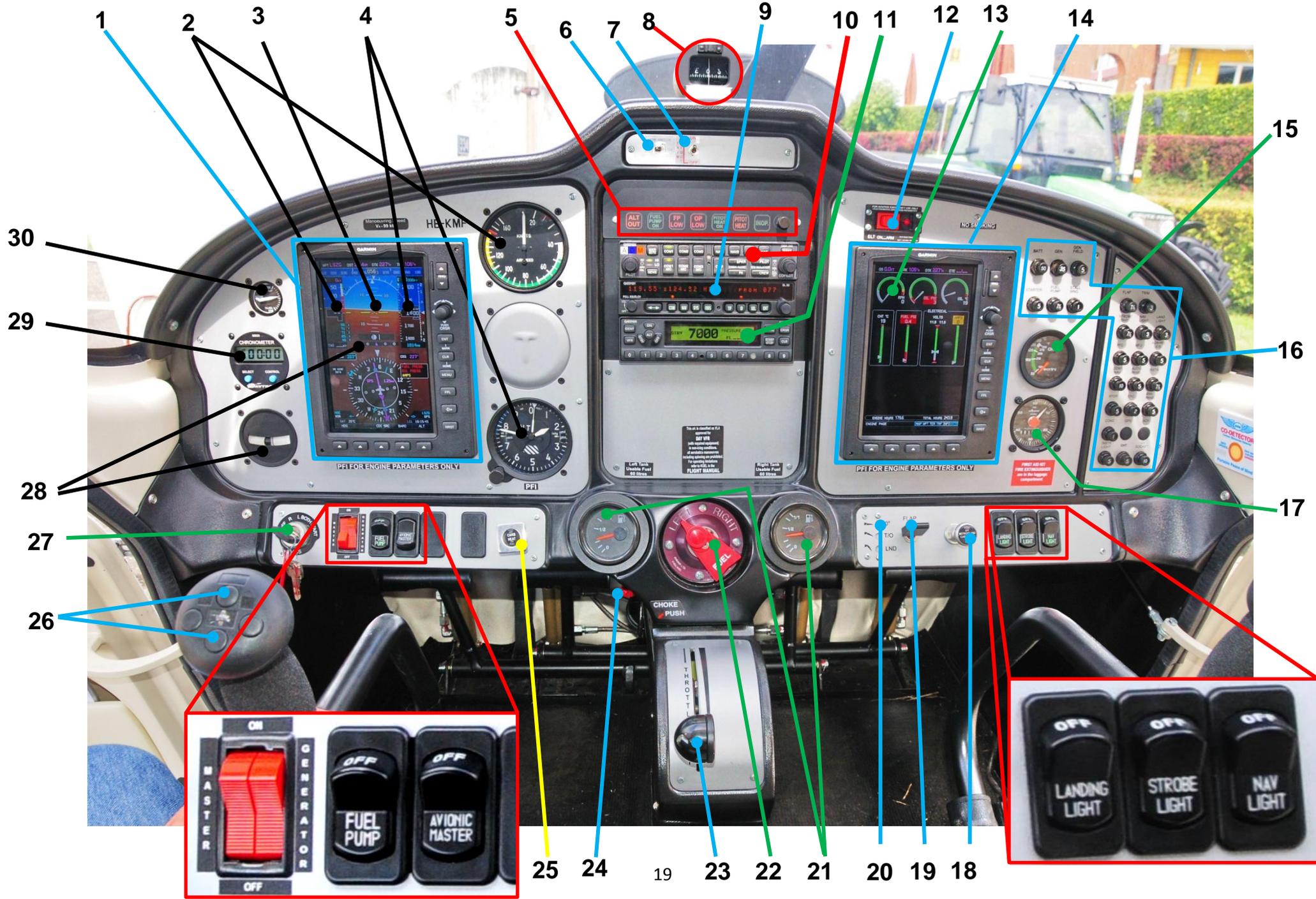
CHECK / PROCEDURE	Wording (if different from CHECKLIST)	Remarks
ATIS	monitor ATIS (Airport Terminal Information Service)	note important information
APPROACH BRIEFING [13.2.6 ]	Landing in ..... at ....ft ( <i>Schupfart at 1788 ft</i> ) RWY .. in use Routing and altitudes (via... and ..., DWD at.. ft) Speeds: downwind 85, base 65, final APP 55 Missed app.: go around, join l/r DWD at ...ft Alternate airport is ..... ( <i>e.g. Birrfeld</i> )	use VAC to perform APP briefing  consider increment for wind consider g/a if final approach is not fully stabilized or any doubts about a safe landing
<b>DESCENT CHECK: [8.2.5]</b> 1. ATIS / landing information..... received 2. Approach briefing..... completed 3. Avionics / EFIS..... set / preselected 4. Seatbelts / cabin + passengers..... fastened / secured	Information X is current  COM1: Frq ..... active, Frq ..... SBY NAV1: Frq ....active, CRS ..set, Frq.... SBY	say frequencies and stations Or say: NAV not used
<b>DESCENT CHECK COMPLETED</b>		
DESCENT [8.2.4] Altitude preselector..... set Lookout..... perform Attitude..... for descent Power..... adjust Trim..... adjust	xy blue airspace clear	(e.g.: 3000 ft blue or FL55 blue) check airspace in front below  cruise descent: ≈2150 RPM

CHECK / PROCEDURE	Wording (if different from CHECKLIST)	Remarks
LEVEL OFF FROM DESCENT [8.4.1] Power..... set Attitude..... for level flight Trim..... set	approaching altitude 50 ft to go, power	say 100ft before reaching level set 2000-2150 RPM, as required
<b>APPROACH CHECK: (4.8) [13.2.10]</b>		
1. Altimeter/PFD..... set QNH 2. Landing light..... on 3. Electric fuel pump..... on, pressure checked 4. Fuel quantity..... checked 5. Fuel selector..... fullest tank 6. Carburetor heat..... as required	altimeter set QNH ....., altitude .....ft     left / right selected	say selected QNH and reading (2x)     change fuel tank if necessary, Default is ON, only in exceptional cases (dry & >25°C) leave OFF
<b>APPROACH CHECK COMPLETED</b>		
<b>INITIAL APPROACH CONFIGURATION [13.3.6]</b>		
Power..... reduced Speed..... checked, white Flaps..... T/O V <sub>INIT APP</sub> ..... 65	initial approach speed 65 KT	initially ca. 1500 RPM below V <sub>FE</sub> 71 KT, stabilize 65 KT  maintain 65 KT by power (ca. 1800 RPM)
<b>STARTING DESCENT FOR LANDING [13.4.2, 13.4.3]</b>		
Power..... reduce <b>start descent</b> Intermediate approach speed..... stabilized	approaching glide power 1200 RPM   65 KT stabilized	initially 1200 RPM attitude for descent maintain 65 KT by pitch

CHECK / PROCEDURE	Wording (if different from CHECKLIST)	Remarks
LANDING CONFIGURATION [13.5.1] Flaps..... LDG Speed..... reducing to $V_{FINAL APP}$	final approach speed 55	extend flaps to LDG position (FULL) or acc. configuration, wind, etc.
<b>FINAL CHECK: [13.5.2]</b> 1. Flaps..... LDG set 2. Carburetor heat..... off	Flaps LDG	Consider partial or no flaps in high wind conditions, particularly in strong crosswind
<b>FINAL CHECK COMPLETED</b>		
BEFORE LANDING [13.7.3] Power..... idle	Gate	
BRAKE CHECK [13.7.5] Brakes..... checked		
<b>AFTER LANDING CHECK: (4.10) [5.3.7, 13.7.6]</b>		
1. Transponder..... ALT 2. Time..... noted 3. Strobe lights..... off 4. Electric fuel pump..... off, pressure checked 5. Flaps..... 0° (up)		Perform when clear of RWY and on a straight part of a TWY, may be performed during taxi only if situation allows if in GND mode: leave it, else STBY note landing time usually strobe lights off
<b>AFTER LANDING CHECK COMPLETED</b>		
STOP TAXI (at the parking after the flight) [5.3.3] Parking brake..... set Throttle..... 1000 RPM set Taxi light..... off Time..... noted		switch off landing light note "ON BLOCK" time

CHECK / PROCEDURE	Wording (if different from CHECKLIST)	Remarks
<p><b>STOPPING ENGINE / PARKING CHECK: (4.11) [2.5.7]</b></p> <ol style="list-style-type: none"> <li>1. Parking brake..... set</li> <li>2. Throttle..... 1000 RPM set</li> <li>3. COM..... 121.500 checked</li> <li>4. Avionics master switch and COM ..... off</li> <li>5. Electric switches ..... off</li> <li>6. Throttle ..... idle</li> <li>7. Magnetos, ignition key..... off, key removed</li> <li>8. Flight time counter / Total hours (MFD) noted</li> </ol> <ol style="list-style-type: none"> <li>9. Generator + master switches..... off</li> <li>10. Parking brake..... as required</li> </ol>  <p><b><i>PARKING CHECK COMPLETED</i></b></p>		<p>monitor emergency frequency also turn OFF the COM/NAV</p> <p>remove key when propeller stops always round up FTC to the next minute, note “Total Hours” counter on MFD</p> <p>red switches (2) OFF Default: <u>Park brake set</u>; if airplane has to be moved: brake released . Use chocks if airplane will stay parked for longer than a few minutes</p>





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- 1 PFD (primary flight display)
- 2 ASI (air speed indicator)
- 3 Horizon
- 4 Altimeter
- 5 Annunciator Lights
- 6 Trim LH/RH selector
- 7 Trim cut out switch
- 8 Magnetic compass
- 9 COM / NAV
- 10 Audio Panel
- 11 Transponder
- 12 ELT switch
- 13 RPM Indicator
- 14 MFD (multi function display)
- 15 CHT indicator (cylinder head temperature)
- 16 Circuit Breakers

- 17 Flight Time Counter
- 18 Cabin heating and windshield defrost
- 19 Flap control
- 20 Flap indicator
- 21 Fuel quantity indicators
- 22 Fuel selector valve
- 23 Throttle
- 24 Chocke
- 25 Carburetor Heat
- 26 Pitch trim
- 27 Magnetos (Ignition)
- 28 Slip indicator
- 29 Stop watch
- 30 Trim indicator